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THE MEASURE OF THE WOMAN: EUGENICS AND DOMESTIC SCIENCE IN THE 1924 SOCIOLOGICAL SURVEY OF WHITE WOMEN IN NORTH QUEENSLAND

Thesis submitted by

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for the degree of Doctor of Philosophy in the School of Arts and Social Sciences James Cook University

Abstract

This thesis considers experiences of white women in Queensland's north in the early years of 'white' Australia, in this case from Federation until the late 1920s. Because of government and health authority interest in determining issues that might influence the health and well-being of white northern women, and hence their families and a future white labour force, in 1924 the Institute of Tropical Medicine conducted a comprehensive Sociological Survey of White Women in selected northern towns. Designed to address and resolve concerns of government and medical authorities with anxieties about sanitation, hygiene and eugenic wellbeing, the Survey used domestic science criteria to measure the health knowledge of its subjects: in so doing, it gathered detailed information about their lives. Guided by the Survey assessment categories, together with local and overseas literature on racial ideas, the thesis examines salient social and scientific concerns about white women in Queensland's tropical north and in white-dominated societies elsewhere and considers them against the oral reminiscences of women who recalled their lives in the North for the North Queensland Oral History Project. Ultimately, the combination of sources enables an examination of the application of prevailing racial ideas and the development of a broad social history of 1920s North Queensland women.

Statement of Sources

I declare that this thesis is my own work and has not been submitted in a another degree or diploma at any university or other institution of tertiary	•
Information derived from the published or unpublished work of others have acknowledged in the text and a list of references is given.	ns been
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Acknowledgement of Contributions & Assistance

This project could not have begun or completed without the funding that James Cook University provided through a Postgraduate Research Scholarship. Scholarship funds covered fees, project and travel costs, technical and administrative support and office space, brought me into an outstanding academic community and enabled a remarkable journey into the past. I am thankful for this assistance and the opportunities it provided.

In addition, the work for this thesis has been assisted by a number of people whose informal contribution and willingness to share research findings are not adequately recognised in the footnotes and bibliography, particularly May Abernethy (NQOHP Curator), volunteers at Townsville Museum and Historical Society, staff at the Fryer Library, John Oxley Library, Queensland Archives, the QCWA and the Sisters of Mercy. The technical assistance of James Cook University IT and Library staff is also acknowledged with gratitude.

Born of undergraduate fascinations with women's history, the history of disease and the spread and adoption of ideas throughout the layers of societies, this thesis began to take shape after my discovery of Lori Harloe's reference to the Survey and the realisation that it was possible to integrate all of my interests in one work. In its embryonic and later stages it depended heavily on the guidance and patience of my supervisors Diane Menghetti and Russell McGregor, to whom I am deeply grateful. At the same time, it invaded my home and personal space in a way that was difficult to predict and probably more difficult to endure, despite the protests otherwise of several special people who soon learned how to shift large piles of paper without getting them out of order and to ask any question at least three times when my head was bent. Moreover, they did so for over four years. For that reason, I dedicate this work to Matthew, Pia and Hannah, with love and thanks.



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Introduction and Literature Review

What is meant by improvement? What by the syllable eu in "eugenics", whose English equivalent is "good"?... All creatures would agree that it was better to be healthy than sick, vigorous than weak, well-fitted than ill-fitted for their part in life; in short, that it was better to be good rather than bad specimens of their kind, whatever that kind might be.

Francis Galton, 1904

The penalty for neglect is disease....

Home Secretary's Department, 1910

Although racial preservation was a strong issue elsewhere, early twentieth century white women in north Queensland were subjected to particular racial pressure. At a time of heightened nationalism, xenophobic attitudes towards neighbouring non-white peoples and concerns about white population growth, it was working rather than middle class women who bore the brunt of that force. Not only did they provide support for adult male workers, but they were likely to supplement the population through the production of the next generation of workers. However, there was considerable lay and scientific disagreement about whether settlement in North Queensland was sustainable because of a longstanding conviction that white people were physiologically unsuited to intense physical labour or long-term residence in the tropics. With mounting evidence that this was not the case, the state government sought to demonstrate that North Queensland was safe for white men and women, and that racial security and population growth were inevitable provided that white women in the tropics adopted scientific personal and household habits.

For this reason, the Australian Institute of Tropical Medicine in Townsville conducted a Sociological Survey of White Women in 1924. Established in 1914 to obtain 'scientifically controlled evidence' of ways of 'maintaining or improving the health' of a permanent 'working white race in tropical Australia', the Institute conducted what still may be Australia's largest sociological survey by visitation and interview using a sole researcher. Researcher Annie Gorman ultimately assessed the women of 750 households, and weighed, measured and interviewed 2,080 children, so that by past or

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¹ It initially operated under the auspices of the (Commonwealth) Home and Territories Department. NAA, SP1061/1, 350, Institute of Tropical Medicine

present standards, the Survey was a significant project: but it is also interesting for several other reasons.

To begin with, the Sociological Survey was a racially specific undertaking that reflects the uneven interest in white and non-white women's wellbeing during the years of the White Australia Policy. Its methodology was significant, providing an example of the new prominence of sociological research and the way in which sociologists viewed themselves as scientists with the human world as their laboratory. In addition, the Survey involved several pioneers of Queensland health. For example, it was Queensland's Director-General of Health, John Howard Lidgett (JHL) Cumpston, who argued that 'the development of Tropical Australia' depended upon there being 'an adequate proportion of women among the residents' and who wanted to be certain that it was safe for them to live there. Its designer, Raphael Cilento, was recognised for his 1925 publication, *The White Man in the Tropics and Its Dependencies* (hereafter *White Man in the Tropics*) which incorporated the Survey results, and later acknowledged for his achievements in health promotion as Queensland's Director-General of Health.

The Survey is also important because of its interest in measuring the sanitation standards of the homes visited. In this way, it mirrors international concerns about the need to ensure racial wellbeing through better hygiene practice; in Australia, the British Isles and the U.S.A, these concerns often inspired the racially and socially bigoted solutions found in eugenic ideas. It also reflects the prominence of science and scientific attempts to reduce the incidence of disease through prevention rather than just response. Consequently, the Survey has a strong connection with the contemporary advances in bacteriology that inspired the professionalisation of municipal workers in public health and the regulation of hospitals and health workers.

For all of these reasons, the Survey endures as an important indicator of white nineteenth and twentieth century anxieties about their racial future, as well as the

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² Letter, Cumpston to Minister for Health, March 9 1921, NAA, A1928/1, 447/1, Health of White Women in Tropical Australia, Appointment of Investigators

³ Raphael Cilento, *The White Man in The Tropics. With Especial Reference to Australia and its Dependencies*, Melbourne, 1925

ability of white people to adjust mentally and physically to tropical life, but it is especially important because of its focus on women, through whom it demonstrates the usefulness of the eugenically-inspired household management system known as domestic science. Because domestic science emerged alongside early twentieth century social and political changes in the lives of middle and working class women, the Survey provides an opportunity to explore the impact of those developments. However, the Survey is particularly valuable because of the breadth of its investigation; as such, it provides a key primary source for the social history of North Queensland women in the 1920s, with its importance further increased because it mostly concerns working class women, who tended to leave limited evidence of their lives for perusal outside of their friends and families.

As women, and white women in North Queensland, the Survey's subjects were exposed to considerable social and racial pressure in the early years of the twentieth century. The Survey does not offer a comprehensive picture of those pressures: alone, it cannot. Firstly, its perspectives and interrogations were limited to domestic science criteria. Secondly, it omits any reference to several issues that others considered critical to racial wellbeing; for example, it fails to establish the marital status of the women it surveyed, and it does not inform us about its subjects' knowledge or ideas about sex education and contraception. Similarly, it did not provide its data in a form that would enable identification of the socio-economic differences between its subjects that were of specific interest to race debates. Finally, its subjects are anonymous, and while municipal records might provide supporting material for the identification of three or four characters, it would be difficult to obtain and (if successful) provide personal information on so few women that the research in this case would not add to the Survey's evidential value for social history.

These matters are of interest to social history. While in this case they exemplify the gendering of social and scientific debates about racial futures, they also provide clues to the everyday existence and conduct of over 750 women but fail to show that the surveyed women's experiences, attitudes and conduct were representative of all or most white women in North Queensland at that time. Consequently, while the Survey is useful in its provision of a clear set of criteria for historiographical exploration and comparison, it suffers from the absence of the particular details needed to confirm that

its subjects' lives might serve 'as an allegory for broader issues affecting the culture as a whole'. As a source for social history of northern women in the 1920s, the Survey lacks personalisation: a void filled significantly by the North Queensland Oral History Project, or NQOHP.

The NQOHP consists of over 6400 digital recordings. Recorders began the collection in the 1980s with men and women in their eighties or older with the intention of capturing and preserving their memories of Queensland life: these recollections encompass both World Wars, the Depression, migrant experiences in the sugar industry and thoughts on social and political change. They eventually began to incorporate the tales of younger participants, and, importantly, developed several subcollections that contain stories from the Upper Murray, Weipa, the Torres Straits and Palm Island. The latter stories include reminiscences from pivotal characters in Queensland history, such as Eddie Mabo. Replete with personalities and particular details, the NQOHP consequently provides an important social history source through free-form interviews almost devoid of editing. For this research, it provided accounts from twenty-six women whose stories suggested white affiliation and identification and whose reminiscences offset, enhanced or supported important issues that emerged during analysis of the Survey. ⁵

Like the Survey however this source presented some problems, for oral histories are contestable as true accounts of historical events. For example, there is ample evidence that memories can be overlaid as time passes. Shifting cultural mores or changes in personal ideology can alter them, as can challenges from other witnesses, an incredulous audience or the narrator's desire to improve perceptions of their relationship to an event.⁶ In addition, the recording environment and methodology has the potential to influence the outcomes of oral history recording.

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⁴ Jill Lepore, 'Historians who love too much: Reflections on Microhistory and Biography', *The Journal of American History*, vol. 88, June 2001, p.133

⁵ The racial premise rests upon the manner in which narrators referred to indigenous and various non-white people as other.

⁶ See Deborah Davis on witness testimony. Deborah Davis, E.F. Loftus, 'Internal and external sources of distortion in adult witness memory', in M. P. Toglia; J. D. Read; D. R. Ross; R. C. L. Lindsay (eds), *Handbook of Eyewitness Memory* (vol. 1): *Memory for Events*, Mahwah, 2006

Carl Wilmsen speaks of the 'production of meaning' during oral history editing, where faithful adherence to a recording creates the assumption that the narrator's meaning is conveyed 'fully and accurately'; but there is a risk, he adds, in 'overemphasis on the interview as the magical moment when meaning is produced'. Interviewers can intentionally or unintentionally steer a narrative, and narrators 'often amplify this effect' by a response that enlarges on the interviewer question. It is natural for a historian to want to query some points made in stories for the sake of later authentication or for clarity; the latter was certainly a factor in some NQOHP recordings, where narrators became distracted or contradicted an earlier remark. This situation creates Katrine Barber and Janice Dilg's 'nuanced and complicated relationship', within which an interviewer must respect a person's version of events, while evaluating material that 'disputes or qualifies those memories.' The objective is to obtain truth; the problem is whether that target is achievable in oral histories.

This work concurs with Valerie Yow's contention that oral historians' personal ideologies and 'responses to their interviewees' can affect the final product, and that the process of recording and analysing oral accounts is subjective. ¹¹ With that recognition, and because the accounts used here were recorded by other historians, but selected for various reasons, it employed or took advantage of several strategies in order to locate the truths in its oral sources, and these will be discussed later in this Introduction.

⁷ Carl Wilmsen, 'For the Record: Editing and the Production of Meaning in Oral History', *The Oral History Review*, 2001, vol. 28, no. 1, pp. 65-85

⁹ Katrine Barber, Janice Dilg, 'Documenting women's history: using oral history and the collaborative process', *Oregon Historical Quarterly*, 2002, vol. 103, no. 4, pp. 530-1 ¹⁰ Michael Frisch claims that it is, through a collaborative process. See Michael Frisch, 'Commentary: Sharing Authority: Oral History and the Collaborative Process', *The Oral History Review*, vol. 30, no. 1, 2003, pp.111-113

¹¹ Yow rejects the idea of objective historiography in the oral history process, particularly when it involves interviews with women. She cites feminist arguments that 'the notion of scientific objectivity is androcentric' because males use 'objective scientific methods...' that 'leave out a lot of information about women.' Summarily, if the recorder acknowledges the potential effects on the interviewee of the recorder's curiousity, age, gender, social and educational background and authority, and if they have a similar ideological background, then subjectivity can be valuable, as empathy can produce freer contributions from the interviewee. See Deborah Davis and William T. Perkowitz, 'Consequences of Responsiveness in Dyadic Interaction', *Journal of Personality and Social Psychology*, vol. 37, 1982, p.544, in Valerie Yow, "'Do I like them too much?": effects of the oral history interview on the interviewer and vice-versa', *The Oral History Review*, 1997, vol. 24, no. 1, pp. 55, 63-64, 73-74.

The Survey omissions required different treatment. Official records and academic writings from the time, as well as popular literature, met many evidential needs, but the abundance of the latter resources created some problems. Race theorists such as eugenists wrote on practically every aspect of human life, from cradle to chapel, and across the minutiae and generality of recreational and occupational practices. A work addressing all of those areas would be voluminous. Since eugenists considered themselves social scientists, and many prominent scientists endorsed eugenic ideas, the chapters that follow relate to one or more of several themes: eugenic/scientific debates about health and female conduct; the experiences and concerns of northern white women mapped according to areas that Cilento considered important for enquiry through the Survey, as well as to some he ignored; and the sanitary and personal practices promoted through domestic science which provided a common ground for the overall examination.

Sanctioned by eugenic movements, social activists and feminists in the U.S.A, British Isles and Australia, early twentieth century domestic science incorporated the latest scientific findings about health and sanitation and directed them at girls and women in the belief that women's domestic practice determined the health of the family. A healthy family, living in a strictly regulated sanitary environment, was a racial ideal. Domestic science provided standards against which to measure conduct, and Cilento used them to assess the Survey's subject women. He also wanted to educate his subjects, and instructed Annie Gorman to do so; with a well-trained nurse conducting home visits, domestic science also provided a vehicle to promote healthier ways to a distinct racial group. For all of these reasons, the Survey appears as a raced and gendered exercise that encapsulated state, national and international imperatives inspired by social and scientific theories.

The survey was gendered in its utilisation of domestic science criteria for a safe, sanitary home environment as a means of measuring women's household management. It assessed their application of practices that enhanced genetic fitness by

¹² Present writers sometimes refer to 'eugenicists'. This is logical: physicists study physics, and geneticists study genetics. However, those who endorsed eugenic ideas as well as their detractors overwhelmingly referred to eugenists, and this term is used here because of its early twentieth century frequency.

determining the extent to which households were likely to harbour germs and disease vectors, and whether the surveyed women stored and prepared food in a manner that maximised the likelihood of good health. It gauged the extent to which their household operation compared to the economic and physical efficiency of the industrial world by examining the frugality of their personal economic conduct. It assessed how well they spent their housekeeping allowances and quantified the hours they took to clean, cook and relax. Finally, the Survey was able to emphasise the need for women to have access to all of the services deemed essential to white female tropical wellbeing: baby clinics, maternity hospitals, domestic science knowledge, informed and modern medical advice, clean water and municipal sanitation. Male biology and social status did not ensure men's economic or physical efficiency in racial or any other terms: but the Survey only measured their spouses.

The Survey was also a raced exercise that reflected Anglo-Saxon ideas about evolution and social evolution such as those presented in the late nineteenth century by Herbert Spencer and Charles Darwin, and later by Francis Galton in the form of eugenics. Darwin argued that humans and animals gradually evolved from less complex organisms. Their survival chances were enhanced or shortened accidentally through the perpetuation of inherited characteristics that helped them adapt to changing circumstances, or reduced their ability to do so. 'Selection' as he called it, was thus a natural process. Spencer preferred to see the social and intellectual achievements of various cultures as evidence of levels of civilisation and believed that human advance could be socially engineered rather than occur accidentally. His ideas emerged from a developed society with daily reminders of its scientific, engineering, economic and military achievements: such achievements inspired many Anglo-Europeans to perceive themselves as genetically superior.

This was the case in Australia, where most non-white people were treated as inferior. White authorities viewed their Asian neighbours as racially inferior but recognised that they came from highly developed and established societies with identifiable civilisations that were as keen as Australia to expand their wealth and power: the threat that Asian societies posed was as much economic as racial. Conversely, Australia's Indigenous people seemed utterly distant from Anglo-Saxon ideals of a civilised or developed race and the only real economic threat they presented was the

cost of caring for them. A sociological survey of Aboriginal women in their homes might have produced some unsettling truths, but in that regard, this group was of no interest to the Institute. The Survey's task was to establish the conditions in which white women lived, so that government could work at reducing any deficiencies and promoting the tropics as a healthy place for its white citizens to work and reproduce. As such, it is as an important signifier of anxieties about white tropical settlement, of the social and scientific importance of domestic science and as evidence of the belief which held white women in Queensland's northern tropics responsible for white tropical sustainability.

Doubts about the viability of white tropical settlement predate the twentieth century; rather than allay white fears in this regard, diverse scientific discoveries and theories had reinforced them during the later nineteenth century. Motivated by their beliefs on racial fitness and deterioration, health experts like Cilento expressed their ideas in research and discussion about the impact of disease on white tropical residents and workers, the role of sanitation in disease prevention and cure, and (as understanding of the conditions optimal to disease occurrence or transmission increased) methods to enhance the application of the principles of hygiene at a national level. ¹³ Since white health and racial fitness were of critical importance, these interests directed all scientific research conducted at the Institute of Tropical Medicine from its opening in 1913. Within a few years, Institute scientists realised that they also needed to pay attention to social aspects of white tropical settlement.

Popular race theories held that white men in the tropics needed the civilising influence of white female company, but if women refused to contemplate tropical life because of its supposed detrimental affects, or became ill or infertile through residence, then white tropical settlement altogether was in jeopardy. Not all scientists or physicians agreed with these ideas, but the tropical effect thesis had many supporters. ¹⁴ These

¹³ Humphreys remarked of Britain in 1874 that '*National* interest in sanitary matters, is comparatively of recent date, and was almost unknown prior to the establishment of the General Register Office.' [His italics] Before that time, sanitation in its relationship to mortality had been a matter of local concern. N.A. Humphreys, 'The Value of Death-Rates as a Test of Sanitary Condition', *Journal of the Statistical Society of London*, vol. 37, no. 4, 1874, p.437

¹⁴ In 1919, geographer and climatologist Griffith Taylor remarked that 'The well-housed wife of a senior official with efficient colored servants is in a very different position from the poor

doubts needed urgent resolution. As he sought Ministerial support for the Survey, Cumpston argued that 'the development of Tropical Australia' depended upon there being 'an adequate proportion of women among the residents.' Despite publicly broader intentions, the Survey focused on working class women, who it measured as well as taught: as such, it was not strictly a research exercise. However, considering the variability of sociological survey methods at the time, as well as the brief time allowed for the work, it was thorough. During home visits of about forty minutes, Gorman inspected areas of interest that included the condition of her subjects' crockery, as well as their teeth, sanitary arrangements and water supplies; through interview and observation, she assessed health, established genetic histories and (as she thought necessary, which seemed often), advised on diet, hygiene and childcare. Through such examinations, the Survey shows the extent of medical and political fixations on white female conduct and daily life in the tropics, and the way in which domestic science ideals provided a means to measure that conduct and those lives.

Domestic science began in the teaching of domestic hygiene or domestic economics during the late nineteenth century, mostly to produce a more informed servant class. By the twentieth century, it had developed into an expression of concerns about the future of the white race and was being promoted as a means to increase eugenic fitness in the U.S.A, the British Isles and Australia, where it blended with ideals for a White Australia. As home economics, domestic science developed a powerful influence in the U.S. and was one of various social, political and scientific ideas that flowed to Australia. Marilyn Lake has demonstrated a strong American model for Australian ideas about race and nation, and American influences are patent in *White Man in the*

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immigrant woman; but it is the feelings of the latter that will largely control future close white agricultural settlement along the northern coasts.... How the struggling white farmer's wife is to rear her babes, handicapped by a tropical climate and probably assisted only by ignorant black *gins* [his italics] is a problem of which no solution is at present obvious.' Questionning the White Australia Policy, Taylor acknowledged the importance of diet and hygiene, but still thought acclimatisation would take white people some generations; it would be better to allow other races to work in the hottest areas. See Griffith Taylor, 'The Settlement of Tropical Australia', *Geographical Review*, vol. 8, no. 2, 1919, pp.107, 109-10, 112

¹⁵ Letter, Cumpston to Minister for Health, March 9 1921, NAA, A1928/1, 447/1

¹⁶ Its companion 'Examination of School Children' was more objective. See Cilento, *White Man in the Tropics*, p.86, or, 'Report on Examination of School Children', NAA, SP1063/1, 277

¹⁷ The situation in New Zealand may have been different; see Melanie Nolan, 'Putting the state in its place: the domestic education debate in New Zealand', *History of Education*, vol. 30, no. 1, 2001, p.13

Tropics. ¹⁸ Committed to White Australia, and influenced by American, and possibly Canadian, concepts of women's social and racial responsibilities, Cilento adopted the ideas of domestic science and planned the Survey in such a way that it examined and exposed the domestic science knowledge of its subjects. The Survey consequently illustrates the diversity of domestic science applications, and reveals them in relation to their level of adoption by a white North Queensland working class audience. Most importantly, with eugenic ideas underlying all domestic science functions, it demonstrates the importance attached to the production of informed or 'scientific' women and mothers and the relationship between domestic science and race protection and development.

A thorough examination of the ideas that contributed to the Sociological Survey is due. Several writers have drawn attention to it, with recognition of its evidence of the way that concerns about women's health reflected wider social and political concerns about the durability of white settlement, and the role of the white woman as a racial model. For example, Douglas Gordon referred to the project as a 'socio-medical survey' in his Bancroft Oration; in a later medical textbook; he remarked that 'It will in time become an important historical source'. ¹⁹ Providing excerpts from the Survey as it appeared in *White Man in the Tropics*, he seemed to accept it without question rather than as a potentially biased account, and did not appear to grasp the significance of its domestic science structure. ²⁰ Conversely, Nikki Henningham recognised that the Survey provided an indicator of the racial pressure that white northern women experienced, and the manner in which social reform activities hinged upon their acceptance of domestic science. Arguing that white women and children were 'specially targeted' by the 'new experts of medicine, sociology and domestic science', Henningham revealed the 'anxiety and uncertainty about white woman's place in

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¹⁸ See for example her discussion of constitutional committee member and later Prime Minister Alfred Deakin's 'effectual and intellectual engagement' with the U.S.A, a nation that he saw as a republican model; as she shows elsewhere, other members of Australia's constitutional conventions shared these ideas, which were embodied in the eventual Constitution. Marilyn Lake, "The brightness of eyes and quiet assurance which seem to say American": Alfred Deakin's identification with republican manhood', *Australian Historical Studies*, vol. 38, no. 129, 2007, pp.32-51, and M. Lake, 'The White Man under Siege: New Histories of Race in the Nineteenth Century and the Advent of White Australia', *History Workshop Journal*, vol. 58, no. 1, 2004, pp.41-62

^{58,} no. 1, 2004, pp.41-62 19 Douglas Gordon, *Health, sickness and society*, St Lucia, 1976, p.167 20 *Ibid*.

early-twentieth-century tropical North Queensland'; and in discussing women as agents of whiteness, considered gender as a category in some depth.²¹

Lori Harloe also recognised the significance of a survey with women as subjects, and provided details of the Survey during her study of challenges faced by nurses during the period from early non-indigenous settlement of North Queensland through to the 1920s; Harloe's work also showed the enormity of the task that Gorman undertook.²² Alistair Yarwood similarly provided some detail on the Survey and acknowledged its social history value, but his focus was on Cilento.²³ Like Harloe, he refers to some Institute of Tropical Medicine files, but otherwise cited Harloe, Gordon or Fedora Fisher (Cilento's official biographer). These studies are valuable but by no means exhaustive considering the opportunity that the Survey presents for a comprehensive assessment of working class women's lives in North Queensland.

The title 'Sociological Survey' reflects the progressive importance of the ideas of sociology, a prospective academic discipline that emerged in the 1880s and 1890s, was still defining itself at the turn of the century but had formally established itself as a field of study in the U.S.A by the 1920s. A forum for studies and observations of society, sociologists sought to enhance human existence; from 1895, its devotees were able to share their ideas through the *American Journal of Sociology*, hereafter *AJS*. Because of its curiousity about the human condition, and its belief that humanity could improve through application of ideas developed from study of the forces that affected society, early sociology had a potential empathy with eugenics. Popenoe and Johnson argued in 1918 that 'the science of eugenics' consisted of 'a foundation of biology and a superstructure of sociology', and *AJS* articles show the way in which eugenic ideas attracted or worried sociologists, medical professionals and other social activists. ²⁴ In

²¹ Nikki Henningham, 'Perhaps if There Had Been More Women in the North, The Story Would Have Been Different': Gender and the History of White Settlement in North Queensland, 1840-1930, PhD Thesis, Department of History, University of Melbourne, 2000, pp.148-156.

Lori Harloe, "Claims on Common Humanity." A descriptive and historical analysis of the status of injured patients in tropical north Queensland 1864-1920s with emphasis on northern mining settlements, PhD thesis, James Cook University, 1996.

²³ A.T. Yarwood, 'Sir Raphael Cilento and *The White Man in the Tropics*', in R. MacLeod, D. Denoon, (eds.), *Health and Healing in Tropical Australia and Papua New Guinea*, Townsville, 1991, p.58

²⁴ P. Popenoe, R.H. Johnson, *Applied Eugenics*, New York, 1918 http://www.gutenberg.org/files/19560/19560-h/19560-h.htm

its early issues, *AJS* published papers from almost anyone with social or academic credibility, and consequently provides a rich repository of late nineteenth and early twentieth century discussions about human life. As such, it shows the breadth and intensity of early sociological practice and thought. ²⁵ In the 1920s, the *Journal of Social Forces* emerged to provide alternative publication opportunities for sociologists. Like *AJS*, *Social Forces* articles provided the opportunity to follow the development of sociology, and ultimately, sociological or social surveys. Some of the many significant writers in these publications were eminent sociologists Albion Small, Lester Ward, Charles Ellwood, Ernest Burgess, Carl Taylor and John Gillin. ²⁶

The Institute of Tropical Medicine might have preferred to obtain a qualified sociologist for its Survey, but as Davison shows, Australian educational institutions were slow to recognise sociology.²⁷ The situation was much the same in Europe, and there may simply have been no sociologists available locally. In 1929, Russian-American sociologist Pitirim Sorokin remarked that:

In Europe sociology still remains an extra-University discipline not recognized by the majority of the Universities; in the United States the Universities and Colleges which do not have it are the exceptions.²⁸

Even the most erudite European sociologists did not hold chairs in sociology and rarely lectured at universities. As a consequence, Sorokin said, there was 'no need for

²⁵ With Sociology accepted as an academic discipline, a change developed in the authorship of articles in *AJS*. By the mid 1930s, academically unqualified writers were few; although race remained important to cultural study, direct references to eugenics also diminished.

²⁶ See for example A W Small 'The Era of Sociology' *American Journal of Sociology* (*AJS*).

²⁶ See for example A.W. Small, 'The Era of Sociology', *American Journal of Sociology (AJS)*, vol. 1, no. 1, 1895, pp.1-15; Lester F. Ward, 'The Place of Sociology Among the Sciences', *AJS*, vol. 1, no. 1, 1895, pp.16-27; Charles A. Ellwood, 'Scientific Methods of Studying Human Society', *Journal of Social Forces*, vol. 2, no. 3, 1924, pp.328-332; Ernest W. Burgess, 'The Social Survey a Field for Constructive Service by Departments of Sociology', *AJS*, vol. 21, no. 4, 1916, pp.492-500; Ernest W. Burgess, 'The Interdependence of Sociology and Social Work', *Journal of Social Forces*, vol. 1, no. 4, 1923, pp.366-370; Carl C. Taylor, 'The Social Survey and the Science of Sociology', *AJS*, vol. 25, no. 6, 1920, pp.731-756; John Lewis Gillin, 'The Application of the Social Survey to Small Communities', *AJS*, vol. 17, no. 5, 1912, pp.647-658

²⁷ Graeme Davison, 'The social survey and the puzzle of Australian sociology', *Australian Historical Studies*, vol.34, no.121, 2003, p.139. When then Institute director Anton Breinl proposed a survey in 1919, he argued that it needed a qualified sociologist with statistical knowledge. See Breinl, Letter to Secretary, Dept of Home and Territories, September 27 1919. NAA: SP1061/1, 350. Survey planners did not appear to advertise for a sociologist: their first choice was University of Queensland biologist Freda Bage, who also screened other applicants. Chapter Four has more on the appointment procedures.

²⁸ Pitirim A. Sorokin, 'Some Contrasts of Contemporary European and American Sociology: I', *Social Forces*, vol. 8, no. 1, 1929, p.58

an existence of text-books in sociology' in Europe.²⁹ Americans however published robustly, and it is evident that Cilento and his peers read sociological texts and academic writings sourced from the U.S.

The Institute's American connection appears in 1921 correspondence between the Institute of Tropical Medicine's original Director, Anton Breinl, and prominent American economist and ethnographer (or social geographer) Ellsworth Huntington. 30 Huntington also appears in *White Man in the Tropics*: although Cilento did not agree with all of his ideas, Huntington's work, and recent essays on him, provided additional background for Cilento's ideas about race. 31 Another of Cilento's sources was Robert de Courcy Ward, renowned for his publications on climate as well as his 1913 suggestion that 'eugenic tests' be applied to prospective immigrants to the U.S.A. Eugenist Raymond Pearl was an additional character in *White Man in the Tropics*, and the public and academic prominence of personalities such as these provided links to other Americans with patent eugenic affiliations. For example, Pearl's article on evolutionary aspects of human mortality rates cited Karl Pearson; Pearson's publications validated connections between Cilento's ideas and those of eugenics. 33

Cilento also referred to social surveys conducted in the U.S. that influenced the way in which he designed the Survey and analysed its findings, and although he did not name them, useful sources emerged through social surveys (or comments on them) that might have provided models. For example, Lilian Brandt planned or conducted several

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²⁹ Ibid.

³⁰ See Anton Breinl; W. J. Young; Ellsworth Huntington, 'Correspondence: The Adaptability of the White Man to the Tropics in Australia', *Geographical Review*, vol. 11, no. 3, 1921, pp.474-476

Example of Mexico', *Geographical Review*, vol. 11, no. 2, 1921, pp. 243-264; Edmund Ramsden, 'Social demography and eugenics in the interwar United States', *Population and Development Review*, vol. 29, no. 4, 2003, pp.547-598; Ronald Reed Boyce, 'Geographers and the Tennessee Valley Authority', *The Geographical Review*, vol. 94, no.1, Jan 2004, pp.23-43 De Courcy Ward was a founder of the Immigration Restriction League in 1894. For more, see 'Eugenic Test for Aliens', *The New York Times*, 25 December 1913, p.8, available at *New York Times* Archives,

http://query.nytimes.com/gst/abstract.html?res=9A00E5DF113FE633A25756C2A9649D946296D6CF

³³ A. Barlington; K. Pearson, 'A Preliminary Study of Extreme Alcoholism in Adults,' Eugenics Lab. Mem., XIV, 1910, in Raymond Pearl, 'Certain Evolutionary Aspects of Human Mortality Rates', *The American Naturalist*, vol. 54, no. 630, 1920, pp.5-44

large surveys, notably of the unwell poor in New York; domestic science ideals are evident in her writing, and her racial prejudices are equally apparent.³⁴ In the same way, Carl Taylor's 1922 survey of the 'Economic and Social Conditions of North Carolina Farmers' may have been published too late for its methodology to influence Cilento, but demonstrates typical 1920s approaches and interests.³⁵

Access to materials such as those outlined above (mostly held overseas) would have been difficult and costly without the resources provided by electronic archives such as JSTOR.³⁶ *AJS* was just one journal in its collection that provided insights into early twentieth century ideas: similar publications displayed contemporary research, ideas and conclusions, as well as challenges to them. Another JSTOR journal, the *International Journal of Ethics*, appears regularly in this work; to a lesser extent, so do *Science, Annals of the American Academy of Political and Social Science, The American Journal of Nursing, Political Science Quarterly, The Quarterly Journal of Economics, The Geographical Journal, The Scientific Monthly and Transactions of the Royal Historical Society*, with occasional reference to others. A further electronic archive, Cornell University's Albert R. Mann Library, holds HEARTH (Home Economics Archive: Research, Tradition and History), which contains digitised books from 1820 to 1979 but most importantly the invaluable American *Journal of Home*

³⁴ As shown in Lilian Brandt, 'Social Aspects of Tuberculosis', *Annals of the American Academy of Political and Social Science*, vol. 21, Problems in Charities and Corrections, May, 1903, pp.65-76. See also the review of her 1905 publication, *Five Hundred and Seventy-Four Deserters and their Families*, in Roswell F. Phelps, 'Family Desertion', *Publications of the American Statistical Association*, vol. 9, no. 71, Sep., 1905, pp. 319-321

³⁵ Economic and Social Conditions of North Carolina Farmers. Based on a Survey of 1000 North Carolina Farmers in Three Typical Counties of the State. Prepared under the Direction of a Committee Appointed by the State Board of Agriculture Consisting of Representatives from the North Carolina College for Women, the North Carolina State College of Agriculture and Engineering, the University of North Carolina and the State Department of Agriculture in Cooperation with the U. S. Bureau of Agricultural Economics. North Carolina. Tenancy Commission, Carl C. Taylor (Carl Cleveland), b. 1884, Carle Clark Zimmerman, 1897-, and B. F. Brown (Benjamin Franklin), b. 1881. 1922. [Electronic Edition] University of North Carolina, Documenting the American South,

http://docsouth.unc.edu/nc/ncfarmers/menu.html

³⁶ JSTOR describes itself as an organisation that grew from a project at The Andrew W. Mellon Foundation to 'ease the increasing problems faced by libraries seeking to provide adequate shelf space for the long runs of backfiles of scholarly journals.' Anon., 'About JSTOR', <www.jstor.org> Accessed June 18 2007

Economics (hereafter *JHE*) published between 1909 and 1980.³⁷ The latter served as a key resource, for while Queensland government annual reports from the late nineteenth century through to the 1930s show the increasing importance of domestic science, they lacked tangible details of the way in which it came to the awareness of legislators and officials. *JHE* helped to fill that void by recording the ways in which domestic science enthusiasts interacted with official bodies and community organisations to enhance and spread their cause.

There was an unmistakable sense of déjà vu in reading the older academic literature, so much so that at times the material in White Man in the Tropics seemed to lack originality. Yet, this could be said of any of writers on race at the time: the unanimity of racial, and particularly eugenic, ideas was larger than their differences. Where possible, biographical details on the contributors concerned appear as footnotes, and show that practically all held positions of power or were influential in American, British and Australian society: American Ellen Potter, for example, was Director of the Pennsylvania Children's Bureau, while her contemporary Emily Greene Balch was an economist, social worker and eventual Nobel Peace Prize winner. 38 Respected Australian Sir George Knibbs was Australia's first Commonwealth Statistician: with reports that show a commitment to eugenic ideals, he was cited regularly in overseas writings. For instance, renowned bacteriologist Mazÿck Ravenel quoted him as an international authority in an essay on eugenic and dysgenic aspects of public health.³⁹ As two more examples of potential social influence, the prominent Britishers H.G. Wells and George Bernard Shaw need no introduction; sources such as these demonstrated the diversity of the manner in which eugenic messages were delivered

³⁷ HEARTH, Home Economics Archive: Research, Tradition and History, Ithaca, New York; Albert R. Mann Library, Cornell University, http://hearth.library.cornell.edu (Version January 2005).

³⁸ See Ellen C. Potter, 'Community Measures to Conserve Child Life', *Annals of the American Academy of Political and Social Science*, vol. 98, Child Welfare, Nov. 1921, pp.16-27; Emily Greene Balch, 'The Education and Efficiency of Women', *Proceedings of the Academy of Political Science in the City of New York*, vol. 1, no. 1, The Economic Position of Women, 1910, pp.61-71

³⁹ Mazÿck P. Ravenel, 'The Trend of Public Health Work: Is it Eugenic or Dysgenic?', *The Scientific Monthly*, vol. 23, no. 4, 1926, pp. 331-336. For Knibbs, see G.H. Knibbs, 'Two Letters from G. H. Knibbs, C.M.G., F.S.S., The Commonwealth Statistician of Australia', *Publications of the American Statistical Association*, vol. 16, no. 124, 1918, pp.220-221; 'The Organisation of Imperial Statistics', *Journal of the Royal Statistical Society*, vol. 83, no. 2, 1920, pp.201-224; 'The Analysis of a Census', *Quarterly Publications of the American Statistical Association*, vol. 17, no. 130, 1920, pp.177-187

and received. ⁴⁰ Locally, Australian archival material relating to domestic science and public health incentives provided opportunities for comparison and contextualisation, while Queensland government annual reports provided valuable information on attitudes and incentives in relation to its social and economic wellbeing; but *White Man in the Tropics* and the Sociological Survey provide the central print sources for 1920s Queensland. ⁴¹

The Commonwealth Department of Health published *White Man in the Tropics* as a guide to life in tropical Australia, but under Cilento's authorship, it does not engage markedly with conditions in Australia's other tropical regions in the Northern Territory or Western Australia. While Cilento uses his experiences in Papua New Guinea to support some remarks, and involves tropical health research and white tropical housing adaptations in the Americas and India, he predominantly refers to Queensland. *White Man in the Tropics* is essentially a promotional publication for that state, with two obvious themes: firstly, that white men and women could live comfortably in the tropics so long as they did so in adapted accommodation, and, secondly, that their overall health could be the same as (or better than) that of white people elsewhere provided that they adopted and endorsed low-carbohydrate diets, scientifically acceptable hygiene practices and disciplined lifestyles.

The Survey Report is available separately from *White Man in the Tropics* as an inclusion in an Institute of Tropical Medicine file. Labelled 'Report on House To House Visitation etc. Sociological Unit', the file included the Report and relevant correspondence, as well as the 'Report on the Examination of School Children in Tropical Queensland', which Gorman conducted at the same time. ⁴² The school visit report does not allow any reliable matching between its 2, 080 children and the interviewed women; its general remarks however were valuable, and cited in this work as relevant. Another file, 'Health of White Women in Tropical Australia, Appointment of Investigators' holds correspondence regarding the appointment, including

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⁴² NAA, SP1063/1, 277

⁴⁰ See 'Paper read before the Sociological Society at a meeting in the School of Economics (London University), on May 16, 1904'; published as Francis Galton, 'Eugenics: Its Definition, Scope, and Aims', *AJS*, vol. 10, no. 1, 1904, pp.1-25

⁴¹ Except in the case of Health files, to which access was denied despite their age, ostensibly because of Privacy rules. There was an option through personal application to the Minister, but even if some access was granted, it would be limited and specific.

Gorman's employment history, while others provided details of Institute of Tropical Medicine's history, operations and personnel.⁴³ Although limited in number, Gorman's letters and memos to her Institute of Tropical Medicine supervisors also provide useful background material for the Survey.

The Institute initially operated under the auspices of the (Commonwealth) Home and Territories Department, which established it to obtain 'scientifically controlled evidence' of ways of 'maintaining or improving the health' of a permanent 'working white race in tropical Australia'. ⁴⁴ As such, the Institute had a racial impetus based upon longstanding assumptions of the white right to settle where they chose. These ideas had much to do with entrenched ideas of Anglo-Saxon superiority. In 1891, while considering the possibility of productive cross-racial breeding, Francis Galton suggested that:

Partly it may be that new human varieties have come into permanent or only into temporary existence, like that most remarkable mixed race of the Normans many centuries ago, in whom, to use well known words of Mr. Freeman, the indomitable vigour of the Scandinavians, joined to the buoyant vivacity of the Gaul, produced the conquering and ruling race of Europe. ⁴⁵

Nevertheless, notions of racial superiority were not the only motivations for the racially exclusive politics that developed in Australia. Russell McGregor considered the development of Australian nationalism alongside ideas about a White Australia, and showed that economic considerations also provided incentives for racial management and promotion of an increased white population. ⁴⁶ Because of its emphasis on prudent housekeeping, domestic science became useful in this way also. When the Queensland government promoted domestic science as a means to reduce household expenditure during the Great War, it appealed to householders' sense of national and state belonging. It envisaged a benefit to State coffers from the thrift as

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⁴³ NAA, A1928/1, 447/1; SP 1063/1, 786, General Correspondence files, 1930-1965, School Of Public Health and Tropical Medicine.

⁴⁴ NAA, SP1061/1, 350, Institute of Tropical Medicine

⁴⁵ Francis Galton, Presidential address on demography, in 'Preliminary Note on the Seventh International Congress of Hygiene and the Sixth of Demography', *Journal of the Royal Statistical Society*, vol. 54, no. 3, 1891, p.539

⁴⁶ Russell McGregor, 'Breed Out the Colour': Reproductive Management for White Australia, Martin Crotty, J. Germov, Grant Rodwell, (eds), "A Race for a Place": Eugenics, Darwinism and Social Thought and Practice in Australia, Newcastle, 2000, pp.61-70

well as the secondary effect of increased physical wellbeing of its white women and children, which would in turn reduce health spending.

Due to anxieties about a perceived slow rate of population increase, accentuated by the loss of life in devastating wars, public health and hygiene became increasingly important in the late nineteenth and early twentieth centuries. Fildes, Marks and Marland show the manner in which scientists, politicians and social reformers identified poor hygiene as forming a significant part of the health risk. ⁴⁷ Although there was increasing consideration of psychological factors, the emphasis was on firstly creating the type of hygienic environment that gave mothers and children the best health opportunities. These inspirations knitted well with the many textures of domestic science.

Bashford's work on the relationships between domestic science and nursing showed the way in which nurses had to juggle and juxtapose ideas about female nature and scientific advances. By the time of the Great War, when Annie Gorman began her nursing training, instruction included many domestic science concepts: trainees studied dietetics, infant and maternal care, as well as practical nursing. Care of maternity cases, as they were known, was especially important to eugenists. The spectre of white deaths within a short time of parturition focused attention on labour management and postnatal care, and accelerated a shift from home to hospital birth. It was some time before that movement brought results; in the interim however, it inspired examination (and inevitably, criticism) of older practices, as well as the emergence of the professional and accredited nurse and midwife. Wendy Madsen's accounts of the development of the trained nurse (as opposed to the Sarah Gamp of Dickens fame) and of shifts towards hospital delivery in Rockhampton have

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⁴⁷ Valerie Fildes, Lara Marks, H. Marland, (eds), Women and Children First. International maternal and infant welfare 1870 – 1945, London, 1992, p.1

⁴⁸ Alison Bashford, 'Domestic scientists: Modernity, Gender, and the Negotiation of Science in Australian Nursing, 1880-1910' *Journal of Women's History*, Summer 2000, vol.12, no.2, pp.127-146; see also 'Is White Australia possible?' Race, Colonialism and Tropical Medicine', *Ethnic and Racial Studies*, vol. 23, 2000, pp.112-135; 'Migration, borders and public health: Histories of the future?', *Wellcome History*, no. 26, Summer 2004, p.1

⁴⁹ Gorman passed examinations in Surgical Nursing, General and Medical Nursing as well as Practical and Oral Nursing. While these all included training in antiseptic practices, Practical Nursing included invalid diets and infant care. See QSA, B/3072, Register of General Nurses with Exam Results, 1915-1925, Registration no. 338

international and local relevance.⁵⁰ The quality of infant care also attracted discussion: Irvine Loudon provides a comprehensive account of these, combined with careful demographic details.⁵¹ Loudon also argues that links between infant and maternal mortality are difficult to establish; Rebecca Kippen found similar complexities in her reconstruction of maternal mortality data in Tasmania because of under-reporting and medical confusion about official causes of death.⁵²

The midwife's part in the care of labouring women gradually became secondary to that of the GP or obstetrician: early twentieth century obstetricians such as R.W. Johnston argued that childbirth was such a complex process that only a medical doctor could ensure a safe outcome. To Ornella Moscucci considered that development, and demonstrated the racial impetus in improving labour management and outcomes. For later observers such as H.A. Cahill, it seemed that women lost control of a natural process when the medical profession intervened. Lauren Dundes showed that there are fashions even in birthing positions, but that not all made good use of gravity; rather, they increasingly suited the birth attendant. As a corollary to increased intervention, technological advances also affected birth management. Judith Leavitt studied the interactions between patient, attendants and technology, and engaged with debates about agency in childbirth, arguing that women were not powerless recipients of intervention; rather, they delegated authority to enhance their survival.

⁵⁰ Wendy Madsen, 'The Age of Transition: Nursing and Caring in the Nineteenth Century', *Journal of Australian Studies*, June 2003, no. 78, pp.40-45; 'Early 20th century untrained nursing staff in the Rockhampton district: a necessary evil?', *Journal of Advanced Nursing*, 2005, vol. 51, no. 3, pp.307–313

⁵¹ Irvine Loudon, 'On Maternal and Infant Mortality 1900–1960', *Social Annals of Medicine*, 1991, vol. 4, no.1, pp.29-73; 'Maternal mortality in the past and its relevance to developing countries today', *The American Journal of Clinical Nutrition*, 2000, no.72, pp.241s-246s

⁵² Rebecca Kippen, 'Counting nineteenth-century maternal deaths: the case of Tasmania.(Perfecting Data)', *Historical Methods*, vol. 38, no.1, 2005, pp. 14-26

 ⁵³ R.W. Johnstone, A Text-Book of Midwifery for Students and Practitioners, London, 1926
 ⁵⁴ Ornella Moscucci, 'Holistic obstetrics: the origins of "natural" childbirth in Britain',

Postgraduate Medical Journal, 79.929, March 2003, pp.168-174

⁵⁵ H.A. Cahill, 'Male appropriation and medicalization of childbirth: an historical analysis', *Journal of Advanced Nursing*, 2001, vol. 35, no. 3, pp. 334-335. See also Jo Murphy-Lawless, *Reading Birth and Death: A History of Obstetric Thinking*, Bloomington, 1998

⁵⁶ Lauren Dundes, 'The Evolution of Maternal Birthing Position', *American Journal of Public Health*, May 1987, vol. 77, no. 5, pp. 636-7

⁵⁷ Judith Walzer Leavitt, 'The Growth of Medical Authority: Technology and Morals in Turn-of-the-Century Obstetrics', *Medical Anthropology Quarterly*, New Series, vol. 1, no. 3, Obstetrics in the United States: Woman, Physician, and Society, September 1987, pp. 230-255

Changes to family structure and women's public roles, inspired by industrialisation, reinforced by war, debated by religious and other groups, and irrevocably changed by technology, are important to understanding of the society in which 1920s women participated. Angela Woollacott showed that women in Western societies shared experiences of gender and class at this time. They also shared the formative influences of racial categories, as shown in Lee Ann Whites' study of controversy about Clare de Graffenried, which highlights the incongruities of such categorisation. Although Whites' essay is set in the southern states of the U.S.A, its description of social hierarchies is relevant, and reinforces the perception that many of those who lived it at a middle-class level (particularly when equality might decrease the benefits of paying lower wages) preferred a layered nineteenth and early twentieth century society.

Useful insights into Australian experiences emerged from essays in *Women, Class and History. Feminist Perspectives on Australia 1788-1978*, produced at the height of feminist attempts to see recognition of female contributions to societies. ⁶⁰ Elizabeth Windschuttle reminded readers that most of 'what we understand as history' has tended to focus on male activities; Patricia Grimshaw argued that it was time to integrate studies of women's home and public lives in order to provide a balanced account of women's history; Sabine Wills considered the role of the church in setting and maintaining social standards and Linda Rubinstein pondered the effects of technological developments on women and work.⁶¹

Rubinstein did not emphasise the powerful and widespread connections between technology, social change, domestic science and race in many white dominated or governed societies in the early twentieth century. Melanie Nolan argues that New Zealand lobbyists failed to persuade government to make domestic science instruction

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⁵⁸ Angela Woollacott, "Khaki Fever" and Its Control: Gender, Class, Age and Sexual Morality on the British Homefront in the First World War', *Journal of Contemporary History*, vol. 29, no. 2, 1994, pp. 325-347

⁵⁹ Lee Ann Whites, 'The De Graffenried Controversy: Class, Race, and Gender in the New South', *The Journal of Southern History*, vol. 54, no. 3, Aug., 1988, pp. 449-478 ⁶⁰ Elizabeth Windschuttle, (ed.) *Women, Class and History. Feminist Perspectives on Australia* 1788-1978, Melbourne, 1980

⁶¹ *Ibid.*, Windschuttle, 'Introduction'; Patricia Grimshaw, 'Women and the Family in Australian History'; Sabine Wills, 'Homes are Divine Workshops'; Linda Rubenstein, 'Women, Work and Technological Change', pp. 19-36; 37-52; 173-191; 514-530

mandatory there, and makes no mention of any racial incentives in its introduction. ⁶² Grant Rodwell specifically addressed Australian domestic science, displaying its connection with eugenics in studies of influential characters at home and overseas: his studies of eugenics and eugenists proved critical to this work. For example, Rodwell's work on eugenist Caleb Saleeby inspired a search for Saleeby's writings (and other commentaries on them), and thus provided links to rich resources. ⁶³

Philippa Mein Smith was especially interested in the sister idea of domestic science: scientific motherhood or scientific maternalism. Her explanation of the twentieth century emphasis on population and mortality provided valuable further context to domestic science incentives, as well as to shifting ideas about the social and economic value of (white) infants and children that inspired fresh approaches to their care. ⁶⁴ Mein Smith also emphasised the racial importance and controversy of debates about sex education and birth control; albeit contested, these were also integral to the whole-of-life approach of domestic science and have attracted considerable academic interest with or without mention of their domestic science affiliations.

Alison Bashford, Ellen Warne, Bronwyn Dalley, Carol Z. Stearns and Peter Stearns all referred to the activities, motivations and conflicts of socio-political and religious advocates or opponents of sex education.⁶⁵ Dalley's essay on contrasting social responses to infanticide in *The Gendered Kiwi* also raises the matter of different perceptions of good and sad women according to their class position and introduces parallel concerns in New Zealand, with an essay by Frazer Andrewes taking a fresh

⁶² Nolan, 'Putting the state in its place: the domestic education debate in New Zealand', *History of Education*, pp.13-33

⁶³ Grant Rodwell, 'Dr Caleb Williams Saleeby: the Complete Eugenicist', *History of Education*, vol. 26, no. 1, 1997, pp. 23-40; 'Professor Harvey Sutton: National hygienist as eugenicist and educator', *Journal of the Royal Australian Historical Society*, Dec 1998, vol. 84, no. 2, pp.164-179; 'Domestic Science, Race Motherhood and Eugenics in Australian State Schools, 1900-1960', *History of Education Review*, vol. 29, no. 2, 2000, pp. 67-83; "Persons of Lax Morality": Temperance, Eugenics and Education in Australia, 1900-30', *Journal of Australian Studies*, March 2000, pp. 62-75.

⁶⁴ Phillippa Mein Smith, *Mothers and King Baby. Infant Survival and Welfare in an Imperial World: Australia 1880-1950*, London, 1997

⁶⁵ Alison Bashford and Carolyn Strange, 'Public pedagogy: sex education and mass communication in the mid-twentieth century', *Journal of the History of Sexuality*, vol. 13, no. 1, Jan 2004, pp.71-100; Ellen Warne, 'Sex Education Debates and the Modest Mother in Australia, 1890s to the 1930s', *Women's History Review*, vol. 8, no. 2, 1990, pp.311-327

approach by considering the impact of social change upon men. 66 Marilyn Lake anticipated such examinations in the 1980s when she considered Australian manhood as a social construction, arguing that 'just as women's history cannot be fruitfully written without reference to men, neither can men's history be properly written without reference to men's relations to women.'67 Men are the subject of further enquiry in Peter Stearns and Mark Knapp's investigation of changed attitudes to love and marriage at this time; Warwick Anderson refers to masculinity in his discussion of the boundaries of colonial manliness. ⁶⁸ Where they involve sexuality – and most do – all of these debates invite some induction: in this regard, Carol and Peter Stearns emphasise the potential hazards of revisionist historiography because of recent attempts to portray Victorian morality according to present understandings.⁶⁹

Young female sexuality, especially where it concerned the so-called New Woman, and later the 'modern' girl or flapper, was a particular concern for late Victorian and Edwardian society. 70 Debaters tended to be members of the same groups that worried about birth, death and marriage rates, and many of these were connected also to movements for the introduction of domestic science instruction. Recent studies of the 'sex debates' appear in work by Graham Hart and Kaye Wellings, Ivan Crozier, Julian Carter, Harry Cocks and Claudia Breger, showing the way in which young adult sexuality or its prospect concerned moral and religious authorities as young people

⁶⁶ Bronwyn Dalley, 'Criminal Conversations: Infanticide, Gender and Sexuality in Nineteenth-Century New Zealand'; Frazer Andrewes, 'The Man in the Grey Flannel Suit: White-Collar Masculinity in Post-War New Zealand', in Caroline Daley and Deborah Montgomerie, (eds), The Gendered Kiwi, Auckland, 1999, pp. 63-86; 191-212. See also Frazer Andrewes, "Putting husbands in the background?" Fashioning family, sexuality, and the modern woman in 1930s Australia'. Paper presented at the 4th Conference of the International Federation of Research into Women's History, 2003, Queen's University, Belfast

⁶⁷ See Marilyn Lake, 'The Politics of Responsibility: Identifying the Masculinist Context', Australian Historical Studies, vol. 22, no. 86, 1986, p.116, and 'Mission impossible: how men gave birth to the Australian nation – Nationalism, gender and other seminal acts,' Gender & History, vol. 4, no. 3, 1992, pp.305-322

⁶⁸ Peter N. Stearns and Mark Knapp, 'Men and Romantic Love: Pinpointing a 20th-Century Change', Journal of Social History, vol. 26, no. 4, 1993, pp. 769-795; Warwick Anderson, 'The Trespass Speaks: White Masculinity and Colonial Breakdown', The American Historical Review, vol. 102, no. 5, 1997, pp. 1343-1370

⁶⁹ Carol Zisowitz Stearns; Peter N. Stearns, 'Victorian Sexuality: Can Historians Do It Better?', *Journal of Social History*, vol. 18, no. 4, 1985, pp. 625-634

Tommentators at the time capitalised New Woman: this practice is continued here.

adopted new fashions and ideas.⁷¹ As Liz Conor and Judith Smart show, the racial integrity of young people was a constant theme of early twentieth century rhetoric and writings.⁷² Whether or not they considered that sexual activity was for recreation or procreation, debates about population increase and racial integrity were fundamental to late nineteenth or early twentieth century sex education literature. Nearly all such literature raises the issue of sexually transmitted disease, which had racial ramifications in its reputed ability to taint the white race.

Disease with its many consequences was a paramount concern in temperate as well as tropical regions and was inevitably linked to a woman's responsibility to care for her infants and children. 'Infant care' included the quality of the food offered to babies and children, through breast or artificial feeding and balanced diets: domestic science experts, allied with medical personnel, saw themselves as most fit to provide advice on these matters. Artificial feeding however produced disease risks. Peter Atkins has demonstrated the many facets of milk debates, and the reality of the dangers in the United Kingdom; Barbara Orland similarly explored Europe, and both writers show the development of food controls.⁷³ Peter Swan paid special attention to food laws and regulations in Australia, noting that action often followed disease rather than sought to prevent it to begin with.⁷⁴ Eugenists as well as domestic science experts were quick to add their voices to those of other social and medical activists who wanted broader

⁷¹ Graham Hart and Kaye Wellings, 'Sexual behaviour and its medicalisation: in sickness and in health. (Education and Debate), *British Medical Journal*, 324.7342, April 13, 2002, pp. 896-901; Ivan Crozier, "'All the World's a Stage": Dora Russell, Norman Haire, and the 1929 London World League for Sexual Reform Congress', *Journal of the History of Sexuality*, vol. 12, no. 1, 2003, pp. 16-40; Julian B. Carter, 'Birds, Bees and Venereal Disease: Toward an Intellectual History of Sex Education', *Journal of the History of Sexuality*, vol. 10, no. 2, April 2001; Harry G. Cocks, "'Sporty" girls and "artistic" boys: friendship, illicit sex, and the British "companionship" advertisement, 1913-1928', *Journal of the History of Sexuality*, vol. 11, no. 3, July 2002, pp. 457-484; Claudia Breger, 'Feminine Masculinities: Scientific and Literary Representations of "Female Inversion" at the Turn of the Twentieth Century', *Journal of the History of Sexuality*, vol. 14, no's 1/2, January/April 2005, pp. 76-106

Judith Smart, 'Feminists, flappers and Miss Australia: contesting the meanings of citizenship, femininity and nation in the 1920s', *Journal of Australian Studies*, Dec. 2001, no. 71, pp.1-20; Liz Conor, 'The Flapper in the heterosexual scene. (Representing identities), *Journal of Australian Studies*, Jan. 2002, no. pp. 43-63

Journal of Australian Studies, Jan. 2002, no. pp. 43-63

73 Peter Atkins, 'White poison?: The social consequences of milk consumption, 1850 - 1930', Social History of Medicine, 1992, vol. 5, pp. 207-227; Barbara Orland, 'Cow's Milk and Human Disease. Bovine Tuberculosis and the Difficulties Involved in Combating Animal Diseases', Food & History, vol. 1, no. 1, 2003, pp. 179-202

⁷⁴ Peter Swan, *The Pure Food Laws and Regulations: Burdensome Laws in Search of Meaningful Objectives?*, St Leonards, 1987, p.46

food controls; Caleb Saleeby for example included milk among items he described as 'racial poisons'; the same groups argued for increased legislation to cover lead, arsenic and other contaminants, in industry and the home.⁷⁵

The preceding matters all reflect the increased public presence of late nineteenth and early twentieth century women and also the associated growth of women's organisations. Judith Smart paid specific attention to women's organisations in her study of temperance movements. 76 Women's organisations developed out of shared commitments to change in women's social, economic and political situation; many also had an interest in infant and child wellbeing. The Queensland Country Women's Association (QCWA) was such a body, and organisations like theirs were common enough for Cilento to refer to them as 'movements founded on popular sentiment.'77 Records of such sentiment from a QCWA northern perspective were lost because of water damage in Townsville in the 1980s and there are no records of local meeting activities, as Minutes or Correspondence, at QCWA state archives in Brisbane. This was a disappointing discovery, because the Northern Executive stimulated and facilitated the Survey. While QCWA state records provide an absorbing overview of the organisation's ethos and activities, they contain no references to the Sociological Survey before or after its completion. Copies of QCWA correspondence in relation to it seem to exist just in Institute of Tropical Medicine files.

An enduring and significant local source is *The Townsville Daily Bulletin*, a broadsheet that drew on regular contributions from regional correspondents to *The North Queensland Register*. *The Register* was a weekly newspaper originally published from Charters Towers; it shared management with the *Bulletin* from 1911 and on various days of the week included 'Notes' from towns such as Cloncurry, Milaa Milaa, Home Hill, Charleville, Hughenden, Winton, Prosperpine, Babinda, Blackall, Emerald and Richmond.⁷⁸ The notes offered a useful insight into local events and concerns, but reports on state and national news were just as important. When

⁷⁵ Caleb Saleeby, *Woman and Womanhood. A Search for Principles*, New York, 1909, p.24 ⁷⁶ Judith Smart, 'A Mission to the Home: the Housewives Association, the Women's Christian Temperance Union and Protestant Christianity, 1920 – 1940', *Australian Feminist Studies*, 1998, pp. 217-218

⁷⁷ Memo, Cilento to Cumpston, July 20 1923, NAA, SP1063/1, 277

⁷⁸ Diane Menghetti considers it 'very likely that the Register had local contacts... - quite possibly unpaid.' Diane Menghetti , pers. comm., April 18 2006

other newspapers distributed in those areas were read, reports on wider matters of interest appeared in practically the same format in each. For example, the *Northern Miner*, another Charters Towers paper, repeated the 'notes' mentioned above and reported items of state and national news also found in the *Bulletin*. Consequently, it was more efficient and useful to work mostly with the one production, although random readings of the *Miner* were made and provided confirmation of issues that the newspapers, or their readers, deemed important to life in the North.

Some of those newspapers mentioned characters in the NQOHP recordings used here, validating particular memories, but memory can be fallible, and small corroborations are not enough to authenticate all. Use of the NQOHP as a primary source required the establishment of its reliability and hence its practical value for historical research, with three analytical tactics employed. Firstly, evaluation of the recordings used here benefitted from the NQOHP design. NQOHP participants were volunteers that initiated contact with the project, and its designers wanted a situation where the participants maintained ownership of their memories; they were narrators rather than interviewees, and their opportunity to relay stories that they deemed important overshadowed recorder interest. The free-form format enhanced the potential for those stories to emerge from memory into a tangible state. Recorders did not work from set questions, and were trained to listen, not direct.

Secondly, some histories were rejected because of reduced integrity, poor sound quality, the absence of distinct chronological markers and because (with the latter factor particularly considered) they added no new information. For example, rejection might have occurred because the story's reliability was challenged by the presence of a spouse, relative or friend who intentionally participated in the case of a joint interview, or was there for support and became involved inadvertently, making it difficult to identify individual ideas. ⁷⁹ Others were discarded because the events described could have happened at any time, and the orator overlapped dates or even decades in such a way that accurate temporal location proved to be a complex task.

⁷⁹ Many interviews took place in shared accommodation where the process intrigued other residents; companions or spectators sometimes challenged or enhanced accounts. In such circumstances, it was occasionally difficult to identify a speaker, or key speakers did not expand upon some remarks because of interjections. Some black noise was edited from recordings as they were transferred from tape to CD; background sounds however were left.

Further difficulties occurred because of the age of the women concerned. A number of participants had hearing difficulties or spoke so softly or so quickly that they were difficult to decipher; in cases where this affected the context, the recordings were not used. Nonetheless, in a database of several thousand stories, the histories rejected for these reasons were comparatively few. Detail however was critical.

It does not take fifteen accounts of doing one's laundry to demonstrate how most women did such a task, and some stories added no new information about these and other practices. Commonality is a natural outcome of interviews with individuals who were situated in communities and times when similar events affected their daily life, and is valuable: repetition and sameness help to authenticate oral accounts. At the same time, anecdotes that differed were important too, especially when they exemplified the way in which women were not necessarily locked into a practice or idea or supported other uncommon accounts. While the original intention was to refer to a group of one hundred similarly aged women, twenty-six histories were selected for focus because they incorporated markers and details verifiable elsewhere, the narrators provided specific details that others did not, and with their diversity and commonality they were representative of 1920s practices.

That does not mean there was no intervention. At times, orators fell silent or broke off for morning or afternoon tea; interviewers became actors as they attempted to revive accounts halted in this way. On a few occasions, they did so by directing the interview towards their particular academic interests, but mostly they succeeded in reminding the orator concerned of where they had been, or inspiring a shift into other topics. For example,

Barbara: It's a shame, you know, it's really a shame we haven't got the big boats coming in now to take us, you know.

Recorder: Must have been a beautiful sight, actually, especially the sailing ships.

Barbara: Ohhh, too, the loveliest sight though was the *Kuranda* – [brief pause] – the *Mourilyan*, the *Mourilyan* – of a Sunday night – it was a two-decker [two-funnel], though, the *Mourilyan*, and came across from Magnetic Island, the passage there, lit up. And of a moonlight night there, coming across, it was a beautiful sight, the *Mourilyan*, lovely sight. The *Kuranda* was only a one-decker, left there Monday night and got back here Friday night.

⁸⁰ For example, with the stories of the few women who expounded upon 1920s sexuality.

Other comments suggest that the recorder was curious about sailing ships, but all of those that Barbara mentioned were steamships; she ignored the recorder's potential cue. However, this intervention (among others) promoted temporal framing for her story. The *Mourilyan* (1349 tons, 1908, Glasgow) was a twin funnelled ship, built to carry forward mails and passengers between Townsville and Cairns, but its draught was too deep for all ports, and it switched to just a Townsville-Cairns direct service until about 1912; it resumed that service after the Great War, was withdrawn when rail services became more popular soon afterward, and sold to New Zealand in 1923; the single funnelled AUSN steamer *Kuranda* replaced it. Such influences proved a narrator's recall and allowed dating. They also probably enabled the collection of a much more detailed account than would otherwise have been provided and, while sometimes frustrating, were still productive.

In another place however, Barbara produced some questionable information as she recalled a devastating tropical storm:

I've been in two cyclones. Yes, I seen Sigma! I was a baby, coming from Brisbane, and Sigma, the big flood in Townsville... *I was the baby!* [Excited emphasis] I think we'd been to Brisbane. I was the baby on board. You wouldn't remember Sigma. 83

The recorder would not have recalled severe tropical storm Sigma, which hit in January 1896 and (during its several days of fury), caused eighteen deaths, mostly through drowning in the harbour and rivers; nor would Barbara, who was born at Charters Towers seven weeks earlier. A woman and baby of a different name were thrown from one of the boats that ferried passengers from ship to land. Several differently named women with small children appear as passengers on the sailing ships due during the storm, but each also carried steerage passengers, not listed by name: if Barbara's mother took an infant to Brisbane and back, she may have travelled that way. The point is that (whether or not she was 'the baby') Barbara obtained the story indirectly, and installed it beside her own memories. Jill Lepore refers to similar

⁸¹ W. Torrance, Steamers on the River. From Ipswich to the Sea, Brisbane, 1986, p.68

⁸² For example, with such detail, it was easy to locate another of Barbara's stories about an ocean trip that she and her husband enjoyed. NQOHP, ID 3, 6-1

⁸⁴ January 24 - 27 1896. It may have been a cyclone; see 'EMA Disasters Database', Emergency Management Australia, <www.ema.gov.au/archives/ematrack/EMATrack5.html> ⁸⁵ *Ibid.*, Sigma inspired the construction of an adequate wharf.

⁸⁶ North Queensland Herald, January 28 1896, pp. 1-3

situations.⁸⁷ The outcome was that greater attention had to be paid to substantiation of particulars in Barbara's and other accounts.

That final process completed the strategic approach to verification of the oral sources. Material from the histories used was collated and indexed to enable swift corroboration or comparison with other histories, and (wherever possible) outside sources. For example, local newspapers supported accounts of weddings; contemporary manuals and articles written by and for doctors and nurses, or for public information, verified, highlighted or filled voids in accounts of labour and childbirth. Research supported further aspects of Barbara's recollections, as it did for sundry circumstances in other stories. Consequently, although some stories may have been a little fuzzy at the edges, there is an adequate basis to assume that all of the oral histories used contain valuable truths.

While the Survey generally produced details of the lives of low-income women, the NQOHP women represent a wider range of economic and social situations. They also appear to have been overwhelmingly heterosexual; tempting though it was to wonder about one and possibly two NQOHP women, there was insufficient evidence to make an argument in that regard either directly or through inference. Fears or stories about lesbianism or any form of non-heterosexual conduct do not emerge from NQOHP accounts and would not have been on the agenda for Cilento or the Commonwealth Department of Health, publisher of White Man in the Tropics. But there is a more topical omission from the NOOHP stories: not one of those used mentions White Australia as such, and most of the NQOHP accounts concerned show little interest in and make scant reference to non-white people. It may be that conventions for polite conduct and concerns about 'political correctness' at the time when their stories were recorded tempered racial language in the recordings, especially since the narrators knew their stories were being recorded for posterity. Even without the influence of social conventions and a table microphone, a dearth of direct confirmation of the adoption of dominant ideas is unsurprising: there were so many ideas for early twentieth century women to absorb.

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 $^{^{87}}$ Lepore, 'Historians who love too much: Reflections on Microhistory and Biography', pp. 129-144

The NQOHP women's stories emerged from times when neologisms and scientific jargon bubbled from magazines and newspapers, and some of these surely entered everyday language. Eugenics, domestic science, neo-Malthusianism, scientific motherhood, White Australia, public health, female emancipation, unionism, industrial efficiency, psychology, nationalism, communism and more – the list of terms, models and theories potentially encountered by Australian men and women in the 1920s is long. Apart from some national differences, though, it generally mimics developments and changes in other western societies. As with the early journal articles, in the case of *White Man in the Tropics*, and in concerns about race, domestic science, population, health, national security and economy evinced in the popular press, government reports and books, the Sociological Survey reflects a widespread desire to improve human conditions, and, for many, humans.

Because so many of the concepts above connect, subtly or overtly, and because they merited deeper development due to their significance in or to the Sociological Survey questions or Oral History remarks, this thesis does not follow a chronological sequence. Rather, the narrative isolates matters of particular interest to Raphael Cilento, as well as some critical eugenic ideas that he ignored, such as food controls, sexual conduct, contraception, and childbirth management. White Man in the Tropics intended to persuade, not titillate; to allay fears, not raise anger. The latter topics were too controversial, sensitive or (in the case of the importance of food and particularly milk standards) superfluous for a promotional publication, but are important to an examination of domestic science in North Queensland, where ideas about racial improvement and female conduct had special significance, and to establishing or verifying events and ideas that affected the daily lives of women at this time.

Chapter One establishes the setting for comprehensive study of the Survey by consideration of the New Woman, domestic scientist and scientific mother overseas and in White Australia. It also considers some of the complexities and contradictions involved with White Australia through consideration of the development of eugenic ideas and the relationship between the work of government, social activists and the White Australia Policy that inspired fears for northern women and hence the Survey. These concerns demand consideration of the impetus behind the establishment of the

Institute of Tropical Medicine, with a brief examination of Cilento's ideas about survey methodology, and the historical development of sociological surveys. It is impossible to appreciate the importance of the Survey's interest in women without considering the prominence and significance of women themselves in times of intense racial research and introspection. As shown in Chapter One's brief reference to the growing influence of middle-class female activists and social commentators, late nineteenth and early twentieth century society emphasised almost everything that concerned women – and women were partially responsible for that attention. Chapter Two considers the social and political activities and influences that contributed to the late nineteenth and early twentieth century fixation on women; combined with mounting racial anxieties, these developments also inspired domestic science.

Chapter Three delves further into the international and domestic reform movements whose concerns about maternal and infant mortality contributed to the other inspirations for the Survey, then provides a more detailed history of the development of domestic science instruction in Queensland. In doing so, it touches upon the way in which women's groups lobbied the government to introduce domestic science lessons in schools, and baby clinics into towns. School-based domestic science education arrived too late for the women that the Survey targeted: their education was over, and had been diversely experienced. This chapter introduces several NQOHP participants as they talk about their education, but also shows other ways in which their lives changed. One such change would affect their daughters and granddaughters: regardless of their social, economic or racial categorisation, domestic science had become part of formal female education in Queensland by the time of the Survey.

Chapter Four takes a deeper look at local influences on the Survey, which would not have taken place in the manner it did (or under Cilento's direction) without scientific concerns related to white settlement and to the White Australia policy and the Institute for Tropical Medicine's recognition of women's role in nurturing white workers, or, importantly, the activities and motivations of the newly formed Queensland Country Women's Association. For the QCWA, the concepts of race science and domestic science were never distant from each other: although they articulated the importance of the latter idea for the sake of 'all' women, white women were their core concern. The principles of domestic science legitimised their focus. This chapter also provides

an impression of the way in which Gorman worked. Ultimately, it shows the influence of domestic science ideals on the Survey, its designer and its researcher.

Chapter Five explores the ways in which the northern white householder's ideas either met or failed the economic standards of domestic science; in so doing, it shows the reasoning behind the 1920s focus on the economic aspects of domestic science.

Economy was a component of domestic science from the beginning, but the Great War, science and the production line combined with the rapid development of household appliances to make economic management salient. Some domestic science commentators saw the household as a model for industrial efficiency; others wished that were so. Health, time and money intersected in the domestic science version of economics: efficient approaches to household chores provided the housewife with valuable relaxation time, and supposedly enhanced her health, but the way in which she spent her money was also critical. Theoretically, every penny should count, and the family would benefit physically, emotionally and economically from streamlined kitchens, smarter laundries and a mother with the time to shop for fresh food.

Chapter Six considers other aspects of northern life for the survey's subjects through exploration of some of the events that made them women: the rites of passage and experiences for which society bestowed the title of woman upon them; these changed during the period before the Great War and afterward. Regardless, the average New Woman still wanted marriage and the adult status that accompanied it. Some chose their marriage partners wisely. Others were caught in a cultural bind whereby it required a husband to achieve social respectability and that husband should also provide economic security, but might not, or promise to love and honour, but did not. Many women who suffered disappointment, economic or physical abuse took their regret to the Divorce Courts and embraced relaxed divorce laws instead. An increase in divorce concerned government and social commentators, but particularly eugenists, for whom the improvement of white racial life depended upon the development and continuation of the ideal environment for reproduction: marriage.

The prominence of the New Woman coincided with an increased emphasis on contraception in its various guises. Of course, if the New or modern woman took control of her sexuality, she may well have done so with the approval of the New or

modern man, for alongside the wealth of information, educational tactics and programs designed to increase their knowledge of infant and childcare and family health, young 1920s couples were likely to encounter influential new ideas about sexuality and birth control. As birth rates continued to decline, the Queensland and other governments were generally unimpressed by the possibility that married white couples were taking measures to manage their fertility. Predictably, domestic science doctrines encompassed sexuality and sexual conduct, and although Cilento was quiet on these matters in *White Man in the Tropics*, other domestic science enthusiasts were vocal. Because of their importance to a prosperous, populous, healthy and hygienic White Australia, Chapter Seven examines these matters and places them against the reality of young white northern women's sexual knowledge and conduct.

The Survey mirrored national and international concerns about Infant Mortality Rates when it enquired about its subjects' Baby Clinic attendance, and their familiarity with new childcare ideas such as those of the Plunket system. Chapter Eight follows the 'waking up' of the Queensland government to the need for baby clinics through to their introduction, revealing the actions of government and of public lobbyists from the turn of the nineteenth century into the 1920s; it progresses through those decades to reach the point where (just a few years after their introduction) clinics attracted at least a third of the mothers of newborn babies. It also addresses the Report's findings on Infant Welfare, and emphasises national, state and international concerns about infant and child mortality rates at a time when the middle-class birth rate seemed far too low. Whether or not they married or had children, by the 1920s, women were under medical and social scrutiny because of their potential to become mothers.

Baby clinics took infant care into the community and involved the presentation of nurse specialists such as the Infant Care nurse. In other developments, the reverse applied, with health incentives designed to draw women back to hospitals for prenatal and postnatal care; these coincided with the development of benchmarks for midwives, or Maternity nurses. Chapter Nine supplements NQOHP accounts of childbirth to reinforce the increased importance of safe management of labour and childbirth in a society concerned about the protection of its white mothers, and reaffirm the role played by eugenic ideas in the development of better government services. It delves further into the history of the establishment of Queensland's Baby

Clinics and (alongside consideration of NQOHP narratives) incorporates Annie Gorman's findings on northern women's understandings of infant and childcare. These sources show that, in North Queensland at least, 1920s women remained divided between old and new ways of caring for children.

Chapter Ten considers the Sociological Survey criteria for personal hygiene and cleanliness, and its measurement of health, personal hygiene and cleanliness. To do so, it examines the development of food regulation in Queensland and elsewhere, showing the importance of regulation in attempts to create a sanitary environment for the sake of public health. It also shows the shift from a belief in miasmatic or airborne contamination to a realisation that bacteria were responsible for many illnesses: by the 1920s, authorities deemed bacteria control essential to public health. This chapter reveals a poor understanding and application of hygiene and sanitation in the women Gorman encountered: if those visited were typical, then the government, health authorities and prominent eugenists had reason to worry about northern white women.

Chapter Eleven considers emerging and established health concerns and the way that health authorities addressed them. It examines selected aspects in detail; for example, through activities associated with the recognition of problems such as enteritis, tuberculosis and poisons found in the home, such as arsenic and lead. Milk safety was a significant worry because it was a food for children, yet regularly hosted disease-causing organisms: eugenists particularly targeted milk safety, believing that racial threats lay hidden within the 'opaque whiteness' of milk. The Queensland government similarly expressed its racial concerns in food and environmental control activities.

With these, with its activities in relation to rural and regional infant and maternal health, and in conjunction with federally sponsored activities such as the Survey, Queensland's government and government agencies repeatedly demonstrated their commitment to development of the tools and facilities to promote the wellbeing of its current and future white citizens. The Survey accentuated the diversity of local and international activities designed to promote community health, reflecting the belief that a vigilant and scrupulous public could reduce disease outbreaks to controllable events so long as they followed good hygiene and sanitation practices. With its interest in mothers, their domestic science knowledge, their health and personal

circumstances, the Survey draws attention to the centrality of marriage and sexual conduct in birth rate fears. Conducted within a few years of a World War whose human losses reinforced the tragedy of needless infant and maternal mortality, and supplemented pre-existing fears about white birth rates, it follows a wide impetus towards educating females into ways of caring for families that enhanced the chances of preserving human life. Finally, in measurement of its subject white women, it endures as an indicator of early twentieth century concerns for the future of a white northern Australia, the prominence of northern white women in social and governmental fears for racial security and the powerful eugenic affiliations of the preferred means of producing an informed and healthy white public: domestic science.

'The condition of the setting is the measure of the woman': social and scientific concerns about the white race that influenced ideas about the racial security of white women in the tropics.

The social survey provides a unique opportunity both for investigation and for social construction, both for the analysis of mental attitudes and for the study of the control of forces in securing improvement.

Ernest Burgess, 1916

In adopting the shibboleth "White Australia", the Australian people have been unjust to their own cause.

Persia Campbell, 1921

In 1899, William Ripley remarked upon 'The almost universal opinion... that true colonization in the tropics by the white race is impossible'. By the 1920s, some scientists contended that disease and white physiologies were smaller factors in tropical comfort than white conduct, but others were not convinced. In 1923, Andrew Balfour (Director of the London School of Hygiene and Tropical Medicine) argued that:

So far as the race is concerned I am persuaded that the hot and humid tropics are not suited to white colonization and never will be with our present knowledge, even if they are rendered as free from disease as England.²

While tropical living carried pathological risks, many physicians and social researchers thought it also to have a psychological affect on the emotionally sensitive higher races: the condition known as tropical neurasthenia exemplified and manifested those ideas. A functional term for a host of perceived physiological, psychological and psychiatric disorders often otherwise classified as hysterical, neurasthenia had cultural differences and similarities in many parts of the world. Charles Beard had described and labelled neurasthenia in the late nineteenth century: he considered it a nervous

¹ W. Z. Ripley, *The Races of Europe*, New York, 1899, p. 584, in Glenn T. Trewartha, 'Recent Thought on the Problem of White Acclimatization in the Wet Tropics', *Geographical Review*, vol. 16, no. 3, 1926, p.467

vol. 16, no. 3, 1926, p.467 ² *Ibid*. Cites Andrew Balfour, 'Sojourners in the Tropics', *The Lancet*, vol. 204, 1923, pp.1329-1334

condition that emerged in response to the pressures of modern life.³ The disorder became racially significant in its tropical form, where it seemed to produce a variety of physical and psychological symptoms that included depression, anxiety and a tendency towards dissipation and alcoholism, with the additional complexity of decreased fertility particularly evident in women. Languid, neurotic, debauched, self-indulgent or drunk, they hardly represented the white man or woman at their best or fittest, but with or without the tropical version, neurasthenics were socially and racially problematic; they were another burden on white societies worried about population increase, high infant mortality rates, prevalent diseases and community health in general. To address such issues, concerned middle-class white women and medical scientists developed a socio-medical solution, and called it domestic science.

By 1899, many people in the U.S. knew domestic science as home economics. The terms domestic science and home economics were used there simultaneously for some time; the former appears in books and journals outside of the Home Economics Association. (Officials of the American Home Economics Association weighed different names according to their appeal and the credibility they might add to the movement.⁴) New Zealanders knew it as household or home science, and sometimes domestic arts. Women in British India may have used similar terms, while in

³ Beard and some others envisaged humans in a mechanistic way; like a machine, the human body had a finite capacity for work before it broke down and needed repair. Simply, neurasthenia was attributed to overwork in men, and over-socialisation in women. It produced languor and depression, but also a tendency to become excited; in women it was thought to provoke anaemia, menorrhagia and dysmenorrhea. See Chandak Sengoopta, "'A Mob of Incoherent Symptoms?" Neurasthenia in British Medical Discourse', in Marijke-Gijswijt Hofstra and Roy Porter (eds), *Cultures of Neurasthenia from Beard to the First World War*, Rodopi, 2001, pp.97-115, and Anderson, 'The Trespass Speaks: White Masculinity and Colonial Breakdown', p.1344

⁴ Delegates to the first conference of Home Economics at Lake Placid in 1899 chose 'home economics' to promote an association with economics. Options, as Weigley notes, were 'domestic economy for younger pupils, domestic science in high schools where scientific methods might be applied, and household or home economics for college courses'. Five years later, delegates contemplated a change to the more prestigious title of 'household administration and ecology', before Chairman (Ellen) Richards 'mentioned the new word eugenics... and suggested that euthenics or better living, might be used to designate the field in higher education.' The Conference approved titles (including euthenics) for different educational levels, but home economics eventually became the popular term. See Emma Seifrit Weigley, 'It Might Have Been Euthenics: The Lake Placid Conferences and the Home Economics Movement', American Quarterly, vol. 26, no. 1, Mar., 1974, pp.94-96; also, Anon., 'Lake Placid Conference on Home Economics', JHE, vol. 1, no. 1, 1909, p.4

Australia, as in Canada, it was nearly always domestic science. From its beginnings, domestic science reflected eugenic ideas about a woman's responsibility for her family's health as well as concerns about infant and child mortality rates attributed partly to poor household sanitation. Consequently, the American Home Economics Association aimed to train teachers who could deliver a message of household sanitation and personal hygiene, infant and childcare, dietetics and economic practices to mothers and others responsible for child or family care. It wanted domestic science widely accepted as a valuable means of improving and maintaining community health. The same goals applied in Australia.

Rodwell refers to Tasmanian doctor Gertrude Halley, who in 1907 taught

fresh air, respiration, circulation, personal and home cleanliness, the care of teeth and digestion, values and uses of different foods, the care and feeding of infant and children, and the prevention of the spread of infectious diseases. ⁶

Halley's intentions seem innocuous as sanitation activities in a world without antibiotics, but they concealed a larger objective of race protection, and its enablement through the education of mothers. Ellen Richards, a prominent figure in the American Home Economics Association, commented the same year that 'Education of all women in the principles of sanitary science is the key to race progress in the twentieth

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⁵ No literature or government records found explained the choice of domestic science as a name in Queensland. New South Wales may have adopted the idea of using 'domestic science' and 'home economics' for different levels of education. A 1927 writer remarked of New South Wales that 'For girls fifty scholarships are provided to permit meritorious domestic-science pupils to proceed to the home-economics course at the technical college'; see S.H. Smith, 'Secondary and Super-Primary Education in Australia', The School Review, vol. 36, no. 2, 1928, p.123. Re New Zealand, Nolan notes that 'lobby groups used the terms 'domestic science' and 'domestic arts' interchangeably': see Nolan, 'Putting the state in its place: the domestic education debate in New Zealand', p.13; from 1922, Ann Gilchrist Strong noted that 'Miss Boys-Smith and Helen Rawson from England have done good work in developing what is here called the "Home Science" courses....'; Ann Gilchrist Strong, 'Home Economics in India and New Zealand', JHE, vol. 14, no. 11, 1922, pp.530-2. For more on Strong (an American home Economics graduate and divorcee with a fondness for India) and India, see Mary Hancock, 'Home Science and the Nationalization of Domesticity in Colonial India', Modern Asian Studies, vol. 35, no. 4, 2001, pp. 871-903. For the setting in which home science on the Indian continent began, see Manu Bhagavan, 'The Rebel Academy: Modernity and the Movement for a University in Princely Baroda, 1908-49', The Journal of Asian Studies, vol. 61, no. 3, 2002, p.924

⁶ *Mercury* [Hobart], 1907, in Rodwell, 'Domestic Science, Race Motherhood and Eugenics in Australian State Schools, 1900-1960', p.69

century.' Mothers were the primary targets: science provided constant reminders of their significance.

The emergence of science and the scientist as we know them can be dated to any time in history, but more conveniently to the Enlightenment and Industrial Revolution, especially in regard to ideas about disease. 8 Ancient quarantine practices against the spread of disease assumed that it was transmissible, but Enlightenment thinkers decided that it was environment related and challenged earlier ideas about its contagious nature. From about Enlightenment, minute disease-spreading particles were imagined as miasma, or bad air, and the tendency for disease to occur in places that smelled and looked filthy led to an association of dirt with disease. ¹⁰ In nineteenth century Britain, epidemics of typhoid and cholera seemed to abate when sanitation improved, and the sick seemed more likely to recover when all around them was clean. Sanitation activities became part of municipal responsibility in western societies for these reasons. Science was directly responsible for programs to drain swamps, install sewerage systems, provide clean drinking and bathing water and restrict human movement in times of disease; sanitation and hygiene became bywords for human health. Once germs could be seen microscopically, sanitary ideas began to include measures to control them, albeit with debate. The manner in which the diverse organisms that appeared on microscope slides transformed well into unwell humans inspired intense and competitive international academic arguments. 11

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⁷ Ellen H. Richards, Euthenics, the science of controllable environment: a plea for better living conditions as a first step toward higher human efficiency, Boston, 1910, p.46

⁸ Eighteenth century French developments and culture provide a backdrop to the century that followed: see Robert Darnton, *The Great Cat Massacre and other Episodes in French Cultural History*, London, 2001, p.263. Similarly, Keith Thomas still provides a sound introduction to human understandings of the pre-Enlightenment world and beyond in *Man and the natural world: changing attitudes in England 1500-1800*, London, 1983. For a work with interest in the social relationships and development of medicine, see Roy Porter, (ed.), *The Cambridge History of Medicine*, New York, 2006, particularly the chapters by Kenneth Kipple and Vivian Nutton.

⁹ Jo N. Hays, *The Burdens of Disease. Epidemics and Human Response in Western History*, 1998, p.110. While religion once mediated human existence, eighteenth and nineteenth century thinkers had either to reject older or biblical explanations of creation and human existence, or fit them into new theories and findings; often, they emerged as new ideas.

¹⁰ *Ibid.*, p.111; for more on miasma and dirt theories, see Chapter Ten.

¹¹ As for example with Koch's assertions about tuberculosis, which he later contradicted, only for another scientist to prove a year later that Koch was correct the first time. See Chapter Ten.

By the 1920s, medical science had passed through two stages: the first was when ideas about miasma dominated and authorities targeted 'filth'; in the second, scientists focused upon infectious disease in an attack on bacteria. This, Vincent argued, meant that 'The diagnostic laboratory' assumed its role in disease identification and prevention, through 'the preparation of antitoxins, vaccines and sera'; scientific success in this manner led to the third stage, which dealt with personal hygiene, because:

A large majority of the diseases which contribute to the death-rate cannot be controlled by public authorities. These maladies can be avoided or minimized only by the intelligent self-control of the individual.¹³

Hence, he added, there was the current 'demand for education....'¹⁴ Although he wrote with understandable optimism after the height of what Anne Hardy terms the 'Era of Bacteriology' between 1880 and 1920, Vincent too hastily dismissed the attack on bacteria: in 1923, further microorganisms remained hidden. ¹⁵ He also downplayed the ongoing need for authorities to monitor disease sources that the public had a right to expect to be clean: meat, eggs, milk and other dairy products could host the organisms responsible for salmonella, typhoid and other gastric or infectious diseases – among them, tuberculosis. Nonetheless, Vincent's words suggest that science seemed then to have the entire miniature world in its lenses and had concentrated its focus on prevention at an individual level. Certainly, it was important to teach basic hygiene and sanitation principles to individuals, but had Vincent substituted 'women' or 'mothers' he would have been closer to the reality of his and earlier times. Authorities

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¹² 'Bacteria' is used predominantly throughout this work as a generic term for microorganisms because of its frequency as such in early academic writing; the term gradually entered scientific literature after Ferdinand Kohn's 1875 classification of bacteria. A search of JSTOR articles between 1880 and 1925 shows 5,111 mentions of bacteria or bacterium, seventy-eight mentions of pathogen or pathogens (sometimes with germs, bacteria or bacterium), 155 mentions of microorganisms (with or without a hyphen) and 7, 843 references to germs. The latter term had a broader meaning for some time; it referred also to generative cells, and consequently to sperm or ova. It became linked to bacteria and eventually acquired its present meaning. See for example T. J. Burrill, 'Disease Germs: Another Illustration of the Fact That Bacteria Cause Disease', *Proceedings of the American Society of Microscopists*, Vol. 9, Tenth Annual Meeting, 1887, pp. 193-206; Frederic P. Gorham, 'The Sixth Annual Meeting of the Society of American Bacteriologists', *Science*, vol. 21, no. 535, 1905, pp. 481-498, and Mazÿck P. Ravenel, 'Review: The History of Bacteriology', *American Journal of Public Health*, 1939 March, vol. 29, no. 3, pp. 282–283

¹³ George E. Vincent, 'Public Welfare and Public Health', *Annals of the American Academy of Political and Social Science*, vol. 105, Public Welfare in the United States, 1923, p.36

¹⁵ Anne Hardy, 'Methods of outbreak investigation in the "Era of Bacteriology" 1880-1920', *Soz-Präventivmed*, vol. 46, no.4, 2001, pp.355-360

routinely involved women as agents in disease control from about the time that they theorised that milk carried disease; once they had evidence of bacterial contaminants, the pressure on women and mothers increased, going from insistence on their duty to breastfeed to incorporate their duty to sanitise the home.

Science also contributed to the concept of eugenics. For United States and English-speaking eugenics enthusiasts, Ramsden notes that enquiries included 'an array of social, anthropometric, genealogical, and census surveys', the results of which substantiated fears of a decline in white middle and upper class fertility; with reproduction rates falling in society's supposedly racially fittest group, racial security was jeopardised. Anxiety about these changes overwhelmingly emanated from a white middle class, and also inspired late nineteenth and early twentieth century European socio-scientific research in non-English speaking nations. Regardless of their location, it seemed to educated observers that as the health and mortality rates of the lower classes improved, they placed the least fit in a better position to survive and to breed. This they appeared to be doing, which inspired Edward Ross to discuss the fear of 'race suicide' According to Ross, white society was allowing itself to be driven to the edge of a racial cliff. For that possibility, Francis Galton proposed eugenics as a remedy.

¹⁶ Ramsden, 'Social demography and eugenics in the interwar United States', p. 552 ¹⁷ For Germany, see Sheila Faith Weiss, 'The Race Hygiene Movement in Germany', *Osiris*, 2nd Series, vol. 3, 1987, pp. 199-206; for other European developments, see Siep Stuurman, 'Samuel Van Houten and Dutch Liberalism, 1860-90', Journal of the History of Ideas, vol. 50, no. 1, 1989, pp.135-152 and Richard Cleminson, "Science and Sympathy" or "Sexual Subversion on a Human Basis"? Anarchists in Spain and the World League for Sexual Reform', Journal of the History of Sexuality, vol. 12, no. 1, 2003, pp. 110-121 ¹⁸ Edward A. Ross, 'The causes of race superiority', Annals of the American Academy of Political and Social Science, 1901, vol. 18, pp.67-70, 87-89. Ross's fears incorporated reproduction increases among (perceived) lower class white people and other races: in fact, the article concerned shows prejudice against almost every non-white culture, and some considered white. Ross argued that superiority of one people over another was 'not necessarily racial' and that race was 'the watchword of the vulgar' or uninformed. He contended that racial superiority depended upon the presence of specific racial characteristics; key characteristics were climatic adaptability, energy, self-reliance, foresight, value sense, martial traits, stability of character, 'pride of blood' and a strong sense of superiority. Importantly, Ross believed that climatic adaptability worked against white tropical residence in the long term. White people could benefit from 'commercial and industrial exploitation at a distance' but would eventually deteriorate as they adapted, causing 'the creation at a frightful cost of a new race variety by climatic selection'.

¹⁹ Francis (later Sir Francis) Galton was born in 1822 and died in 1911. He began to study what we now call genetics in the 1860s after being impressed by Darwin's *The Origin of Species*. Later he began 'the systematic study of variation and heredity' that he called biometry.

Influenced by the genetic theories developed by Gregor Mendel, Galton's simplest explanation of eugenics revealed it as a science that studied or attempted to manipulate 'those social agencies that influence, mentally or physically, the racial qualities of future generations.' It was more than a social matter however: eugenics was also about biology, with an interest in the perpetuation of characteristics that Galton described as 'more valuable than money or lands'; he meant 'the heritage of a high character, capable brains, fine physique and vigor' through careful breeding. Because of the limitations of microscopy at the time, early twentieth century scientists had just an experimental basis for their understanding of genes, which they represented through terms such as 'germ cells' and 'determiners' related to an organism's 'genetic material'. Nonetheless, it was clear that there existed 'something of unascertained nature, which must lie at the foundation of any elementary hereditary quality'. Over the years, fruit fly research showed that genes carried markers for different traits and characteristics that scientists could use to breed for desired characteristics. For Galton, these discoveries could extend to human breeding.

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According to Shull, Galton (and his compatriot, Karl Pearson) saw biometry and 'Mendelian heredity... [as] one and the same concept.' Galton's ideas on inheritance eventually emerged as eugenics. George H. Shull, 'A Permanent Memorial to Galton and Mendel', *The Scientific Monthly*, vol. 16, no. 3, 1923, pp. 263-268; John Gray and John Beddoe, 'Sir Francis Galton, M.A., D.C.L., F.R.S. Born, February 16, 1822; Died, January 17, 1911', *Man*, vol. 11, 1911, pp. 33-34. See also Gavan Tredoux (ed.) 'Biography of Francis Galton', http://galton.org/Viewed May 10 2007>. Karl Pearson was a statistician who held the Galton-funded first Chair in Eugenics at London University. See M. Eileen Magnello, 'Karl Pearson and the Origins of Modern Statistics: An Elastician becomes a Statistician', *The Rutherford Journal*, vol. 1, December 2005. http://www.rutherfordjournal.org/current.html>
²⁰ Francis Galton, 'Studies in Eugenics', *AJS*, vol. 11, no. 1, Jul., 1905, p.11

²¹ Ibid

²² G.H. Shull, 'Genetic Definitions in the New Standard Dictionary', *The American Naturalist*, vol. 49, no. 577, 1915, pp. 54-5. In 1912, Shull had explained that the word "gene" and 'its plural "genes"' were English developments of Darwin's descriptive word 'pangen'; they were, he said, 'now generally used by writers of English papers on genetics; see G.H. Shull, ""Genes" Or "Gens"?', *Science*, New Series, vol. 35, no. 908, 1912, p. 819. See also T. H. Morgan, 'The Theory of the Gene', *The American Naturalist*, vol. 51, no. 609, 1917, pp. 513-544.

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&</sup>lt;sup>23</sup> Shull, 'Genetic Definitions in the New Standard Dictionary', pp. 54-5. By the 1920s, scientists understood genes as real parts of chromosomes. In 1922, Shull's brother (Aaron Franklin Shull) told students that, over the past decade, hundreds of determining areas on fruit fly chromosomes had been identified, and that they 'crossed over' during fertilization, when chromosomes from both parents twisted together. He did not mention the word 'gene': by then he did not need to do so. A. Franklin Shull, 'Ten Years of Heredity', *Transactions of the American Microscopical Society*, vol. 41, no. 2, 1922, pp. 82-100

Galton did not expect or desire the eventual creation of a homogenous humanity. Society would be 'very dull', he argued, if all humans were alike; eugenics allowed for different civilisations, characters and ideals. Eugenics intended:

to represent each class or sect by its best specimens; that done, to leave them to work out their common civilization in their own way... The aim of eugenics is to bring as many influences as can be reasonably employed, to cause the useful classes in the community to contribute more than their proportion to the next generation.²⁴

Paradoxically, Galton proposed that both higher and lower races experienced decline, the one by being highly civilised, and the other by not. He theorised that civilisation came at a cost to the higher races, which tended to experience reduced fertility, while lower races (with the exception of 'the Negro') declined as a consequence of being brought into contact with high civilization'. Rather than explain African survival, he found hope for the white race in their fecundity under oppression; similarly, he suggested, selectively bred white humans could regain their fertility; moreover, he added, 'they may become more fertile under artificial conditions....' Galton intended to locate the best white breeding stock, and eugenists consequently directed much of their research into identifying higher and lower quality humans. The family tree became a eugenic fascination, while other research, notably by Charles Davenport, sought to expand upon Mendel's findings on breeding.²⁷

Despite their contradictions, eugenic ideas seemed like good science to their supporters, who researched and published busily and earnestly as they developed and promoted their ideas about human difference and its consequences. Eugenically influenced academic articles and books seem to be more a collection of artfully argued points of view than science, yet arguments of this type were persuasive at the time. They appealed outside of science because they coincided with so many contemporary social interests but differed enough to meet individual beliefs. As he addressed the

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²⁴ Galton, 'Eugenics: Its Definition, Scope, and Aims', p.3

²⁵ *Ibid*.

²⁶ *Ibid*.

²⁷ Davenport remarked that 'man is studying all phenomena. He has at last come to study himself. Not his diseases, not his language, not his customs merely, but also his intimate self... if there be a serious support of research in eugenics and a willingness to be guided by clearly established facts in this field, the end of our species may long be postponed and the race may be brought to higher levels of racial health, happiness and effectiveness. 'Charles B. Davenport, 'Research in Eugenics', *Science*, New Series, vol. 54, no. 1400, 1921, pp.391, 397

Second International Congress of Eugenics in 1926, Charles Darwin's son did not see such differences as problematic. 'Differences of opinion no doubt exist', he said, among the researchers who had provided the 'practical superstructure' for eugenics, and would among the people who would apply eugenic theories in society; but uniformity was never productive in an evolutionary sense.²⁸ Believers 'should therefore neither regret a certain amount of divergence of opinion not attempt to hide it... competition we must have in everything, our opinions included.' ²⁹ Darwin was correct. Eugenics was never unequivocal.

Individuals and groups expressed their understanding of eugenics in diverse ways, following a general ideal or applying some concepts, and some such concepts were common to other racial theories. In the same way, 'race hygiene' was another term that can encompass several racial ideas: it occasionally appears as an explanatory concept in late nineteenth and early twentieth century scientific literature alongside eugenics. In Germany, notions of race hygiene (*Rassenhygiene*) were noticeably tied to eugenic ideas that Weiss describes as 'far more heterogeneous... [in terms of] politics and ideology than is generally assumed.'³⁰ Nonetheless, in relation to race hygiene, like their European and North American peers, German eugenists 'accepted the racial and cultural superiority of Caucasians as a matter of course.'³¹

As a concept, race hygiene was also sometimes mentioned alongside Social Darwinism. D. Colin Wells explained Social Darwinism in 1907 as the:

general doctrine of the gradual appearance of new forms through variation; the struggle of superabundant forms; the elimination of those poorly fitted, and

²⁸ Leonard Darwin, 'The Field of Eugenic Reform', *The Scientific Monthly*, vol. 13, no. 5, 1921, p.385

²⁹ *Ibid.*, pp. 385-386

³⁰ Weiss notes that there was potential ambiguity in the term as applied in Germany.
'Rassenhygiene', she says, had wider connotations than the English understanding of the word eugenics, as it incorporated efforts to improve hereditary qualities as well as measures towards population increase. Nonetheless, she adds that 'Even when German eugenicists limited themselves to measures that fall under the more limited term Eugenik (the Germanized form of the English word), they almost always used the term Rassenhygiene.' Weiss, 'The Race Hygiene Movement in Germany', p.193, fn 1; p.194. Weiss reveals that in 1931, the Gesellschaft fur Rassenhygiene (the society responsible for the magazine Archiv für Rassenund Gesellschaftsbiologie or 'Archive for Racial and Social Biology' changed its name to Gesellschaft für Rassenhygiene (Eugenik): in English, this was equivalent to 'the Society for Racial Hygiene (Eugenics)'; see p.221. Weiss also discusses the ideas of pro-Aryan eugenists prior to Hitler's rise to power and the threat that some perceived in neo-Malthusianism.

³¹ Ibid.

the survival of those better fitted, to the given environment; and the maintenance of racial efficiency only by incessant struggle and ruthless elimination.³²

He added that:

Through variation, adaptation, the struggle of competing forms, elimination, survival, and heredity, organic life undergoes a slow modification, age after age, in a process that results in extinction, or variety, and what we call progress. This explanation of how the infinite variety and hierarchy of organic forms came about may be, and has been, applied, as by Spencer, to human institutions and types of thought... We have been forced to a more vital and organic interpretation of history....³³

Simply, Social Darwinists sought to apply Darwin's theories of survival to human society, but hasten 'natural' selection by the unnatural means of deliberate breeding; in so doing, as the excerpt above shows, they attempted to make their interpretations sound scientific enough to justify adoption. Darwin certainly gave them a basis for such ideas: in The Descent of Man, he argued that

We civilized men... do our utmost to check the process of elimination; we build asylums for the imbecile, the maimed and the sick; we institute poorlaws; and our medical men exert their utmost skill to save the life of everyone to the last moment .. Thus the weak members of civilized societies propagate their kind ... no one who has attended to the breeding of domestic animals will doubt that this must be highly injurious to the race of man ... excepting in the case of man himself, hardly anyone is so ignorant as to allow his worst animals to breed.34

Nonetheless, as Gloria Mc Conauchey shows, Darwin saw culturally rather than biologically-based race differences. Mc Conauchey described Social Darwinism as 'the use of natural selection to justify the more brutal aspects of late nineteenth century society'; in this way, 'Imperialism and dogmatic racism were translated into biological language' and eventually, 'Darwinian theory became social dogma.'35 But Social Darwinism did not become broadly popular as a distinct idea under that name at this time: the term is uncommon in European and American academic literature before the late 1940s. Reviewing a work on acknowledged American sociologist and social Darwinist William Graham Sumner, A.G. Keller commented in 1945 that he had

³² D. Colin Wells, 'Social Darwinism', *AJS*, vol. 12, no. 5, 1907, p. 695

³⁴ Charles Darwin, *The Descent of Man*, New York, 1989, pp.5-6, in Gloria Mc Connaughey, 'Darwin and Social Darwinism', Osiris, vol. 9, 1950, pp.398, 404

³⁵ *Ibid.*, p.398

known many of the characters mentioned in the book, and (while he thought that 'nearly all of them would have registered as evolutionists, and would have interpreted what they disliked as perversions of evolution as they saw it'), the concept was not accepted. 'There was once a session of the American Sociological Society devoted to Social Darwinism', he recalled, 'but nothing emerged from it, not even a diverting squabble, that was lively enough to stick in memory.' Although another reviewer differed, the idea did not seem to have any more currency in Australia, and consequently will receive little attention. Because of its ability to accommodate different perspectives, and its subsequent broad appeal within and outside of science during debates on racial futures, eugenics is a more convenient term to represent the breadth of racial theories and perspectives based upon the concept of regulated breeding to maintain white superiority.

Race ideas inspired and met fresh ideas about tropical medicine. Late nineteenth century Britain produced evidence that tropical life for Europeans could be improved rather than suffered, through preventive rather than responsive medicine and through practical investments in infrastructure and tropically specific accommodation and sanitation developments.³⁸ The new approach to tropical living standards inspired investigations inside and out of the Empire; scientific research boomed as scientists in the colonies, the U.S.A and Australia developed research programs independently of

³⁶ A.G. Keller, 'Review of *Social Darwinism in American Thought, 1860-1915*', *The Scientific Monthly*, vol. 60, no. 5, 1945, p.399. This is almost certainly sociologist and anthropologist Albert Galloway Keller, himself an 'evolutionist', as he puts it, and a friend of Sumner's, hence potentially biased. The review refers to Richard Hofstadter, *Social Darwinism in American Thought, 1860-1915*, Philadelphia, 1944. Keller edited Sumner's works and had published on Sumner 35 years earlier: see A. G. Keller, 'William Graham Sumner', *AJS*, vol. 15, no. 6, 1910, pp.832-835. See also Online Library of Liberty: 'Albert Galloway Keller', http://oll.libertyfund.org/index.php?option=com_staticxt&staticfile=show.php%3Fperson=237&Itemid=27

³⁷ M.F. Ashley Montague explained that 'Social Darwinists are the people who believe - and there are still many of them around – that the forces of natural selection, and particularly the operation of the laws which determine the survival of the fittest, are at least as effective within the universe of social life as they are in that of the life of nature....'; he argued that Spencer had a greater impact, and that 'For about twenty years, from 1870 to 1890, almost everyone who amounted to anything intellectually was a Spencerian, and in some sense, a social Darwinist.' See M.F. Ashley Montagu, 'Review of *Social Darwinism in American Thought*, 1860-1915', *Isis*, vol. 36, no. 2, 1946, p.146

³⁸ For the diversity of ideas attached to the development of colonial science and relevant historiography, see Mark Harrison, 'Science and the British Empire. (Colonialism)', *Isis*, vol. 96, no. 1, March 2005, pp.56-64

British funding and direction, actively exchanging ideas and expertise. ³⁹ Among these were diseases such as yellow fever and malaria, parasitic infections like hookworm, and the puzzling 'fevers' that bothered tropical residents. ⁴⁰ The Institute of Tropical Medicine dedicated much of its budget and energy to such research. However, education remained a critical component of its and other agencies' public health activities, and newly emancipated middle class women saw themselves as uniquely positioned to guide such educational work.

The Great War, as Hayes and many other commentators argued, reinforced or proved emancipist claims about female abilities. From England, Dame Adelaide Anderson attributed much of the New Woman's conduct and many of her new ideas about her value as a worker and individual to her entry into wartime factory work. Anderson argued that engagement with new work opportunities meant that women 'overcame their sense of inferiority and found a new self-confidence'; moreover, in coping well with physical work 'previously believed beyond their powers', they 'became accustomed to better wages, more wholesome food, more suitable sanitary arrangements'; so much so, that they began to expect a much higher standard of living overall, but especially at work. ⁴¹ Domestic science ideas already influenced expectations for women's conditions at home but could accommodate their non-domestic work conditions too.

Demands for increasing the availability of domestic science education increased after the Great War. In 1921, Benjamin Andrews (Chairman of the International Association of Home Economics) commented that

The world is focusing on the health of the human race from childhood to old age. Every association dedicated to bettering human life is calling for more information regarding human nutrition, maintenance of efficiency, and the direct teaching of those basic principles which enter into everyday living. In all these, home economics workers are the leaders who must point the way.

As for example with the Rockefeller Foundation, which worked closely with Australia's Commonwealth Department of Health. Cilento also visited Rockefeller facilities in the U.S.
 Hays remarks that "Fevers" might include typhus, malaria (sometimes subsumed under a more general "ague"), yellow fever, and influenza. Hays, *The Burdens of Disease*, p.110
 Frank R Kerr, "Women in the Factory", Review of Anderson, A. M., *Women in the Factory*, John Murray: London, 1922', *The Queensland Industrial Gazette*, September 1923, p.540

The need was never more compelling, the call was never more imperative; they must either forge ahead and assume leadership or surrender it to others. 42

Andrews was subtle in his reference to the 'human race': for white dominated societies, domestic science was a racial undertaking first and humanitarian objective second. In the same address, he noted that:

The International Committee has been asked to send a deputation of American professors of home economics to Australia to organize work in the University of Sidney [sic], and make other plans for promoting home economics in Australia.... The invitation comes in the name of the National Council of Women in Australia....⁴³

It is likely that the National Council of Women were aware of the racial betterment ambitions of domestic science.

Vincent had remarked in 1923 that 'Public health progress is conditioned by the state of scientific knowledge.' 44 The Sociological Survey represents a genuine attempt to increase scientific knowledge for the sake of public health. Cumpston, its keenest official supporter, was a public health enthusiast who in 1921 had pessimistically held that climate was too great a deterrent to long-term northern settlement but was willing to see if healthier lifestyles made a difference. 45 While Cilento did not accept that climate was a problem, the two were in agreement about healthy practices: Cumpston argued that 'the continued residence of women under tropical conditions is entirely a matter of health', and Cilento believed that people could live in the tropics healthily by their own actions with the help of their inherent adaptability. 46 They had other common ground. Each hoped for continued white development of the tropics, understood eugenics and had lived through the days prior to the Great War when science, emancipation, the rising consumer society, birth and death rates and the future of the white race were much debated issues.

Women remained central to scientific and social discussions because of their dual roles as mothers and racial custodians. A great deal of eugenic research concerned itself with the roles and functions of women, who provided most of the primary care

⁴² Benjamin Andrews, 'A Call to Service', Bulletin of the American Home Economics Association, Series 7, no. 1, 1921, pp.1-2

⁴³ *Ibid*.

⁴³ Vincent, 'Public Welfare and Public Health', p.37

⁴⁴ NAA, A1928/1, 447/1, letter, Cumpston to Minister for Health, 9 March, 1921 46 Ibid.

of the infants and children that Western societies wanted to see increase in numbers and health. However, another development of eugenic concepts emerged around the 1920s in the form of social medicine, or the belief that environmental factors as much as, or more than, heredity determined individual health. Eugenic theories helped social medicine to offer a broad and coherent concept of human improvement through hygienic and sanitary education at home and at work. Scientists, doctors and sociologists worked together to develop programs that explained and promoted hygienic practices for nurses, teachers and industry managers to deliver in homes and workplaces, which should then become safer and more productive places.

Social medicine addressed biological realities along economic and social lines. Its economic component depended upon industry and employer support so that workers could earn enough to live well, for an appropriately paid worker would be more willing to adopt new ideas and could afford to apply newly acquired sanitarian knowledge at home and at work. In 1925, for example, Thompson reminded readers that health problems were more intense among the underpaid, or in a eugenic sense, inefficient humans at the base of the genetic tree:

Inefficients, as a class, fall into the lower wage groups and many studies have shown that infant mortality is closely correlated with wage, varying inversely with the size of the income. ⁴⁸

Social medicine supporters hoped that health-conscious employers might also introduce a safer, ergonomic work environment that contributed to a decline in industrial accidents, enhancing productivity and national wealth. All of these developments would supposedly flow on to the home. Through exposure to media, school and work-based health education programs, the social and economic ills of home and work life would decline and the wellbeing of the disadvantaged working classes improve. It was a sound concept that continues to influence medical practice today. The question here is the extent to which it influenced Raphael Cilento.

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⁴⁷ Galton had argued that 'a complete theory of heredity... may conveniently be divided onto two groups; the one refers to those inborn or congenital peculiarities that were also congenital in one or more ancestors, the others to those that were... acquired for the first time by one or more of them in their lifetime, owing to some change in the conditions in their life.' Francis Galton, 'A Theory of Heredity', *The Journal of the Anthropological Institute of Great Britain and Ireland*, vol. 5, 1876, p.329

⁴⁸ Warren S. Thompson, 'Eugenics and the Social Good', *Journal of Social Forces*, vol. 3, no. 3, 1925, pp. 414-419

Many of the Survey's objectives echo the ideas of Belgian doctor Rene Sand; *The Queensland Industrial Gazette* reprinted one of his arguments in 1923. An advocate of social medicine, Sand argued that social medicine formed the 'connection between the economic and physiological condition of a man, a family, or a class'; it entailed 'an entirely new conception of popular health education' that had developed over the previous twenty years, and incorporated 'health propaganda' as it engaged with promotional activities in the workplace and home. ⁴⁹ Unquestionably, Cilento was an enthusiastic health propagandist, and definitely encouraged a holistic approach in the Sociological Survey, so that there is a powerful socio-medical component in his investigation and in the Press releases and publicity related to it. At the same time, it is difficult to discount eugenic influences in unpublished Cilento correspondence about the Survey, as shown in his original instructions to Annie Gorman. Task Six covers gathering information about length of residence in the tropics, and instructs her:

More especially, to obtain, with full particulars as to names, etc. the history of any definite second or third generation children on both sides born in Tropical Australia; more especially to note the more important features of the lives of such individuals; to ask whether at the age of 8 or thereabouts, at the age of puberty, immediately subsequent to marriage, in relation to childbirth, etc. there was any outstanding indication of feebleness or degeneration. The history of the parents will often be far more important than the third generation children, since Nature often is competent to offset any illeffects of residence up to adult age, but may shew it when the larger responsibilities of family life make their demands upon a possibly exhausted system.... This last feature will be of the most outstanding value in your work.... ⁵⁰

Although contested, the third generation idea arose from Mendel's argument for dominant and recessive genes; by eugenic interpretations, genetic weakness was bound to emerge in a few generations.⁵¹

The same concerns emerge in relation to diet, which Cilento was convinced played short and long-term roles in the development of a unique and advanced Australian physique. 'Different parts of Australia are producing local strains', he argued: there was 'beginning to be a very definite type of North Queenslander'. ⁵² To support his belief that 'climate and environment undoubtedly modify considerably racial types',

⁴⁹ Rene Sand, 'Health and the Workers', reproduced from *International Labour Review*, April 1923, in The *Queensland Industrial Gazette*, July 1923, p.410

⁵⁰ NAA: SP1061/1, 350, Memorandum, January 16 1924, Item VI, p.3

⁵¹ See Horwitz, 'Always with us', f/n 3, p.332. Hays explained the principal formulaically: see Willet M Hays, 'Constructive Eugenics', *Journal of Heredity*, 1912, vol. 3, pp. 114-115 ⁵² Cilento, *White Man in the Tropics*, p.73

Cilento included a photograph of a 'muscular', 'tall and rangy' man who he thought a 'typical tropical-born Queenslander of [the] third resident generation' in *White Man in the Tropics*. ⁵³ These remarks could just reflect prevailing ideas about white racial superiority, were it not that Cilento's acknowledged academic influences were recognised eugenists.

Eugenic principles endured in Queensland in the 1920s whether presented as such, partially disguised in domestic science or scientific motherhood, or subtly submerged in social medicine incentives. Although eugenic ideas appear fainter the further one delves into the history or historiography of social medicine, this is just a surface effect. Eugenics as a word and an explanation appears in academic and official documents concerning the public health in the U.S., Australia and Queensland from the turn of the century. Direct references in Queensland health-related records do pale as the century progressed, particularly so after the First World War, but the ideas continued in official and other records, showing that eugenics held political and social significance between the wars. To misquote American educator and eugenist Earl Barnes, once shaped in language, ideas may survive long after their original labels are forgotten.⁵⁴

Historiographical doubts exist about the social authority of eugenic ideas. From the U.K., Richard Soloway argued that eugenic movements attracted little support and that those few supporters at any rate lacked political or social power. That may have been the case there, but was not in Queensland, where organisations as diverse as the QCWA, religious bodies and government continued to use the eugenic elements of race fitness and racial superiority as the justification for all manner of political and social change. Eugenists often occupied positions of power: Australia's first Commonwealth Statistician, Sir George Knibbs, thought that censuses should be used

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⁵³ *Ibid.*, pp.92-3

^{&#}x27;Ideas must, of course, have a cause; but once shaped in language, they may survive long after the conditions which created them have ceased to exist'. Earl Barnes, 'Woman's Place in the New Civilization', *Annals of the American Academy of Political and Social Science*, vol. 56, The Feminist Movement - Women in Public Life, 1914, pp.9-10

55 See Roy Porter, 'Review of Richard A. Solway *Demography and degeneration: eugenics*

See Roy Porter, 'Review of Richard A. Solway *Demography and degeneration: eugenics and the declining birthrate in twentieth-century Britain'*, *Medical History*, April 1991, vol. 35, no. 2, p.272. See also Dorothy Porter, Roy Porter, 'What was social medicine? An historiographical essay', *Journal of Historical Sociology*, 1988, vol. 1, pp.90-109

to obtain racial information. 56 His audience at a London meeting endorsed these ideas.⁵⁷ Eugenic concepts certainly had their critics, and those who supported some might not necessarily support all. Carl Kelsey, for example, responded icily to Colin Wells' earlier mentioned presentation on Social Darwinism. Firstly, he disagreed with Wells' ideas about what constituted Social Darwinism, which, he pointed out, was interpreted differently in England, the U.S. and Europe, and also between scientists. Secondly, he took exception to the scientific interest in just one part of humanity:

The doctrine defended by Professor Wells is the most complete example of the oligocentric world-view which is coming to prevail in the higher classes of society, and would center the entire attention of the world upon an almost infinitesimal fraction of the human race and ignore all the rest. It is trying to polish up the gilded pinnacles of the social temple so as to make them shine a little more brightly, while utterly neglecting the great, coarse foundation stones upon which it rests. The education and preservation of the select few, of the higher classes, of the emerged hundredth, to the neglect of the submerged tenth and the rest of the ninety-nine hundredths of society, covers too small a field. I cannot bring myself to work contently in a field so narrow, however fascinating in itself. Perhaps mine is a "vaulting ambition," but I want a field that shall be broad enough to embrace the whole human race, and I would take no interest in sociology if I did not regard it as constituting such a field.⁵⁸

Kelsey felt alone in his attitude that the lowest people on the social ladder had social value:

- it is said that society is doomed to hopeless degeneracy. Is it possible to take any other view? I think it is, and the only consolation, the only hope, although, so far as I am aware, I am the only one to emphasize it, and perhaps the only one to accept it – that, so far as the native capacity, the potential quality, the "promise and potency," of a higher life are concerned, those swarming, spawning millions, the bottom layer of society, the proletariat, the working classes, the "hewers of wood and drawers of water," nay, even the denizens of the slums – that all these are by nature the peers of the boasted "aristocracy of brains" that now dominates society and looks down upon them, and the equals in all but privilege of the most enlightened teachers of eugenics.⁵⁹

He continued on to attack most eugenic ideas, criticise the 'vagueness of the term heredity' and support women's education; he disparaged the idea of superior and

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⁵⁶ Knibbs, 'The Analysis of a Census', pp. 181-2, 186; quoted further here in Chapter Eight, p.230. Knibbs also promoted the statistical work of a eugenic magazine, saying that 'the wellknown "Biometrika" contains numerous instances both of methodological technique and of analysis'.

⁵⁷ *Ibid.*, 'The Organisation of Imperial Statistics', pp. 201-224. Several positive responses are

attached to this paper.

58 Kelsey, response to Wells, in Galton, 'Eugenics: Its Definition, Scope, and Aims', p.711 ⁵⁹ *Ibid*.

inferior races, and acknowledged the 'approximate equality of mental ability among the various races' because research had showed that 'race differences are the result of different environments.' Although he perceived one human race and rejected class difference, Kelsey still saw degrees of human fitness. He referred to 'idiots', 'degenerates', and the 'physically unfit (by heredity)'; the latter problem, he said:

is, after all, relatively small, and may easily be borne if we but have the forethought to prevent the marriage of the physically unfit. The other problems are much more difficult to solve. Here we may pursue either the drastic method advocated by Dr. McKim in his book on *Heredity and Social Progress*, in which he practically advocates knocking the defectives on the head, or we may neglect the problem entirely and suffer the consequences. ⁶⁰

No matter how they were labelled, ideas of white racial superiority and variations in human quality pervaded white science and white society. Social support for eugenic ideas may have appeared lacking to Soloway, but there is no evidence of widespread rejection of them, overseas or in Australia before the Second World War. Perhaps it is erroneous to argue that silence implies consent, for it is entirely possible that the ordinary person had too little understanding of the full meaning of eugenic ideas to protest them. It is accepted also that eugenic beliefs did not necessarily underlie all nineteenth and twentieth century activities towards social and political change; nonetheless, the ordinary person directly felt their influence.

In America, the gradual decline in direct mentions of eugenics can be attributed to an increasing disparity between eugenic researchers and supporters, particularly in regard to the use of the middle-class as an example of desirable genetic expression. In 1925, Thompson complained that

To say the least, it is exceedingly unfortunate that a study as important as eugenics is degenerating from its high estate and in this country is becoming a mere class propaganda. ⁶¹

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⁶⁰ Ibid.

⁶¹ Thomspon disliked the eugenic penchant for using the intelligence test as a measure of eugenic fitness, as well as the growing assumption that the economically advantaged must have been fitter to have achieved so much. Higher intelligence, he argued, did not guarantee a higher morality, neither did the acquisition of wealth, with its selfish motivation. Hence, he challenged eugenists that if they should 'admit that the present mental tests (definite "intelligence tests" and attainment of economic success) are adequate to pick out the intellectually superior people in our population, does it follow that our society would be better off if these people contributed more than their share of children to the next generation?' Thompson, 'Eugenics and the Social Good', p.418.

There is a similar explanation for changes in Britain. Roy Porter argued that eugenics was long 'too hot a potato' for incorporation into the program of any political party or church there. ⁶² Porter adds that:

No less concerned by 'national deterioration' than the eugenists, public health spokesmen looked instead to environmental and social improvements as the way forward; and the medical profession chose to keep as quiet about eugenics as about all other aspects of that embarrassing subject, sex. ⁶³

Perhaps (like social medicine) it was all in the name. Regardless, in relation to Queensland, powerful figures supported and enabled preferential legal and social developments that affected the ordinary white and non-white person.

One such development was that of White Australia. There was no 'White Australia Policy' as such in Australian state or federal legislation, although there are many public and government references to it from the late nineteenth century, through Federation and until official abandonment of racially restricted immigration in the 1960s. The Federal Government's *Immigration Restriction Act of 1901* used a literacy test to determine the right to entry, and became a vehicle to restrict undesirable and non-European immigration; encompassing people of Asian descent, it also provided a means to prohibit the admission of criminals and people deemed socially undesirable, white or otherwise. 64 The accompanying Pacific Islands Labourers Act addressed perceived problems in the continued employment and residence of Pacific Islanders or so-called 'Kanakas' in Queensland. Because Australia perceived an economic threat in its Asian neighbours, McGregor argues that nationalism and the desire to protect and develop Australia's economy were as strong factors as race in the development of exclusionist policies. 65 With such diverse motivating factors, White Australia was both idea and ideal. Important among early references to the concept is that of Alfred Deakin, who became Australia's first Attorney-General. Commenting on the above Acts, Deakin contended that they were 'the necessary complement of a single policy –

⁶² Porter, 'Review of Richard A. Solway', p.272

⁶³ *Ibid*.

 ⁶⁴ See NAA, A1559/1, 1901/17, or a facsimile at NAA's 'Documenting a Democracy', Immigration Restriction Act 1901. <http://www.foundingdocs.gov.au/item.asp?dID=16
 ⁶⁵ McGregor, 'Breed Out the Colour': Reproductive Management for White Australia' in Crotty, Germov, Rodwell, (eds), "A Race for a Place": Eugenics, Darwinism and Social Thought and Practice in Australia, pp.61-70

the policy of securing a "White Australia". ⁶⁶ Inaugural Prime Minister Edmund Barton explained that the Acts made 'a legislative declaration of our racial identity'. ⁶⁷ With an 'identity' to protect, nationalist fervour contributed to legislated and implied declarations of exclusion.

Federal ideas about White Australia also reflected the personal beliefs of the men who proposed their tacit or explicit articulation in legislation; in those, there was a strong American influence. Individually, Lake suggests, Australia's 'federal fathers' were convinced that they were 'confronting changes and challenges of world-historic importance'; prejudiced by theories of massive non-white population growth globally and in the U.S., and by the outcomes of manumission there, they wanted a country whose borders acted as racial barriers. Deakin acknowledged the importance of the American experience to Australian legislators when he commended the inclusion of Constitutional provisions for racial exclusion, which he saw as a 'distinct advance upon and difference from that of the United States'. He continued that,

It is not merely a question of invasion from the exterior. It may be a question of difficulties within our borders, already created, or a question of possible contamination of another kind. I doubt if there can be found in the list of powers with which this Parliament, on behalf of the people, is endowed – powers of legislation – a cluster more important and more far reaching in their prospect than the provisions contained in sub-sections (26) to (30) of section 51, in which the bold outline of the authority of the people of Australia for their self-protection is laid down.

In enacting the means to develop and maintain a White Australia, federal legislative activities met national, state and individual preferences for the instigation of a nation with an inbuilt mandate to protect its economic and racial future.

Economic incentives displayed later in domestic science programs support the existence of a relationship between racial wellbeing, and overall (white) economic

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⁶⁶ Edmund Barton, untitled speech on Federation [1901], National University of Australia, Barton Papers, National Library of Australia, Series 5, item 977, in Lake, 'The White Man under Siege', p.56

⁶⁷ *Ibid.* See also Alistair Yarwood, *Asian Migration to Australia: The Background to Exclusion 1896–1923*, Melbourne, 1964 and Anderson, *The Cultivation of Whiteness. Science, Health and Racial Destiny in Australia.*

⁶⁸ Lake, The White Man under Siege', p.58

⁶⁹ *Ibid.*, p.56. Cites Deakin, *Commonwealth Parliamentary Debates*, House of Representatives, 6 September 1901.

⁷⁰ Ibid.

security. The ambitions of domestic science supporters as displayed in the Sociological Survey and in activism for its introduction in schools, alongside the introduction of baby clinics and other activities to promote a healthier white society, support Rodwell's argument that domestic science reformers adopted a form of eugenics directly related to fears for the future genetic wellbeing of the state's white workers. Eugenic ideas could justify exclusionist policies and thereby the economic improvement of white society; domestic science promoters envisaged it as a means to improve all aspects of racial life, with a careful eye on the purse. In this way, domestic science was integral to individual health and welfare and the national interest.

It is worthwhile paying some attention to antecedents of the Survey. Social surveys in the form of Censuses and Government Inquiries were used to gather information about people's lives, generally for economic reasons than from moral interest. A shift of focus occurred in Victorian times, where Edwin Chadwick's 1842 study, *The Sanitary Conditions of the Labouring Population*, and Charles Booth's late nineteenth and early twentieth surveys signify an increased concern about the relationship between poverty and public health. Booth's enquiries in particular are often viewed as the precursor of the social survey; his methods and intentions certainly influenced Lady Bell's work, and that of several social researchers in the U.S..⁷² Eugenists did not necessarily like Booth's approach: American reformer Lilian Brandt maintained that although Booth's methods produced some useful material, their potential value was unrealised unless interviews also considered 'the elements of environment and distant heredity'.⁷³ Similar and arguably more academic projects took place in other parts of Europe in this time.⁷⁴ Most surveys used multiple researchers, and their findings might depend

⁷¹ Rodwell, 'Domestic Science, Race Motherhood and Eugenics in Australian State Schools, 1900-1960', pp.67-83

⁷² See Charles Booth, 'Condition and Occupations of the People of East London and Hackney, 1887', *Journal of the Royal Statistical Society*, no. 51, 1888, pp.227-45; *Labour and Life of the People*, London, 1889-1881, and *Life and Labour of the People in London* (17 volumes), London: Macmillan and Co., 1902-1903. For more on Booth, see Kevin Bales, 'Popular Reactions to Sociological Research: The Case of Charles Booth', *Sociology*, vol. 33, no. 1, 1999, pp.153-68

⁷³ Lillian Brandt, 'The Causes of Poverty', *Political Science Quarterly*, vol. 23, 1908, pp. 637-651

⁷⁴ Eileen Yeo shows for example that eighteenth century political interest began to shift towards a desire for information about social standards: surveys conducted during the French Revolution represent such concerns. Yeo sees five chronological phrases of social survey development. These are the 'Bourgeois Social Investigation in the Age of Revolutions (1789-

upon information gathered by proxy about their subjects (such as through interviews with landlords) rather than direct interview; this changed with time.

The concept of sociology as a profession and the research opportunities offered by social surveys seemed unrecognised in any broad sense in Australia at that time.⁷⁵ Davison argues that although Francis Anderson, a Professor of Philosophy in Sydney, argued in 1911 for the introduction of courses in sociology in Australian universities, this did not happen until the 1960s. ⁷⁶ He attributes this lack of interest to 'two powerful competing paradigms for the resolution of national problems: eugenics and economics'; with Australians 'especially receptive to eugenic ideas', he continues, 'much of the reforming zeal that elsewhere flowed into humanitarian social enquiry and reform was diverted into investigations more biological and medical than social.'77 According to Davison, the great social surveys conducted in the U.K. and U.S. that demonstrated a 'reflective sociology' did not develop in Australia until the 1930s because of the lack of philanthropic sponsorship that enabled and promoted them elsewhere. Those conducted by government agencies in the meantime, he says, were 'impersonal, factual and bureaucratic'. 79 The Institute's Survey was anything but impersonal. Cilento definitely intended it to be factual, and perhaps it was bureaucratic, but it does not stand comparison to recent investigations or to those of its time. It should not have to do so: at the time that Cilento designed it, there was little consensus about survey formats.

Early surveys in England and the U.S.A attempted to be scientific, but their organisers found it difficult to apply quantitative methods. In 1905, V.V. Banford argued that 'Sociology, like all other sciences, must be based on factual observations, methodically made, systematically arranged, and generalized by the aid of verifiable

^{1850)...} the Mayhew Moment (1849-1850)... Social Science and the Professional Middle Class (1850-1890)... Middle-Class Progressives and the Crisis of Liberalism (1890-1920), Academic Professionals and the Exclusivity of Objectivity (1920-). Yeo, in Martin Bulmer, K Bales and K.K. Sklar, (eds), The Social Survey in historical perspective 1880-1940, Cambridge, 1991

⁷⁵ Davison, 'The social survey and the puzzle of Australian sociology', p.139 ⁷⁶ *Ibid*.

⁷⁸ *Ibid.*, p.145 Davison notes that 'both the University of Melbourne and the University of Queensland briefly contemplated the foundation of chairs or courses in sociology', but 'the proposals were rejected, apparently for financial reasons.' *Ibid.*, p.144

hypotheses.'⁸⁰ In 1911, Thomas Riley added that the earlier sociological surveys carried out by charitable societies (mostly concerned with the poor) provided resources for comparison because they showed a useful sameness over time. Although social surveyors came 'from different fields' and applied 'different methods', the 'common elements in many of the questions they considered from time to time' would provide statistical bases for comparison, enhancing the scientific credibility of future surveys. ⁸¹ 'The social survey', he suggested, was 'an appreciation of the organic character of *social problems*.'⁸² Like 'laboratories, test tubes, weights, and measures', a survey was a valid scientific instrument, and the survey method was objective and inductive. ⁸³ Nonetheless, he worried that 'objectified' surveys might lose their usefulness for eugenic investigations, and questioned whether they really could pass 'the test of scientific validity'. ⁸⁴ 'It may be,' he added,

that they are for immediate and practical purposes and reach their sufficient proportions when they amount to convincing arguments to persuade men to undertake the work of civic and social betterment. The question would still remain, however, whether the collection and interpretation of data can be done without prejudice when there is an ever-present purpose, and when every item is to be tested by the touchstone of getting something done.

Although surveys became more homogenous, debates about methodology and purpose continued. Four years later, John Gillin of the University of Wisconsin's Sociology Department argued that the social survey was closely tied to the new ideas of industrial efficiency; hence,

Never as now have men put the test of efficiency to political, economic, and social movements and agencies... The social survey is an expression of this same movement in the social as distinguished from the economic realm....Its methods have been borrowed, to begin with, from the commercial world in part, and in part from the methods of the census. 85

⁸⁰ V. V. Branford, 'Sociology in Some of Its Educational Aspects', *The American Journal of Sociology*, vol. 11, no. 1, 1905, p.86

⁸¹ Thomas J. Riley, 'Sociology and Social Surveys', *The American Journal of Sociology*, vol. 16, no. 6, 1911, p.819

⁸² *Ibid*. His italics.

⁸³ *Ibid.*, p.820

⁸⁴ *Ibid.*, p.821

⁸⁵ John Lewis Gillin, 'The Social Survey and its Further Development', *Publications of the American Statistical Association*, vol. 14, no. 111, 1915, p.603

After referring to the precedents set by Charles Booth, the Pittsburgh Survey and the Russell Sage Foundation, Gillin observed that 'It has become almost a fad to start a social survey.' 86 Gillin described several sorts of survey, encompassing the 'rapid, rather superficial kind of social prospecting [that provided] 'a cross-section of the community life', and several options for larger communities. 87 The latter included what he described as the 'cross-section' type, focused on 'certain neighborhoods'; a wider but 'not intensive' investigation of the whole community in preparation for a larger survey; a preliminary survey that identified significant phases of a community's life for a larger investigation, and the 'community problem survey' that confined itself to 'one or more specific problems... such as health, recreation, sanitation, industry, etc.' 88 Once the survey type was determined, there was the matter of choosing a researcher. Gillen considered that despite some disadvantages (such as a lack of local knowledge) 'experts trained for such work', preferably from outside the community, were best for a large survey because they should be unaware of local attitudes or social currents before their work, and consequently lack prejudice. 89

Four years later again, when the University of Missouri's Carl Taylor sought to reinforce Sociology's ownership of the social survey in 1920, methodology was still an issue. Taylor argued that

The degree of exactness which any science attains depends almost wholly upon the technique and technology with which that science works. The social sciences are the least exact of all the sciences because they have a greater poverty of exact technology than other sciences. ⁹⁰

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⁸⁶ *Ibid.*, p.604. He also argued that the popularity of social surveys had created two situations: the one where there was now the chance that they would degenerate into a 'byword... or pleasant pastime for otherwise unoccupied people', and the other where social surveying had developed into a profession, commercialising a 'passion for social knowledge.' Other commentators at this time similarly criticised 'professional' (but unqualified) researchers; the issue faded in the mid 1920s as researchers with academic qualifications became preferred.

⁸⁷ *Ibid.*, pp.604-5

⁸⁸ *Ibid.*, p.605

⁸⁹ *Ibid.* Alternatively, researchers could be 'certain interested persons in the community itself, under the direction of an expert. Or again, the survey may be made by certain people in the community on the basis of an outline and printed or typewritten plan prepared by experts.' He acknowledged that intended survey groups might be more willing to collaborate with the local researcher under expert direction, but be reluctant to extend that cooperation to the expert directing the work, while the idea of employing 'certain people' from the community was appropriate only for small preliminary investigations. But Gillen preferred the expert outsider.

⁹⁰ Carl C. Taylor, 'The Social Survey and the Science of Sociology', *The American Journal of Sociology*, vol. 25, no. 6, 1920, p.731

A social fact, he added, was difficult to measure; yet conclusions formed from experiments in 'exact science' held validity because they could be 'observed to reappear in the same outward form many times'; for sociologists and social researchers, it was time to 'subject that fact to measurement, or at least to quantitative representation' so that sociological generalisations were recognised by the scientific community as fact. 91 In learning the 'value of measurement', sociologists could 'develop a system of technology by which they can reduce variations to the minimum and by thus doing produce uniformity. ⁹² They had begun to subject 'social facts to quantitative representation', and to compare their results to the findings of similar surveys, to use standards based on ideals and to engage in 'impartial analysis'. 93 All they needed to do, he thought, was refine their techniques, expand their horizons beyond local research, and continue to define themselves professionally. They did.

By the time that Professor F. Stuart Chapin reviewed the progress of research in the social sciences in 1924, his presentation and vocabulary was different. Like Taylor and Burgess, Chapin referred to Karl Pearson, and spoke of research and analytical methods that were 'experimental, analytical, statistical, synthetic, inductive, objective, deductive, classificatory or descriptive....⁹⁴ He mentioned bias, referring to recent sociological theory on how to identify and limit it, and explained the 'partial or multiple correlation' that enabled measurement of 'the relative importance of different causative factors in a given situation': but he still felt that its lack of coherent methodologies meant that social science struggled to obtain scientific endorsement. 95 Cilento's survey might have struggled to do so for these reasons.

For control groups for his survey, Cilento used 'all persons of extra-tropical birth', with 'A further control series... taken from figures for English, Australian and American standards. 96 He does not identify them in any other way. He added that to circumvent 'any possibility of the investigated population being regarded as specially

⁹¹ Ibid.

⁹² *Ibid.*, p.733

⁹³ *Ibid.*, p.750

⁹⁴ F. Stuart Chapin, 'Progress in Methods of Inquiry and Research in the Social and Economic

Sciences', *The Scientific Monthly*, vol. 19, no. 4, 1924, p.390 ⁹⁵ He cited Ogburn, 'Bias, Psycho-analysis, and the Subjective in Relation to the Social Sciences,' Publications of the American Sociological Society, vol. 17, 1922, pp.62-74. F. Stuart Chapin, 'Progress in Methods of Inquiry and Research in the Social and Economic Sciences', *The Scientific Monthly*, vol. 19, no. 4, 1924, pp.392-5 ⁹⁶ Cilento, *White Man in the Tropics*, p.76

selected a fixed percentage of the total households in each area was taken at random'; as it eventuated, the 'random choice of households' included 'a larger proportion of the meaner type of house'. 97 If the areas visited in Townsville were representative of the suburbs or areas chosen in other cities or towns, this is not surprising. Cilento did not provide further information, and later lost Gorman's Index Cards, which would have provided details of all 740 homes surveyed and perhaps also the possible 790 homes visited. However, the unpublished version of Gorman's survey and her notes to her eventual supervisor (Alec Baldwin) suggest that in Townsville at least she surveyed the densely populated city centre and its older suburbs rather than its newer sections, and was consequently highly likely to encounter residents in 'meaner' types of accommodation. 98 It therefore seems more than accidental that the survey findings by chance represented 'those sections of the tropically resident population who live under the worst possible conditions'. 99

What Cilento seems to have done in the suburbs selected for Gorman's visits was identify a population of interest where there was a higher probability that the survey results would meet his particular expectations; this remains an approach to survey planning and provided that the surveyed group bore some statistical relevance to the wider population, the method should produce findings that permit generalisation. However, the surveyed group is not shown as a percentage (for example, as a quarter of one percent of white women of the first or third generation resident in the north) of any other, and census breakdowns are of little use in identifying a like group for comparison. Had the Commonwealth government followed George Knibbs' suggestion of showing generational residence and racial background in Census enquiries, this might be possible, but it did not. Similarly, the Queensland Department of Public Health did not provide a background defined in this way, and although figures are available in annual reports for the occurrence of gastric illness and other disorders of interest to Cilento, they do not allow comparison to Cilento's categories. 101

⁹⁷ *Ibid.*, p.77. He also did not quantify the 'fixed' number.

⁹⁸ The Report as found in ITM files names three streets in Townsville's centre.

⁹⁹ Cilento, White Man in the Tropics, p.77

¹⁰⁰ See Knibbs, 'The Analysis of a Census', pp. 181-2, 186.

¹⁰¹ See Appendix.1 for results according to Cilento's health categories.

It is consequently not possible to extrapolate from his results as shown in White Man in the Tropics or Institute files: but it is unlikely that this was a concern for Cilento. His aim was not to generalise his findings to the whole community, but reveal the inadequacies of a particular section of it. Because of that unconcealed purpose, it is more accurate to say that his project surveyed a selected population rather than one randomly obtained. His objective was to continue with 'the theme song of the Australian Institute of Tropical Medicine', and 'our project of brainwashing public opinion about the effects of tropical living. The Survey was not dependant upon external validity: it would achieve its intentions if it showed that a lack of scientific knowledge compromised the health and wellbeing of women and children. Whichever one or more of the available methodologies influenced Raphael Cilento, the chosen nature of his survey group and the errors, inconsistencies and lack of comparative analysis in the final product make statistical scrutiny difficult and pointless. The greatest values of the 1924 Sociological Survey are as a record of the racial ideas that affected scientific research in North Australia in the 1920s and as a snapshot of the living conditions of its subjects.

In relation to a Sociological Survey of 'white' women, another issue emerges from the wide-ranging ideas that surrounded whiteness. Mein Smith notes that 'whiteness presumed blackness'. Certainly, this thesis concerns a group that the Survey considered 'white' women, with the subsequent implication that such women constituted members of a defined racial group. By these criteria, a black woman should be identifiable without any great difficulty – but that was not generally the case in the years from European settlement in Australia up to the time of the Survey. Definitions of race were often contradictory and generally subject to interpretation or variation throughout the first decades after Federation. For example, in 1905, according to section four of the *Aboriginals Protection and Restriction of the Sale of Opium Act*, 1897, the Chief Protector of Aboriginals defined a half-caste as

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¹⁰² Cilento, unpublished autobiography, chapter nine, 'Part Two – My Summer of Aggressive Achievement.' Fryer Library, UQFL 44, box 1, folder 4b, 'Chapters 7-12', p.20 ¹⁰³ Phillippa Mein Smith, 'Blood, Birth, Babies, Bodies', *Australian Feminist Studies*, vol. 17, no.39, 2002, p.317

Any person being the offspring of an aboriginal mother and other than an aboriginal father - whether male or female, whose age, in the opinion of the Protector, does not exceed sixteen, is deemed to be an aboriginal....¹⁰⁴

A quadroon was the 'offspring' of a half-caste woman, by a 'white, &c.' (presumably other, non-Aboriginal) father. 105 Their lighter skin left the Department in a quandary; it believed that they 'most certainly should not be brought up as white children', but had difficulty persuading Queensland's Orphanage Department to accept them. 106

Definitions were no clearer fifteen years later. The Aboriginals Department refers to 'European half-caste mothers' in its 1920 Report alongside 'half-breeds', 'half-castes' and 'Aboriginals': it does not expand upon how the Department made the distinction between a half-breed and half-caste, a native and an Aborigine. 107 Where no other information was available, white observers judged degrees of ancestry. This dilemma of identification was not restricted to Queensland: Gordon Briscoe comments that the Commonwealth government found it difficult to decide upon 'appropriate criteria for defining Aborigines' in censuses; racial purity was as likely to be a factor as 'social habit and custom.' Consequently, he notes that

sometimes people of half-caste or less than half Aboriginal descent were counted, and at other times they were not.... In Queensland, as in other states, the major problem appeared to be the inability of collectors to distinguish people of mixed Aboriginal descent from 'natives'. 108

Holland comments that 'interwar racial thinking/planning was strongly influenced by biological paradigms concerning blood "types" in the adoption of descriptive terms for the part-Aboriginal.' Certainly, once it had bestowed a racial category upon its charges, the Aboriginals Department treated its subjects according to their variations in skin colour. For girls and women of mixed descent, such judgements affected their entire future.

¹⁰⁴ *OPP*, Report of the Chief Protector of Aboriginals, 1905, p.13

 $^{^{105}}$ \tilde{I} bid.

¹⁰⁷ *OPP*, Report of the Chief Protector of Aboriginals, 1920, pp.1-5

Gordon Briscoe, Disease, Health and Healing: aspects of indigenous health in Western Australia and Queensland, 1900-1940, PhD Thesis, ANU, 1996: //histrsss.anu.edu.au/briscoe ¹⁰⁹ Alison Holland, 'Wives and mothers like ourselves? Exploring white women's intervention in the politics of race, 1920s-1940s', Australian Historical Studies, vol. 32, no. 117, 2001, p.292, f/n 1

Over the years, the various Queensland departments responsible for Aborigines wavered between separating them from the white community to preserve them from being morally corrupted, and keeping them away from reserves for the same reason, dependent upon their pigmentation. As Joanne Scott and Raymond Evans have argued, there was occasional expression of the possibility that some young mixedancestry Aboriginal women might be useful as servants. 110 For example, the Protector had remarked of Clara, a white-skinned, fair-haired and blue-eyed 'quadroon', in 1907 that it was:

a pity to see a child like her in the black's camp, whereas if she was taken away now she might be brought up and trained to be a good serviceable

The pain of the families of those who were 'taken away' makes the Protector's pity misplaced, but Clara's family was unlikely to have been consulted about their feelings.

The racial and classificatory ambiguity that surrounded girls and women such as Clara raises the question of how Cilento and Gorman identified 'white' women. Cilento did not clearly define his own notion of whiteness in White Man in the Tropics, but since race was so critical to the Survey, there was surely some concept in place. 112 Clara would have been a young woman or even an adult by the time of the Survey, and while at the 'camp' she was black by association, it seems that Gorman might have had a problem if a neatly groomed Clara, in a clean, modern house, had been one of the women who answered the door to her. There is an attractive irony in that possibility; nevertheless, without evidence of operational criteria, the only safe assumption is that Gorman interviewed women whom she thought to be white. As the 1920s dawned, young white women were likely to encounter the Queensland government's version of domestic science.

Queensland government reports reflect continued anxiety about falling marriage numbers, the numbers of illegitimate births and divorces. They celebrate any increase in marriages, and reveal the importance attached to the acquisition of domestic science

¹¹⁰ Joanne Scott and Raymond Evans, 'The molding of menials: the making of the Aboriginal female domestic servant in early twentieth century Queensland', Hecate, vol. 22, no.1, May 1996, pp.139-158

OPP, Report of the Chief Protector of Aboriginals, 1907, p.14

¹¹² Fedora Fisher shows some of Cilento's ideas in her biography of him; see Fedora Fisher, Raphael Cilento. A Biography, St Lucia, 1994

skills for the sake of new and existing family members. Of course, care of a family was not restricted to mothers. Sisters, daughters and childless women were also essential providers of domestic services, and many of them also probably actively engaged with new ideas about housewifery: young or unmarried women often cared for siblings, participated in routine chores and handled food. Domestic science instruction would increasingly target girls and women on the family fringe. At the beginning, though, governments aimed to deliver the domestic science message to mothers, with the intention of persuading potential and existing mothers to standardise their domestic routines and adopt new ways of caring for babies and children.

Gorman's findings reveal a significant lack of knowledge about the new ways in 1924, but it is not possible to argue unequivocally that this signified resistance to well-meant but clearly imperious attempts at indoctrination. The fact is that many women actively sought advice. Of those, it is difficult to separate women who simply wanted to provide the best care for their families, and those who responded to the combination of nationalism and economic concern stimulated by the Great War. According to Mary Sweeny, American domestic science benefited from 'A remarkable impetus... given by the war', and this had led to 'subsequent demands... for participation in health programs.' Another commentator added that:

In these days it is quite the habit to blame all the ills of life upon the World War, but home economics has a very different story to tell, for here the war was a great benefactor. The public learned more about food and nutrition and the relation of food to health in one year then than in any ten years preceding. The vital relation of food to health and efficiency was demonstrated on a great scale by the army and the ill-nourished children of other lands. The vocabulary of food was acquired by the layman rapidly. 114

The economic aspects of domestic science had a marked effect:

Real advance in the estimation of the public in home economics in war time was made chiefly along the lines of food, economics, and research. The necessity of the situation put emphasis upon wise spending for both food and clothing....¹¹⁵

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¹¹³ Mary E Sweeny, 'The President's Address, Fifteenth Annual General Meeting of the American Home Economics Association, August 1-5, 1922', *JHE*, vol. 14, no. 11, 1922, pp. 519–520

⁵¹⁹⁻⁵²⁰ 114 Isabel Bevier, 'Reconstruction Days in Home Economics', $\it JHE, vol.~14, no.~8, 1922, p.361$ 115 $\it Ibid$

Domestic science economics certainly appealed to the Queensland government in wartime, and it also did not want its children to be ill-nourished. As it demonstrated by the issue of a pamphlet titled 'To the Future Mothers and Women of Queensland' in 1915, Queensland no longer deemed child-rearing a natural pursuit, but the practice of a science that its women should embrace for the sake of the state, and by extension, Australia.¹¹⁶

According to an American visitor, the reform process was well under way by 1911, the year of her first visit to Australia. Writing in about 1930 after several visits during which she travelled in city and rural areas, Jessie Ackerman remarked that 'Women, in Australia particularly, have advanced in knowledge of scientific motherhood. They are seriously considering themselves as life-givers.' Ackerman preceded the remark with a reference to Malthusian Theory, and then linked scientific motherhood with eugenic principles. In so doing, she demonstrated an allegiance to neo-Malthusian ideas that had emerged in the mid-nineteenth century, but had largely been overshadowed by the new emphasis on eugenics. Life-giving', she said, should be restricted to the 'fit', for

¹¹⁶ QSA, A/15698, Florence Willett, 'To the Future Mothers and Women of Queensland', memos 15/26262, 19070, and 18116, plus related letters, such as those of 9/5/16 and 31/7/15 sequentially in the same file.

¹¹⁷Jessie Ackermann, *Australia from a Woman's Point of View*, Melbourne, 1931, 1981 edn., pp. 97-100. For more on Ackermann's activities and motivations, see Patricia Grimshaw, 'Settler Anxieties, Indigenous Peoples, and Women's Suffrage in the Colonies of Australia, New Zealand, and Hawaii, 1888 to 1902', *The Pacific Historical Review*, vol. 69, no. 4, Woman Suffrage: The View from the Pacific, Nov., 2000, pp. 553-572

At the end of the nineteenth century, as new economic theories emerged in England, Thomas Malthus argued that a crisis would emerge when population outstripped food supply; he saw this as inevitable, but believed that humanity corrected itself, for when such a crisis occurred the attendant disease and starvation (to Malthus, natural checks) would lead to a restored balance. He also thought that the impoverished or lower classes were most likely to succumb to natural checks, and that being charitable towards them would prevent the otherwise natural outcomes of their position. He did not advocate birth control. Charles Darwin read Malthus, but extended his theory on humans to all species. See TR Malthus, *Observations on the Effects of the Corn Laws, and of a Rise or Fall in the Price of Corn on the Agriculture and General Wealth of the Country*, St. Paul's Church-Yard, 1814.

www.yale.edu/lawweb/avalon/econ/corframe.htm. See also John C. Caldwell, 'Malthus and the Third World: The Pivotal Role of India'. Malthus Bicentenary Conference 1998: Malthus and His Legacy: 200 Years of the Population Debate. National Academies Forum, Canberra. http://www.naf.org.au/caldwell.rtf

¹¹⁹Neo-Malthusians similarly believed in the risk of over-population but advocated birth control for the impoverished. See F. D'Arcy, 'The Malthusian League and the Resistance to Birth Control Propaganda in Late Victorian Britain', *Population Studies*, vol. 31, no. 3, 1977, pp.429-448

Women have come to feel that, in the best interests of the future race, it is better to rear three or four physically sound and mentally fit citizens than help to swell the increasing flood of poorly equipped specimens of humanity. 120

The present, she said, was 'a day of specialty', when training was essential for many aspects of life, including marriage and motherhood. Ackerman foresaw a time when people might criticise dedicated mothers; when 'the very air is rent with libelous utterances concerning her scientific attitude towards her own offspring'; but to no avail, for

No railing or wailing, no groans or moans, or abuse, will move women in their fixed and determined purpose to safeguard the future generations.... There seems little danger of the decay of the race in Australia.¹²¹

Decayed or sound, Ackerman acknowledged that they were bound to be tired after a long day of being the perfect wife and mother, especially since so many did so without servants. Ackermann thus presents a picture of Australian women as being generally informed, scientific, and dedicated to healthy, happy eugenic whiteness. In Queensland, however, the Survey presented a less wholesome picture, with Gorman finding a widespread lack of hygiene and domestic cleanliness and a broad lack of understanding of reasons to cover and chill spoilable foods. Cilento had expected such a finding; so did others. The scientific suspicion that such shortcomings would reveal themselves in North Queensland was shared by the members of the newly-formed Queensland Country Women's Association. The Survey might not have eventuated without their 1923 approach to the Institute of Tropical Medicine.

The CWA was also an enthusiastic participant in programs to train young women in domestic science, such as those offered to girls through Technical Colleges in Brisbane and rural centres for some years prior to the survey, and via the two Travelling Domestic Science trains operating in Queensland during the 1920s. ¹²³ In keeping with its theme of 'service for women, by women', the CWA was anxious to improve the quality of country women's lives: to 'better their social conditions and

122 *Ibid*.

¹²⁰ Ackermann, Australia from a Woman's Point of View, pp.97-100

¹²¹ *Ibid*.

¹²³ The Department of Public Instruction oversaw such programs in Queensland. Governments in Victoria and New South Wales offered similar courses, and may also have used trains. Travelling Domestic Science Train No. 1 travelled in Queensland's southern regions. The idea of using railway train carriages to demonstrate home economics was established in the U.S.A: see photographs from 1919 at Cornell University, HEARTH, Human Ecology Photographs,

^{&#}x27;Demonstration Trains'. http://he-photos.library.cornell.edu/browse_results.php?sub=9

make life a little happier'. ¹²⁴ The Northern Executive of the CWA saw white northern women as having special circumstances because of their isolation and developed the idea of a program that would assess their needs and provide an opportunity to educate them through public lectures and pamphlet distribution. ¹²⁵ When it suggested educating 'country' women, it meant disadvantaged white women – poor or wealthy Aboriginal women could not join the CWA in its early years. ¹²⁶ (Fairfax argued that the government was responsible for Aboriginal women, not the CWA. This was ostensibly correct, because at this time, as shown earlier, Aboriginal women came under the umbrella of the Aboriginals Department [sic], a sub-section of the Home Secretary's Department. ¹²⁷) Ultimately, the Survey evaluated white working-class women rather than the 'all country women' that the CWA supposedly represented. Cilento argued that this was inadvertent, but it is difficult to see it as uncontrived. ¹²⁸ For the sake of tropical futures, the working class white woman was far too important to be statistically lost among a broader group during the splendid opportunity that the Survey presented to assess her situation.

Founded in scientific theory, economic concern and diverse attempts to explain human progress or its lack, the notion that women carried the responsibility for family and racial health was established by the 1920s. These concerns acquired exigency in Australia, its tropics and particularly in Queensland because of fears about the practicability of long-term white settlement.

^{124 &#}x27;Country Women's Association', Townsville Daily Bulletin, January 16 1924

¹²⁵ ITM and related files rarely refer to the 'QCWA' or Queensland CWA: CWA is most commonly used. This thesis follows that practice except where its sources used the full title. ¹²⁶ Jennifer Jones showed that consciousness (or embarrassment) about the lack of Aboriginal members did not develop until the 1950s: see her study of the emergence of Aboriginal branches of the CWA in New South Wales. J. Jones, 'Inside the CWA rest room. (Country Women's Association)', *History Australia*, vol.3, no.1, 2006, pp. 9.1-9.12

¹²⁷ Fairfax rejected a Motion that indigenous women on Palm Island be allowed to join because they particularly needed support; this was her rationale for the refusal. See Muriel Pagliano, *Country Women. The History of the First Seventy Five Years of the Queensland Country Women's* Association, Brisbane, 1998, p.15

The main lecture that he wrote for Gorman implored the women present to help her make contact with 'a very large class with which it is very difficult to get in touch'. 'Introductory Lecture – Country Women's Association or other', NAA, SP1063/1, 277

A 'point of view' that 'changed the aspect of the world': the emergence of the 'modern' woman and domestic scientist.

To say that the individual exists for the race is to say that he, and, as we shall see, pre-eminently she, exist for future individuals...

Caleb Saleeby, 1909

Public opinion... is more and more demanding from women a recognition of their duties, to the state, as women.

Mary Gilliland Husband, 1909

Dialogues about women and race developed alongside a mid-nineteenth century passion for the study of natural history that inspired vigorous discussion about the relationships between people and nations, and generated diverse explanations for human diversity and progress. As the years passed, such discourses addressed matters ranging from slavery to child labour, war, marriage, poverty, racial difference, alcohol use and abuse and the legal and political situations of women. Importantly, they increasingly included the opinions of articulate women, signifying their growing public visibility through the later nineteenth and into the early twentieth centuries. In the U.S.A, Britain and Australia, female emancipists provide examples of such visibility: they not only attracted attention to women through their challenges to the existing societal order but displayed their collective power as orators, writers and

¹ Natural history was otherwise known as ethnology, and later as human geography; it overlapped the other emerging discipline of anthropology. Students of natural history tended to reject the grand narratives of history and focus on past and present human development and culture rather than politics and nations. For American geographers, the same interest took them away from rocks and rivers and into the study of those who lived near them. For the development of ideas in ethnology and human geography, see Ernest Dieffenbach, 'The Study of Ethnology', *Journal of the Ethnological Society of London (1848-1856)*, vol. 1, 1848, pp. 15-26, and John Crawfurd, 'On the Connexion between Ethnology and Physical Geography', *Transactions of the Ethnological Society of London*, vol. 2, 1863, pp.4-23. For development of American and European differences in ideas about geography, see Jurgen Herbst, 'Social Darwinism and the History of American Geography', *Proceedings of the American Philosophical Society*, vol. 105, no. 6, 1961, pp.538-544

activists.² Some emancipists astutely referred to earlier debates as they questioned the real meaning of freedom: when Mary Gilliland, for example, spoke of female emancipation as a symbol of release from a state of slavery, she also provided an example of successful activism that had grown from arguments about human freedom and the quality of the human condition.³ Not all women supported the emancipist cause – Queen Victoria did not, and she had many supporters.⁴ Anglo-European societies at this time were predominantly masculinist and paternalist, and numerous men and women saw freedom and equality as ideas applicable in their fullness only to the white male. Some endorsed views such as those represented by American sociologist William Thomas, where women's roles were determined by and because of their biology: they were best suited to a submissive social role as nurturers and carers because they had evolved that way.⁵ Nonetheless, emancipation activities helped to consolidate the white middle-class woman's emergence as a class-empowered social

² For emancipation activities and social systems in Australia and New Zealand, see Kay Saunders and Raymond Evans (eds), *Gender Relations in Australia – Domination and Negotiation*, Sydney, 1992, and Grimshaw, 'Settler Anxieties, Indigenous Peoples, and Women's Suffrage in the Colonies of Australia, New Zealand, and Hawaii, 1888 to 1902', pp. 553-572; for a useful discussion on the U.S.A, see Fiona Paisley, 'Evolutionary Women: "Race" and Modernity at the Heart of White American Feminism', *Journal of Women's History*, vol. 12, no. 3, 2000, pp.218-226

³ Gilliland Husband wrote in 1909 that 'In England there are no women citizens in the full meaning of that phrase.' She referred to Aristotle's definition of citizenship, in which 'three classes of adult persons could not be citizens, *viz.*, aliens, slaves and women.' England, she added, 'has long ago abolished slavery within her dominions on grounds of humanity'; however, having recognised that 'a human being as such is the subject of certain rights', it still had not granted women the rights of citizenship. Mary Gilliland Husband, 'Women as Citizens', *International Journal of Ethics*, vol. 19, no. 4, 1909, p.466

⁴ As shown in Shirley Harrison, *Sylvia Pankhurst. A Maverick Life 1882-1960*, London, 2004, pp. 7-8, 10, 13, 16, 34-5

Thomas thought that women remained captive to ancient survival skills; he argued that they learned to 'specialize in concealment and evasion' to protect their young, and had become cunning for the same reason. Basically, the human female could not help but display herself, had endurance rather than speed, was clumsy and asked silly questions at university. While he could not discount the idea that women and inferior races might be able to meet male standards, he was skeptical that they could override instinctive behaviours. Hence, he said, 'The world of modern intellectual life is in reality a white man's world. Few women and perhaps no blacks have ever entered this world in the fullest sense'. William Isaac Thomas, 'The Mind of Woman and Lower Races', AJS, vol. 12, no. 4, Jan., 1907, pp.457-8, 463, 465, 469. For more on Thomas, see Larry R. Ridener, 'Dead Sociologist's Index', http://www2.pfeiffer.edu/~lridener/DSS/INDEX.HTML#thomas Accessed June 9 2007. For other writers, see C. Judson Herrick, 'Biological Determinism and Human Freedom', International Journal of Ethics, vol. 37, no. 1, 1926, pp. 36-52, and Marcel Weber, 'Determinism, Realism, and Probability in Evolutionary Theory', *Philosophy of Science*, vol. 68, no. 3, Supplement: Proceedings of the 2000 Biennial Meeting of the Philosophy of Science Association. Part I: Contributed Papers, 2001, pp. S213-S224

authority and spokesperson on race, religion and morality.⁶ As such, her view was generally downward, and inevitably woman-centred.

From England, for example, Lady Bell remarked in her 1907 exploration of worker's conditions at her husband's iron works in Middlesborough that:

The key to the condition of the workman and his family, the clue, the reason for the possibilities and impossibilities of his existence, is the capacity, the temperament, and, above all, the health of the woman who manages his house....⁷

The significance of woman's role was undoubtedly, she continued, 'an obvious platitude' that could not be emphasised enough in times when 'we are constantly, anxiously, unavailingly, trying to prevent the much discussed deterioration of the race.' Bell saw female wellbeing as being bound to race hygiene. Other writers echoed her views as the years progressed, and their concern became stronger after the Great War, when low middle-class birth rates reinforced racial deterioration fears.

In 1919, American astronomer and socialist Ellen Hayes responded scathingly to a paper that had placed the blame for falling birth rates on a young and selfish generation. She did not see selfish young women at all: what she saw was that a social revolution had been in process for some time and finally become apparent since the Great War, and she made no apology for saying so:

That revolution is not too strong a word to mark what has taken place in two incomplete decades of the twentieth century is well indicated by comparing the war-time position of women in the past with that of the present. The lady of the nineteenth century and all preceding ones waited and wept at home and prayed for the lord's safe return from the wars.... To-day history takes into her keeping the story of the multiple *Entente* of women who helped to win the Great War. ¹⁰

⁶ The formation of women's clubs and societies are related to these developments. Chapter Three considers them further.

⁷ Florence Bell, *At the Works*, London, 1907, offset edn. London, 1985, ix-x. Bell dedicated the book 'To Charles Booth of wise and sympathetic counsel'.

8 *Ibid*.

⁹ Ellen Hayes, 'The Significance of the Declining Birth-Rate – A Reply', *Science*, New Series, vol. 50, no. 1302, Dec. 12, 1919, p.533. She referred to a paper presented by a Mr Dublin at the meeting of the Social and Economic Science Section of the American Association for the Advancement of Science in Baltimore, U.S.A, on December 27 1918.

¹⁰ *Ibid.*, her italics.

Hayes argued that modern women had demonstrated their abilities to work in non-traditional arenas, and while some might have been happy to leave factories and public places to return to the homes from which they emerged during the conflict, others had found a freedom that they did not want to relinquish. In a democratic system, women should be free and equal, and a free woman would not contemplate a return to a state of servitude. Slavery had gone: so should the ancient idea of female inferiority. Society, she contended, had changed forever; for example, marriage too would now be different, based on comradeship instead. The development of an advanced society depended upon its adoption of socialist ideas in which males and females would 'together own the earth and together administer human affairs'. 11

The older generation had no right to criticise a falling birthrate, according to Hayes. Obsessed with wealth, it had busied itself with plundering nature for profit, while women and children died around it. 'Nothing in this world has been so cheap as child-life except mother-life', she added, and since 'the evolution of society – civilization itself – had proceeded as far as it could, with the archaic status of woman unmodified', Hayes saw the new and modern generation (and new and modern woman) as the hope of the future. They would not randomly reproduce, but have the number of children they thought appropriate to an unsanitary world; they would limit the size of their families until they saw clean streets, clean homes, and all people could live in comfort and health. The generation concerned had a racial responsibility to do so; it was, she contended:

the crudest form of collective selfishness for any one generation to act as if it had a final lien on the earth when at best it is only a temporary tenant, in honor bound by the highest racial ethics to consider the interests of those who follow: the peoples of distant centuries.¹²

Hayes was almost seventy when she wrote those words. In four pages, she managed to address practically all the themes of her time. Industrialisation, female emancipation, slavery, political change, middle-class activism, science, capitalism, disease, infant and maternal mortality, family planning, race, the state of marriage, war: all in some way contributed to the interests and concerns that inspired socio-scientific incentives like domestic science. Women were central to the revolution in a manner 'quite

¹¹ *Ibid.*, pp. 533-536

¹² *Ibid*.

unparalleled in the history of the human race' because of their numbers, because of the 'length of [its] preparatory prelude' and because of 'the importance of the consequences which will undoubtedly follow it.' As Hayes pointed out, the revolution was:

connected with the discovery that women, in spite of being females, are primarily human beings.... This discovery is due to woman's recently acquired opportunity for knowledge and opportunity for economic self-dependence. These opportunities themselves seem to be involved first as effects and then as causes in modern human progress. ¹³

Industrialisation had provided the opportunity (and often necessity) for women to work outside since factories replaced home industry, and urban life rural, and observers had raised concerns about their abilities, morals and the effect of their employment on themselves and society for much of the late nineteenth century. Social commentators referred specifically to a 'woman problem' from about the 1890s; the New Woman was by then not new, but still a worry. ¹⁴

Concerns circulated about the birth and death rates, alongside the threats that emancipation provided to a patriarchal/masculinist social system and consequently to its ideas about woman's nature and natural place. Discussions were often specific to middle class women, as in questions about whether she was capable of work in a male environment. In reality, women of the 'industrial class' proved that they could do so on a daily basis in all areas of production, and had done since the rapid expansion of industrialisation in the early nineteenth century. ¹⁵ Eventually, the debate incorporated industrial workers as well, because of worries about the long-term effects of work pressures on a woman's supposedly frail physiology and psyche. Mid to late nineteenth century discussions initially did not integrate domestic servants; perhaps

¹³ Ibid.

¹⁴ For 'the woman problem' in 1895, see Max Maurenbrecher, 'The Moral and Social Tasks of World Politics ("Imperialism")', *AJS*, vol. 6, no. 3, 1900, p.307. In 1900, it seemed that 'Norway of all the nations seems to have solved the woman problem. There she takes her degrees and gives her vote on terms of perfect equality.' Anon., 'Notes', *Journal of the Society of Comparative Legislation*, New Ser., vol. 5, no. 2, 1904, p. 508

¹⁵ The 'Industrial Class' was a statistical group that could vary in composition over time and

statistical preference; the term also facilitated social demarcation. Giffen remarked of the growth of that class that 'though [it is] nothing so decisive as what has since taken place... we are able to assert a continuous improvement among the masses of the community from the beginning, or nearly the beginning, of the century to the present time.' Robert Giffen, 'Further Notes on the Progress of the Working Classes in the Last Half Century', *Journal of the Statistical Society of London*, vol. 49, no. 1, 1886, p.30

because they did work perceived as natural to women, they did not become of interest until they began to withdraw their labour and opt for the greater freedom of alternative employment. The focus of discussions about these matters varied according to the socio-economic class of the women in question; what they had in common was their relationship to fears for white racial wellbeing.

The 'woman problem' was most problematic for a white middle-class that would rather its single daughters stayed home, and its married daughters withdraw to theirs. Feminists insisted that the adult woman have a choice, but wondered whether it had to be absolute. In 1894, Mary Gilliland questioned whether a woman must 'sacrifice all that is in her, else, of work and ambition, if she takes upon herself the responsibility of maternity? The reverse dilemma applied: if a woman wanted to do 'efficient and continuous public work', Gilliland continued, did she necessarily have to 'renounce marriage?' Gilliland thought not.

The 'efficient' and 'public work' Gilliland spoke of was philanthropic: she saw her class as having social responsibilites that could be exercised through charitable work, and worried about the social cost of the withdrawal of an experienced worker. Yet, a woman also had a social and racial duty if she chose to become a wife and mother. Gilliland argued that cultural developments enabled such women to multiskill:

With shortened hours of labor for the individual, with a much lessened number of births to the individual, with a reorganized, much socialized, and much simplified family life, all mothers might devote a larger proportion of time and an infinitely more intelligent care to their babies, while at the same time they took their regular and fair share of public social work.¹⁸

Arguments such as these appear regularly in the literature at this time. Fifteen years later, English economist and social reformer Helen Bosanquet reviewed Olive

¹⁶ Allusions to feminists and feminism in this work refer to feminism and feminists as understood until the 1930s, if not beyond. Hence, they signify women committed to the attainment of social justice in regard to legal, social and political equality, as shown in Ann Taylor Allen, where feminism is 'that general term which encompasses many movements', from communism to birth control and the right to vote'; Ann Taylor Allen, 'Feminism and Eugenics in Germany and Britain, 1900-1940: A Comparative Perspective', *German Studies Review*, vol. 23, no. 3, 2000, p.479

¹⁷ Mary S. Gilliland, 'Women in the Community and in the Family', *International Journal of Ethics*, vol. 5, no. 1, Oct., 1894, p.37. Probably English (see her 'Women as Citizens') Gilliland contributed regularly to ethics discussions until 1914; in the latter years, she wrote as Mary Gilliland Husband.

¹⁸ *Ibid.*, p.34

Schreiner's latest work. Schreiner worried about the long-term racial cost of offering women no choice but maternity. Bosanquet thought the older feminists had sorted out such issues; there was no need to debate them further. Schreiner, she said saw:

in the desire to confine women to the one function of child-bearing (and, latterly, not too much of that) the danger that they will become increasingly parasitic, and in the parasitism of women she reads the downfall of the race. Not the least interesting passage in the book is that in which side by side with the New Woman is depicted for us the New Man – the man who desires to find in woman active companionship and co-operation rather than passive submission.... Does not, however, that energy blind her somewhat to my second point, i.e., the extent to which that cause is already won? I think of the difficulty and hesitation with which we of the older generation groped our way, where now the younger lives push on with confidence and strength; I look around and see bright young girls and capable women eagerly taking up their work in almost all departments, and I feel that what remains to be achieved is not indeed a small matter, but an easy one compared with what has been achieved in the past. 19

In closing, Bosanquet quoted from a popular nineteenth century poem:

In front the sun climbs slow, how slowly, But westward, look, the land is bright. 20

In the factories, middle class homes and businesses of the late nineteenth century, some bright young girls possibly did go eagerly to work, as they had done for decades, and many were probably happy to be earning money of some sort, even if they were comparatively underpaid. For others however, the sun still climbed all too slowly – but their calls for change ensured that traditional society kept them under scrutiny.

When mid to late nineteenth century middle-class women began to insert themselves into public life, their actions guaranteed attention: but this is what they wanted, for the

And not by eastern windows only,

When daylight comes, comes in the light,

In front the sun climbs slow, how slowly,

But westward, look, the land is bright.

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¹⁹ Helen Bosanguet, 'Review, Women and Labour, Olive Schreiner', *The Economic Journal*, vol. 21, no. 82, Jun., 1911, pp.251, 253. For more on Bosanquet, see A.M. McBriar, An Edwardian Mixed Doubles: the Bosanquets versus the Webbs. A Study in British Social Policy, 1890-1929, Oxford, 1987; also, Jane Lewis, Women and Social Action in Victorian and Edwardian England, Stanford, 1991

²⁰ Arthur Hugh Clough, 'Say not the struggle nought availeth', 1855, cited in Seamus Cooney, 'A Small Anthology of Poems', Western Michigan University,

http://homepages.wmich.edu/~cooneys/poems/index.html. The entire verse reads:

sake of change. Salience and unity brought results.²¹ Whether interested in the legal, physical, moral or spiritual state of women and children, or of humanity overall, activists began to form and act in groups to promote their causes in organisations that might not demand religious or political conformity for membership.²² In the U.S.A, there arose the Women's Clubs Movement. Before recent times, Sarah Platt Decker recalled in 1906, woman had been 'the one isolated fact in the universe' because:

The outlook upon the world, the means of education, the opportunities for advancement, had all been denied her... The opportunity came, with the awakening of the communal spirit, the recognition of the law of solidarity of interests, the sociologic advance which established a basis of equality among a wide diversity of conditions and individualities, and opportunities for all, capable of using them. This great advance was not confined to a society or a neighborhood; it did not require subscription to a tenet, or the giving up of one's mode of life. It was simply the change of a point of view, the opening of a door, the stepping out into the freedom of the outer air, and the sweet sense of fellowship that comes with liberty and light. The difference was only a point of view but it changed the aspect of the world.²³

In America, groups such as these represented a middle class that incorporated 'the happy grandmothers, mothers, wives and daughters, who stand for the best and sanest in American home and social life'. ²⁴ It is probable that many individuals within them endorsed eugenic ideas: Platt Decker, for example, was a correspondent of prominent activist and eugenist Amos William Butler, alongside a number of other characters

²¹ 'All your strength is in your union: all your danger is in discord.' Motto in *Woman's Monday Club Program Booklet 1912-1913*, Woman's Monday Club, 1897-1947, Corpus Christi Public Libraries, Box 13, 1301, p.1, http://www.library.ci.corpus-christi.tx.us/mondayclub/box13.01p1.htm

²² Women had long showed their ability to bond for a cause, as for example in membership of the Society of Friends. The difference arose when activists did not share such singular ties, but functioned together despite political or religious difference. Smart shows women from diverse political backgrounds combining to form the Housewives Association in Victoria in 1915: see Smart, 'A Mission to the Home', pp. 217-218

²³ Sarah Platt Decker, 'The Meaning of the Woman's Club Movement', *The Annals of the American Academy of Political and Social Science*, vol. 28, no. 2, 1906, p.199
²⁴ *Ibid.*, 'The general air', she added, 'was one of modest prosperity.'

with eugenic affiliations.²⁵ Sharing and developing their ideas, women's organisations were potent social forces by the early twentieth century.²⁶

In Australia, before and after the Great War, women formed and joined societies such as the Country Women's Association (CWA), the Women's Christian Temperance Union (WCTU) and similar bodies. Generally middle class, they acted because of their concerns about the security of white family life in the face of declining birthrates and unchristian conduct that included alcohol use among other perceived evils. The sexual conduct of young white women was a significant one of those: shifting behavioural mores fed fears that young unmarried women were either too sexually aware or becoming pregnant or diseased because they were naïve and vulnerable to peer pressure. NQOHP accounts indicate that for most women, sexuality outside of marriage was either not contemplated or considered too risky to pursue; nonetheless, the prospect of widespread adoption of social and sexual freedoms by young unmarried women bothered middle-class observers.

The conduct of married women was also topical: much to the distress of many church groups, feminists encouraged fertility management, and science once again helped with diverse ideas about the means to restrict family size. Critics might recognise that women feared childbirth for their own and children's sake (and thus preferred to focus their attention on a smaller number of children), but maintained that proper sanitation and medical care from trained and specialist nurses rather than traditional midwives could overcome birthing problems. On the other hand, while eugenics-minded feminists such as Marie Stopes and Margaret Sanger agreed that there needed to be

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²⁵ She also corresponded with home economics expert Ellen Swallow Richards. For more on Decker, see Sarah Platt Decker Chapter, Daughters of the American Revolution, Durango, Colorado, http://www.rootsweb.com/~cospdcd/ For correspondence with Butler, see Butler MSS, Lilly Library Manuscript Collections,

http://www.indiana.edu/~liblilly/lilly/mss/html/butler.html; for Richards, see Ellen Swallow Richards Papers, 1882-1910, Sophia Smith Collection, Five College Archives and Manuscript Collections, http://asteria.fivecolleges.edu/findaids/sophiasmith/mnsss59_list.html

²⁶ Oceans seemed no barrier; journal articles show activists attending meetings in the U.S.A, Canada, New Zealand and Europe, and activists from there turned up anywhere from Canada to the Pacific Islands.

²⁷ By the 1920s, contemporary commentators agreed that some autonomy was an inevitable development of modernity, but as Liz Conor shows, figures such as the 'Flapper' seemed to point to the possibility that some young women were taking self-determination too far. See Liz Conor, 'The Flapper in the heterosexual scene. (Representing identities)', pp.43-63

improvements in the chances of a woman or baby surviving childbirth, they argued that having fewer children took less toll on a woman's health, and with less physical trauma, those children she did have would be racially stronger. 28 (Such ideas were endorsed by people who clung to neo-Malthusianism: the under-classes should not breed because they were destined to die in a Malthusian crisis; others should control their reproduction.)²⁹ With the preservation of white womanhood and white society at stake, the issue remained racial. The answer to the dilemma seemed to lie in science and active social reform.

In 1909, Scottish eugenist and obstetrician Caleb Saleeby worried that feminists posed a threat to eugenic ideas. His remarks in this regard demonstrate the way in which issues concerning women remained racialised. While he had accepted that women were equal to men in some ways by 1909, Saleeby thought that feminists failed to understand that their new standing did not alter their racial duty. 'Like the rest of the world', he said:

I read their papers and manifestoes, their speeches and books, and have done so, and have subscribed to them, for years; but no one can refer me to a single passage in any of these where any feminist or suffragist, in Great Britain, at least, militant or non-militant, has set forth the principle, beside which all others are trivial, that the best women must be the mothers of the future.³⁰

The 'best' women of course were also the ones most likely to pursue higher education; Saleeby referred to America, 'where the dysgenic consequences of the so-called higher education of women have been clearly demonstrated.'31 His argument that feminists did not support eugenics seems wrong.³² Ann Taylor Allen argues persuasively that eugenics and feminism were mutually supportive ideas. 33

²⁸ Sanger's ideas are referred to in more detail on p.194

²⁹ See Joshua H Cole, "There Are Only Good Mothers": The Ideological Work of Women's Fertility in France before World War I', French Historical Studies, vol. 19, no. 3, 1996, pp.643-55, 648-49, and D'Arcy, 'The Malthusian League and the Resistance to Birth Control Propaganda in Late Victorian Britain', pp.429-448

³⁰ His italics. Saleeby, Woman and Womanhood, p.5

³¹ *Ibid.*, his italics.

³² *Ibid.*, p.6. Some eugenists may not have supported feminism: Saleeby added that 'I know that hitherto the eugenists have inclined to oppose the claims of feminism, Sir Francis Galton, for instance, having lent his name to the anti-suffrage side.' For more on Saleeby, see Grant Rodwell, 'Dr Caleb Williams Saleeby: the Complete Eugenicist', pp. 23-40

³³ Allen cites 'the prominent American feminist, Doris Stevens' who in 1912 commented in the British suffrage periodical Common Cause on the growing popular appeal of the field of eugenics. 'It is significant that this new outburst of eugenic energy,' she wrote, 'is coincident

Recognition of eugenic ideas seemed clear in Emily Balch, who addressed the problems that faced the professional and ordinary working woman at the start of the twentieth century. (The New Man, also cast in a rigid role, did not seem to get as much attention in these times.³⁴) 'Human nature' she said, had to 'adjust itself as best it can to industrial conditions, instead of industrial conditions adjusting themselves to human nature.³⁵ The professional woman faced a particular dilemma:

If she leads a single life... [she] cuts the Gordian knot of the incompatibility of work and marriage. This is simple, certainly, but quite abnormal. While it is doubtless a happy solution in many cases, it is certainly undesirable that large numbers of women should adopt it, especially if we may suppose that a class of celibate professional women withdraw from the race the inheritance of some degree of picked intellectual ability. 36

Balch saw 'far-reaching economic consequences' in the 'difference' between the 'racial lives' of men and women when it came to work; when she spoke of the 'last class... the working women', she firstly dealt with the contradiction of supposing that a working class woman worked any harder outside the home than a woman who did so inside:

The woman who does her own work is not, in the curious development of our phraseology, a working woman, though we may believe that the mother of a brood of children for whom she cleans, cooks, sews, washes and nurses does some work. 37

with the women's movement.' Allen, 'Feminism and Eugenics in Germany and Britain, 1900-1940: A Comparative Perspective', p.477

³⁴ But he was there, as suggested earlier in Bosanquet. See Peter N. Stearns and Mark Knapp, 'Men and Romantic Love: Pinpointing a 20th-Century Change', pp.769-795. For an Australian perspective, see Martin Crotty, 'The Limits of Manliness', Australian Humanities Review, no. 22, 2001, http://www.lib.latrobe.edu.au/AHR/archive/Noue-June-2001/crotty.html Crotty's work on Australian masculinity from the 1870s to 1920 has international resonance in Jessie Taft, who notes in regard to the 'modern man' that 'The woman has no monopoly on conflict and disharmony. He, too, is swamped by the system in which he finds himself' and 'is being made, willy-nilly, by the relations in which modern business and industry are involving him': hence, the 'unsatisfactory character of the woman's life is but a conspicuous part of a wider and more basic situation which involves men as well'; Taft, 'The Woman Movement and the Larger Social Problem', 1915, p.334. Anderson also considers the modern man: see Warwick Anderson, 'The Trespass Speaks: White Masculinity and Colonial Breakdown', pp. 1343-1370. See also Lake, 'The Politics of Responsibility: Identifying the Masculinist Context', p.116, and 'Mission impossible: how men gave birth to the Australian nation – Nationalism, gender and other seminal acts,' pp.305-322

35 Balch, 'The Education and Efficiency of Women', p.61. Biographical details from Frederick

W. Haberman, Ed., Nobel Lectures, Peace 1926-1950, Amsterdam, 1972, at Nobelprize.org, http://nobelprize.org/nobel prizes/peace/laureates/1946/balch-bio.html>

³⁶ Balch, 'The Education and Efficiency of Women', p.63

³⁷ *Ibid.*, p.64

Curious as it was, society saw a working woman as one who worked outside, and perceived that outside work posed a distinct health threat that would 'more commonly and more seriously than has been at all generally understood' render women 'nervously and physically' unfit to bear children. ³⁸ That belief was unfounded, as was the concurrent idea that the professional woman was less likely to have children, or have a smaller number: women in general were having fewer children. ³⁹ In this, their husbands may have played a part, but society emphasised the woman's role in reproduction.

After the Great War, with new public respect for her ability to adapt to work that was physically and intellectually challenging, the young woman who worked outside of the home and earned her own money was (theoretically) well situated to take advantage of modern developments. The world seemed progressive. ⁴⁰ Nonetheless, maternal, infant and child mortality remained too high: the spectre of disease persisted despite the achievements of science, and white middle class birth rates continued to fall while some of society's best potential breeders appeared intent on partying, increasing their material wealth or restricting their family for this or other reasons. Suffragettes and early feminists fought their way through centuries of discriminatory barriers to achieve recognition of their individual rights. In so doing, they drew more attention to themselves and to their potential maternal functions in times when scientists and social commentators sought explanations for shocking infant and child mortality rates, and

³⁸ *Ibid.*, p.65

³⁹ A comparative study of American 'college-educated women' found such a slight difference to the wider population that it bore no statistical weight. Nonetheless, a commentator was unwilling to accept that this was the case. Emerick cited a 1900 study by Mary Roberts Smith, who concluded that "'there is by no means the degree of difference between the two classes in matters of health, marriage and child-bearing capacity that has been looked for both by the friends and by the enemies of the collegiate education of women." However since American colleges had only accepted women since 1865, Emerick felt it 'manifestly premature to collect satisfactory statistics of marriages and births among college women.' Charles Franklin Emerick, 'College Women and Race Suicide', *Political Science Quarterly*, vol. 24, no. 2, Jun., 1909, pp.274, 283.

⁴⁰ Many contemporaries spoke of a Progressive Age. Horwitz refers to 'progressivism, a faith that "middle-class professionals applying scientific expertise [could] solve pressing social problems through government intervention." Edward J Larson, *Sex, Race, and Science: Eugenics in the Deep South,* Johns Hopkins University Press, 1995, p.30, in Howard Horwitz, 'Always with Us', *American Literary History,* 1998, vol. 10, p.320. For a thorough discussion, see Tim Leonard, 'Still in Search of Progressivism: If the Progressives Weren't Progressive What Were They?', http://www.princeton.edu/~tleonard/papers/insearchof.pdf

linked them to the condition of humanity overall. Domestic science offered solutions to all of these perceived problems.

In 1920, a writer in the Journal of Home Economics referred to an Armenian domestic science disciple, 'Miss Mianzare Kaprielan', who had been doing a 'unique piece of work in domestic teaching' in an American school in Asia Minor when she heard of a remote town in an 'out-of-the-way corner' where the people lived in 'a terribly primitive state'. 41 Kaprielan decided that she 'could not sleep in her pretty bed room until she had decided to go to them and serve them.' 42 Once in the town of Chalgara. Kaprielan found her fears realised and 'every instinct revolted' at the first room she encountered; nonetheless, this 'refined, educated lady' took a scrubbing brush, 'girded herself for toil' and set to work on 'an unspeakable floor' 43. Kaprielan's passion for social transformation exemplifies the zeal and determination with which domestic reformers approached their task of fixing society's ills: brushes in hands, they devoted themselves to making society speakable from the floor up. This was domestic science.

⁴¹ Hester Jenkins, 'Home Economics in a Primitive Armenian Village', *JHE*, vol. 12, no. 3, March 1920, pp. 130-131

⁴² Ibid.
43 Ibid.

'The domestic instinct is very lively in young girls': domestic science and its introduction in Queensland

Whatever else a human being has to meet and bear, he has always the home as a governing factor in the formation of character and the direction of life.

Charlotte Perkins Gilman, 1904

The home in its present form has seemed to be so little adapted to the larger world's ideals of trained motherhood, scientific domestic economy, and socialized ethics...

Jessie Taft, 1915

Every young girl, wrote a domestic science expert in 1911, 'expects some day to have a home of her own, and she will go with you every step of the way in rearing it in fancy.' Because the young girl's 'domestic instinct' was 'very lively', the 'first essential' for the domestic science teacher was to:

Emphasize the fact that the first conditions of beauty are health and wholesomeness, and that a healthful, beautiful location, good construction, perfect drainage, perfect plumbing, and perfect sanitary conditions generally, are indispensable to the house beautiful.²

Writers at this time called attention to the relationship between the home and public health, as well as the importance of training young women in hygienic household care.³ Most assumed that there was indeed a 'domestic instinct' that could be built upon to create a 'healthful' home with 'perfect sanitary conditions'.⁴ The price that society would pay for its women not having such an impulse or such a home was

¹ May Haggenbotham, 'The House Beautiful', in Lucy Langdon Williams Wilson, (ed.), *Handbook of domestic science and household arts for use in elementary schools: a manual for teachers*, New York, 1911, p.3

² *Ibid.*, p.4

³ As for example in Brandt's comment that disease prevention hinged upon 'the education of the women and girls of the tenements in the art of housekeeping and the science of food-preparation': Lillian Brandt, 'Social Aspects of Tuberculosis', p.76

⁴ In 1915, Jessie Taft referred to 'the desire of a normal woman for a husband, children, and a

In 1915, Jessie Taft referred to 'the desire of a normal woman for a husband, children, and a home'; probably lesbian, she did not situate herself against the idea of a 'normal' woman. See Jessie Taft, 'The Woman Movement and the Larger Social Situation', *International Journal of Ethics*, vol. 25, no. 3, 1915, p. 329. Taft's sexuality is of interest and discussed on pp.195-6

disease; and disease carried the prospects of racial degeneration and (white) social collapse. Following nineteenth century angst about woman's emergence into the public domain and her continuing claims to equal legal status, debates about the nature of her role at home remained common to the early twentieth century; most accepted that women were home-based, even if they disagreed with that reality. In the face of abhorrent infant mortality rates however there was general agreement on the part that women played in the maintenance of family and child health; obviously, the care they provided emanated from the home, and in the home laid many of the solutions to racial and public health. The Queensland government shared that perspective and sought to consolidate and improve its health, race and economic positions through the introduction of domestic science.

There is an unsigned and incomplete memo in the files of Queensland's Home Secretary's Department for 1910. The author was probably J.S.C. (John Simeon Colebrook) Elkington, then Commissioner of Public Health in Queensland. The memo is 'based on a study of the principal epidemiological features of the State', and refers to three basic considerations for Queensland: 'exotic epidemic disease', 'endemic disease', and 'economic consideration.' The writer argues that 'from the industrial standpoint',

Retention and increase of population and prevention of physical deterioration are of special and peculiar importance to Tropical Queensland... People must be taught, if necessary made – to live properly and reasonably.⁸

Such propositions often involve years of planning and debate rather than immediate action, but in this case, the 'special and peculiar importance' inspired ongoing activity. Elkington continued with the comment that 'The penalty for neglect is disease, and

⁵ Mary Coolidge saw [the middle class] nineteenth century woman's nature as socially constructed; it was not biologically determined but a response to her social environment; women were what men expected them to be. See Mary Roberts Coolidge, *Why women are so*, New York, 1912, particularly Chapter Five, 'The Feminine Temperament', pp. 89-107. See also E.M. White, 'The Woman-Soul', *International Journal of Ethics*, vol. 22, no. 3, 1912, pp. 321-334.

⁶ Unsigned memo to Under-secretary, Home Secretary's Department, April 7 1910. It is followed in the file by a letter referring to 'advance copies of sections 4, 5 and 6 of my Report on Tropical Queensland, for the information of the Hon. the Minister', which contain similar text. Letter, Elkington to Under-secretary, Home Secretary's Department Aug 17 1910, received as ref. 09442. QSA, A/31738, Home Secretary's Office, 1916-1929.

⁷ *Ibid.*

⁸ Ibid.

ultimate degeneration of offspring. ⁹ The idea of teaching, and if necessary, imposing, those health practices deemed to be proper upon a people continues; in this case, and in these comments, eugenic ideas met economics and thence nationalism, as they often did. ¹⁰ In the years that followed, federal and state authorities investigated, researched and legislated until health services and regulations provided reasonable foundations for most people to live 'properly', provided that they could access the services or knowledge, and wanted to do so.

Of course, most of us choose to be well. We expect government to provide us with health resources, made available regardless of our location, socio-economic status or cultural origin; we see physical wellbeing as a right, not (as some ancestors might) as an expression of fate, chance or social position. For Foucault, incentives such as that proposed by Elkington had long since displaced the individual for the supposed greater good: the 'singular, private, individual medical relation' had been lost in 'medical politics' by the twentieth century. For Australians, the reality is that whether authorities taught or imposed better health services and attitudes, most benefited individually from government intervention in community health.

Domestic science advocates did not see domestic science education as an imposition: they saw it as the only proper and reasonable way of life, and many countries, Australia included, profited from its teachings about hygiene and diet and its promotion of household efficiency. ¹³ However, while domestic science extended into

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⁹ Ibid.

Elkington's concerns would have echoes two decades later in Hitler's 'war on tobacco', and possibly continue in present arguments that the medical profession should act 'even in the face of incomplete scientific knowledge.' Sandra Steingraber, 'Mechanisms, Proof, and Unmet Needs: The Perspective of a Cancer Activist', *Environmental Health Perspectives*, no. 105, supplement 3, March 1997, p.685. Steingraber cites Proctor's remark that 'to do otherwise, to wait and see, to delay in the face of good but partial evidence, is tantamount to experimenting on humans'. See also Robert Proctor, 'The Nazi War on Tobacco: Ideology, Evidence, and Possible Cancer Consequences', *Bulletin of the History of Medicine*, vol. 71, no. 3, 1997, pp.435-488.

As demonstrated in Roy Porter and George Rousseau's study of gout. See Roy Porter, G. S. Rousseau, *Gout: the Patrician Malady*, New Haven, 1998

¹² See Michel Foucault, 'The Politics of Health in the Eighteenth Century', in *Power-knowledge: selected interviews and other writings, 1972-1977*, Sussex, 1980, pp.166-172. ¹³ Clendinning demonstrates some intersections between feminism, technology and early domestic science in England: see Anne Clendinning, 'Gas and water feminism: Maud Adeline Brereton and Edwardian domestic technology', *Canadian Journal of History*, vol. 33, no. 1, 1998, pp.1-24

the larger community through its introduction into schools and technical colleges, it began at home, with women. For feminists, the meanings attached to the word 'home' seemed to retain their older association with what they saw as a realm of subjugation; outside the modern woman was proactive; inside she remained submissive, retaining her role as moral and physical nurturer. The spheres met uneasily. Jessie Taft later remarked that:

the home in its present form has seemed to be so little adapted to the larger world's ideals of trained motherhood, scientific domestic economy, and socialized ethics, that the problems arising from the clashing of the two spheres [man's outside world, and woman's inside] have grown into great social questions to be handled by society as a whole. ¹⁴

Eugenists had simple answers for such social questions: by their standards, woman's place was more firmly than ever in the home, for eugenic science had proved to their satisfaction that her unique biology equipped her especially to be there. Edwin Slosson remarked in 1924 that 'the two things that most determine character and destiny are natural endowment and childhood training': science now understood woman's genetic contribution and society recognised her 'power over the rising generation through her share in inheritance and her control of early training'. ¹⁵ Mothers exercised that power best from home; since the assumption was that single women would also do so eventually, they were obvious targets.

In its early days, education and health authorities saw domestic science as a means to educate single women into the new standards for service: to teach young women from New York to London, Delhi to Ceylon, and Constantinople to Brisbane how to cook, clean and care for others in a sanitary fashion. When he toured Europe and the United States on behalf of the New South Wales government, J.W. Turner, then Superintendent of Technical Education in New South Wales, found a widespread opinion that the 'conscientious performance of all household arts' would 'develop a woman morally, mentally and physically'. ¹⁶ Turner's findings had a direct impact on Queensland government decisions about the means and methods by which to introduce domestic science: in 1908, Queensland's Secretary for Public Instruction

¹⁴ Taft, 'The Woman Movement and the Larger Social Situation', p. 329

Edwin Slosson, 'How Women Control the Future', *JHE*, vol. 42, no. 8, 1924, p.126
 J. W. Turner in B Bessant, 'Domestic Science Schools and Woman's Place', in Rodwell, 'Domestic Science, Race Motherhood and Eugenics in Australian State Schools, 1900-1960', p.68

referred to them when he told parliament that 'The U.S. Bureau of Education has supplied many careful and instructive particulars respecting American colleges....'¹⁷ Turner marked the emergent movement towards a broader dissemination of domestic science, noting that although 'domestic science was originally introduced into the school curriculum to raise the prestige of household work' it was also advantageous for unpaid home workers. ¹⁸ Similarly, middle-class Australian women who embraced the cause of domestic science initially thought of it as knowledge most needed by the working class.

The Australian Women's National League, a conservative woman's group founded in 1909, argued for domestic science instruction almost from its inception; after the Great War, it extended its activism on behalf of women and children. ¹⁹ In Western Australia, Midland Junction Technical School initially introduced a course in household skills to meet a shortage of domestic servants; it acquired more domestic science characteristics by 1910, and (supported by feminist activist Bessie Rischbieth), the training was consistent with domestic science objectives for the sake of science by the 1920s. ²⁰ Rodwell provides similar examples from New South Wales and Victoria. In each case, domestic science advocates believed that working-class and rural girls particularly needed instruction; in Queensland, this intention was evident in the extension of domestic science instruction to girls on Aboriginal settlements. Young white women however had broader educational opportunities, and probably more freedom in choosing their educational providers.

In 1908, as the Queensland government began its move towards a greater focus on the teaching of domestic science through its Department of Public Instruction (DPI),

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¹⁷ Formal education in Queensland began when the Department of Public Instruction was established by the State Education Act of 1875: under the Secretary of Education, it replaced the Board of General Education and became accountable for all the responsibilities associated with provision of primary education; it also managed the state's orphanages. It became responsible for technical education through a number of structural changes in Brisbane's technical institutions. *QPP*, Report of the Secretary for Public Instruction, 1908, p.23 ¹⁸ Rodwell, 'Domestic Science, Race Motherhood and Eugenics in Australian State Schools, 1900-1960', pp.70-71

¹⁹ Doug Scobie, 'The Australian Women's National League: A Theoretical and Historical Reconsideration', in Martin Crotty and Doug Scobie (eds), *Raiding Clio's Closet: Postgraduate Presentations in History*, Melbourne, 1997

²⁰ Anon., History of Swan TAFE: 'Household Management',

http://www.library.swantafe.wa.edu.au/History/1930-1939.htm Accessed October 6 2005

Technical Education had been established locally for over twenty-five years. Brisbane's first technical education college, the Brisbane School of Arts, opened in 1882; it became the Brisbane Technical College Incorporated in 1898. Domestic science instruction became available in 1896, directed towards working class girls. ²¹ A Board of Technical Education was created in 1902 and abolished three years later with the establishment of the Technical Education Branch, which took responsibility for syllabuses and teacher appointments but remained accountable to the DPI. Given the national and local concerns of the time about women, it is natural that the DPI was interested in news of educational developments overseas. Certainly, Queensland bureaucrats were impressed by the way in which Americans laid out their technical colleges. The Americans advocated 'large areas for technical college buildings' – Australian and Queensland technical colleges would likewise be purpose-built buildings separate from schools. ²²

Technical colleges met needs beyond those available at state schools, through provision of advanced clerical or pre-trade instruction, as well as training in particular skills such as those necessary for employment as laboratory assistants. There was, a Northern District Inspector of Technical Education said, 'In practically every college... a desire to establish Scientific and Industrial classes.' This desire had inspired legislation: with the sixteen technical colleges in operation at the time recognised as unique institutions, their organisation and funding needed to be mandated and the government passed the *Technical Education Act* in 1907. According to the DPI's Secretary, the Act's 'main features' were:

amalgamation of the several metropolitan colleges... establishment of a central technical college... placing of country colleges upon the same basis as state schools in regard to establishment and equipment; and provision for the establishment of branch classes to be worked in conjunction with technical colleges....²⁴

The Act also provided for increased funding. The Department of Public Instruction budgeted £11855 for 'Schools of Arts and Technical Education' in 1906-7, and

²¹ Joanne Scott, Catherine Manathunga and Noeline Kyle, 'Technical bodies: Towards a gendered history of technical education in Queensland in the nineteenth and twentieth centuries', *History of Education Review*, vol. 29, no.1, 2000, pp. 1-15

²² *QPP*, Report of the Secretary for Public Instruction, 1908, p.23

²³ *Ibid.*, Report of the Inspector of Technical Education, p.81

²⁴ *Ibid.*, Report of the Secretary for Public Instruction, p.23

increased that to £16585 for 1907-8; funding for state and provisional schools increased from £300655 to £310438, but the secondary education budget barely changed, increasing just from £6509 to £6560. Technical education by this time included some subjects that later became core areas of interest in specific domestic science instruction. For example, in 1907, Bundaberg Technical College, 'the only institution of the kind in the district', offered classes in 'commercial subjects, drawing, dressmaking, cookery and ambulance work. At least 771 students per term studied domestic science subjects in 1907. This figure compares well with the 861students per term who studied commercial subjects in the same year: the latter included bookkeeping and accounting, topics that were undoubtedly attractive to intending clerks. The rise in domestic science enrolments show that it had become important to young white women at about the same time that, as Rodwell notes, the government 'upgraded its old home economics curriculum to a domestic science curriculum' to make it one in which 'race-culture and racial betterment' were no longer concealed.

Motivated by various factors, various lobby groups in Queensland and other states made calls for the formal teaching of domestic science (as opposed to the routinely taught basic sewing lessons) in ordinary schools over the next few years. Among them was the Mother's Union of Queensland, a society linked to the Anglican Church. Founded in England in 1876, its mission was essentially one of strengthening and maintaining the family through provision of positive maternal and feminine Christian role models. Dickey saw its aims as being to 'to preserve Marriage and Christian family life.' They were its objective numbers one and three; as Sabine Wills showed,

²⁵ *Ibid.*, 'Estimates of Expenditure, The Treasury, 1907-1908', p.67

²⁶ Ibid., 'Special Observations', Report of District Inspector Brown, p.58

²⁷ *Ibid.*, 'Report of the Inspector of Technical Education', p.81

²⁸ Ihid

²⁹ Rodwell, 'Domestic Science, Race Motherhood and Eugenics in Australian State Schools, 1900-1960', pp.70-71

³⁰ The Union began in Tasmania in 1892, and in 1904, Mrs Frodsham (wife of Bishop Frodsham who played a strong part in the establishment of the Institute of Tropical Medicine in Townsville) introduced it into the North Queensland diocese. By 1910, there were four branches in North Queensland (at Townsville, Mackay, Prosperpine and Marian), and by 1917, there were branches in twenty Anglican dioceses in Australia. Courtesy of Margaret Mack, Anglican Archives, Townsville, 2006. For more on the work and motivations of the Mother's Union, with reference to Queensland, see Brian Dickey, 'Lay or Christian: revisiting some Australian religious history', Paper for the Anglican History Seminar, Brisbane, 2003. For a broader perspective, see Sabine Wills, 'Homes are Divine Workshops' in Windschuttle, (ed.), Women, Class and History. Feminist Perspectives on Australia 1788-1978, pp. 173-191

number two intended to 'Awaken in mothers of all classes' their other moral duty of nation building through development of 'a sense of their great responsibility in the training of their boys and girls (the mothers and fathers of the future.) 31 Made salient by fears of race suicide, that objective became increasingly important to the Mother's Union.³² Earnest and patriotic, middle-class white women like these saw the introduction of baby clinics and domestic science instruction as important stages in the process of saving the Australian family, and strengthening the nation. In early activities, the Housewives Association and the Women's Christian Temperance Union were prominent, alongside the Country Women's Association whose Queensland chapter provided impetus for the Survey. Working together or beside each other, such organisations sought to change society for the better. At the same time, however, their own lives were changing.

For the middle class female, possibly Christian, social activist, infant mortality rates, alcohol abuse (or even use) and venereal diseases were spectres that threatened racial and social security. Remedying these problems directed her outside activities, but she had concerns at home too, for the twentieth century world reached into that. Good servants seemed scarce and everyday life was becoming more costly; by contrast, the industrial world seemed to have organised itself. Perhaps middle class women could apply industrial principles to the home, 'Mrs Frank A Pattison' suggested in 1913:

The recent development of what is known as scientific management in a variety of man's occupations, has roused the American woman to question whether this be not a system equally adaptable to her domain – the building and maintenance of the home... not only are these same principles definitely translatable to her world of activity, but that in the present status of the home the only sure progress toward the solution of the so-called "servant problem," as well as the high cost of living, lies in the ability to apply just this system of scientific management from the survey, the budget, the index and cardcatalogue to the required time, motion, cost and temperature in boiling potatoes, making bread or washing a garment.³³

Hence, the New Jersey Federation of Women's Clubs developed a solution; they would:

³¹ Wills, 'Homes are Divine Workshops', p. 180

³² *Ibid.* It shifted its emphasis to orphans and unmarried mothers from 1918; always concerned with the public morality (or lack of), it became more worried and more publicly active after seeing evidence of rising STDs and premarital sexuality.

33 Mrs. Frank A. Pattison, 'Scientific Management in Home-Making', *Annals of the American*

Academy of Political and Social Science, vol. 48, 1913, p.96

Meet the capital problem by organizing the consumer to a better cooperation with the producer and distributor, and eliminate the servant problem by eliminating the servant class. This latter is not so radical as at first appears, for the female house-servant is fast eliminating herself. Her tendency is to go to the factory, shop, office, or any industry where she can count upon a measure of legitimate freedom, regulated hours of work, and her own home for recreation; for she wants that feeling of self-respect which is difficult to obtain in a position where the condition of the work and the workers have been relegated by society itself, to the lowest plane claiming respectability. ³⁴

Pattison invoked the domestic science tenets of economy and efficiency in almost every paragraph, and recommended that women adopt every possible convenience from paper plates to electric dishwashers, so that 'shorn of its abuses', housework could still have 'within it every cultural value known.' Domestic science would undoubtedly benefit the white race: it was also a vehicle by which the middle class woman could (in principle) save herself from becoming a slave to the home.

With its combined incentives of addressing the servant shortage, increasing domestic efficiency to an industrial standard and tackling the problems of disease and infant mortality, the domestic science movement in the U.S.A grew stronger in the pre-war period; this progress was mirrored in Queensland and other parts of Australia. Nonetheless, despite dedicated activism, it ultimately took the war to inspire the introduction of widespread domestic science and infant health schemes. The impetus was one of improved domestic economy during the Great War, and the Queensland government was no different to other states in this regard as it considered the expansion of its domestic science target group to adult women. The need for public thrift enhanced the benefits of instruction that would ultimately save money, immediately, and in the future, through prudent purchase and use of domestic goods, food and other necessities. In 1915, Mr Storey, Undersecretary of the Department of Public Instruction, urged the Minister to consider the appointment of 'an organizer [sic] in domestic and public economy'; there was, he argued, an 'urgent and imperative need for the initiation of a national policy of thrift and economy.'36 Storey's vision of an organiser's role was to develop and deliver programs in domestic science. Later that year, the Mother's Union began to pressure for a meeting, primarily

³⁴ *Ibid.*, p.96 ³⁵ *Ibid.*, p.97

³⁶ OSA, A/15698, Letter, Storey to Minister, July 31 1915, 15/26262

to discuss the introduction of Baby Clinics but also of domestic science instruction. They linked domestic science knowledge to infant welfare as follows:

> In view of the statements recently made with regard to the death rate among infants, we think this a good opportunity to suggest that

- 1. printed instruction in the matter of Infant Feeding should be prominently displayed for public information by the government
- 2. that such advice should be sent to every mother directly the birth of the child is registered
- 3. that teaching on the same matters should be part of the regular state school instruction of all girls in the higher classes and in connection with the scheme of the Department of Public Instruction of the domestic training of girls. ³⁷

In fact, the DPI had already acted: it issued a pamphlet, 'Facts about Food' for free distribution in Queensland schools that month.³⁸ Moreover, it had employed its organiser, Miss Florence E. Willett (a domestic science specialist) in September, and she was in the process of developing a teaching program.³⁹

The notion of employing a person to teach thrift during war seemed sensible even without the domestic science emphasis on sound economic practice. Australia-wide, the premise was that women would incorporate the messages of domestic science into the way that they managed their home, themselves and their anticipated children. Informed mothers should also be healthy mothers, hence infant and maternal mortality rates would decline alongside a reduction in the costs of remedial and preventative medicine. The better the women who provided essential services to Australia's male workforce carried out that task, the better for the nation's economics, morals, physical health and even its spiritual wellbeing. Willett called her original pamphlet 'Our Daily Bread' in an obvious biblical reference. She also included another biblical quotation that does not appear in the published version, and drafted a patriotic pamphlet on health addressed 'To the future Mothers and Women of Queensland', as well as an

³⁷ *Ibid.*, Letter, Mrs M Le Fanu, Bowen Bridge, for Mother's Union of Queensland to Undersecretary, Home Secretary's office, November 12 1915

³⁸ *Ibid.*, Government Printer, Brisbane, n/d.

³⁹ *Ibid.*, memo re Willett's resignation, n/d; Letter, Storey to unknown, July 31 1915; DPI 19070 & 15/26262

article, 'The Dismal Science' (presumably regarding economics), which the DPI did not publish. 40

The Department employed Willett from September 1915 to February 1916 'on probation' on a salary of £150 annually. They attached her to Central Technical College as 'organiser in Domestic and Public Economy' under the 'general direction' of Dr Bourke, Chief Medical Inspector of Schools. Her role was 'to collaborate with the Domestic Department of the Central Technical College 'in the preparation of suitable food circulars and domestic economy and general thrift literature'. She was also directed to 'co-operate with the various Women's Organisations and lecture to them, as well as to the older school girls and to perform other duties as expected. Whether she achieved the latter objectives is unknown; it does seem though that she laid the groundwork for organised and effective domestic science instruction in Queensland. When the Department brought in another specialist the following year, she found an efficient program in place.

A number of Willet's students intended to become teachers. Some would teach in the countryside, and for Queensland, the lessons they might impart to the daughters, sisters and future wives of a rural workforce were of particular importance. Domestic science education as it emerged in western societies often placed an emphasis on the learning needs of rural women. In Canada, for example, Margaret Kechnie argues that rural women were idealised as part of what she refers to as the 'agrarian myth' that 'romanticized the role that the countryside played in Canadian history and economic

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⁴⁰ *Ibid.*, inclusions and letter, Willett to Storey, May 9 1916. There is no copy of 'The Dismal Science' in the file. In 1918, American Carl Jones linked 'The Dismal Science' to Malthusian theories expressed in the nineteenth century, 'at a time when the writings of the English Classical School of Political Economy were coming into the foreground.' See Carl E. Jones, 'A Genealogical Study of Population', *Publications of the American Statistical Association*, vol. 16, no. 124, 1918, p.201.

⁴¹ *Ibid.*, letter, Storey to Willett, n/d., 15/26262

⁴² *Ibid.*, memo re Willett's resignation, n/d., DPI 19070

⁴³ *Ibid.*, letter, Storey to Willett, n/d., 15/26262

⁴⁴ Ihid

⁴⁵ *Ibid.*, memo re Willett's resignation, n/d., 15/26262. Willett intended to take a position as 'an au pair at Buderim for two months'; she then hoped to get work in America.

development. '46 Domestic science education in Canada began in comparable circumstances, with similar perceived problems to Australia: an influx of non-white immigrants in the late nineteenth century challenged perceptions of Canada as a white society, reinforcing concerns about white female settlement in rural areas. In Canada also, middle-class women took stances associated with eugenics: Kechnie refers to a racially motivated program of 'nation-building' by the Women's Institutes there. 47 Such programs included advocacy for the introduction of domestic science instruction into schools, and for mothers, with approaches that may have had a positive influence on Cumpston, who sent Cilento a number of Canadian pamphlets.⁴⁸ Although there is no evidence that the material influenced Cilento or the Survey, Women's Institutes organiser Adelaide Hoodless had international authority: she was a board member of the American School of Home Economics, an icon of the domestic science movement, and inspired the establishment of rural women's organisations including the QCWA.⁴⁹ Indisputably, domestic science studies conveyed a message of hygiene to young women in a manner that consolidated their gendered and raced functions. At the same time, infant, child and maternal mortality rates were still unacceptably high, and infectious disease remained a significant problem. In such circumstances, it was a good thing for future parents, caterers and housekeepers to understand the basics of personal and domestic germ control and nutrition.

Queensland authorities did not leave Aboriginal women out of the process of broadening and restructuring domestic science: domestic science, taught with similar

⁴⁶ Margaret Kechnie, 'Rural women's role in the "great national work of home building": the Women's Institutes in early twentieth century Ontario', Canadian Woman Studies, vol. 20, no. 2, 2000, p.120. ⁴⁷ *Ibid.*, p.122

⁴⁸ Cilento acknowledged the pamphlets in his formal memo suggesting that the Survey finally take place; he noted that the CWA wanted the Division to issue 'a series of pamphlets similar to those you formerly sent me for review from the Canadian department'. He did not refer to them again. See Memo, Cilento to Cumpston, June 28 1923, SP1061, 350, 657/23. No Canadian literature appeared in ITM or DPI files.

⁴⁹It may be that the death of a child from contaminated milk most motivated Hoodless. See 'Mrs. John Hoodless, Government Superintendent of Domestic Science for the province of Ontario; Founder Ontario Normal School of Domestic Science, now the MacDonald Institute' in S. Maria Elliott, Household bacteriology, American School of Home Economics, Chicago, 1907; Hoodless died in 1910: see Mary Ure Watson, 'Adelaide Hunter Hoodless', JHE, vol. 2, no. 3, 1910, pp.318-9; also, Mary C. Moxon, 'The Development of Home Economics in Canada', JHE, vol. 28, no. 3, 1936, pp.148-150. For biographical and publishing details, see Terry Crowley, 'Hunter, Adelaide Sophia (Hoodless)', Dictionary Of Canadian Biography Online, http://www.biographi.ca/EN/ShowBio.asp?BioId=40915

hygienic intentions, was firmly instituted on North Queensland missions and controlled settlements by the 1920s. Perhaps it was even more important there, where there was rising anxiety about Aboriginal health. The Chief Protector of Aborigines contended in 1920 that 'primitive habits and ideas of sanitation' made 'the native... peculiarly susceptible to infection'. 50 In this case, it seems he meant hookworm, and there was at least one potentially good outcome of visits by 'specialists' from the Hookworm Campaign to Barrambah, Palm Island and 'several northern mission settlements and camps': on their advice, Chief Protector Bleakley organised 'improved sanitary systems and water supplies'. 51 Briscoe challenges the usefulness of such installations for people who were still new to white ways, and who (because of their traditional beliefs about malevolent causes of illness) were unlikely to see a cause-and-effect connection between infection and the onset of disease. 52 From a domestic science perspective however, sanitary improvements were essential no matter where the instruction occurred: there was no point in teaching the hygienic practices embedded in domestic science instruction if the means for application of the lessons were non-existent. The lack of infrastructure to support better sanitation was also a problem in white settlements.

Scott and Evans argue that Queensland's Aboriginal girls and women were trained in domestic science so that they would provide a labour-pool for white mistresses, with the inference that this was the only motivation for such instruction. The problem with this theory is that while it acknowledges the indisputable differences in the way that government and society treated black and white women, it diminishes the significance of domestic science instruction as a vehicle for teaching better sanitary practice for racial betterment. That Aboriginal girls and women were considered useful as servants is not questioned: in its 1920 Report, the Department shows that 123 girls were 'placed' in 'the country' and 'towns and suburbs'. These girls', it continued, were in demand, and 'no difficulty is found in placing them': employers obviously considered them 'worth the wages'. Briscoe remarks that the *Aborigines Protection and Restriction of Opium Act* of 1897 enabled payment of employment subsidies that

⁵⁰ QPP, Report of the Aboriginals Department, 1920, p.5

⁵¹ $\tilde{I}bid$.

⁵² Briscoe, 'Disease, Health and Healing, chapter seven.

⁵³ *Ibid*.

⁵⁴ Ibid.

made Aboriginal labour cheap.⁵⁵ Nonetheless, to have girls trained in domestic science was also important because of their Aboriginality.

Informed young Aboriginal girls might certainly make better servants, but as women, they were also critical to the preservation of Aboriginal racial purity: theoretically, domestic science created a better woman. Scott and Evans show the way in which the Department excluded 'half-caste' girls from pre-Federation schools: they note that an Education Department official in 1896 wanted them to attend settlement schools where they could learn 'habits of industry' and 'training in social, intellectual, and moral responsibilities' alongside religion, moral duty' and 'decent behaviours'. 56 These were the same intentions shown earlier in Turner's report addressed to the development of young white women, and raise the possibility that by the 1920s the Department did not want to shape Aboriginal girls into pseudo-white women but into better (by eugenic standards) Aborigines: domestic science advocates always intended to produce fitter mothers. However, should they exercise their domestic science knowledge in service, young white women could hope for real financial benefit from their exertions; this often was not the case on the missions and settlements. Scott and Evans also captured the frustration of girls who learned how to sew, cook, launder and do housework, ostensibly in preparation for expected employment as domestic servants. In the meantime, the products of their sewing tended to be sold or used in other establishments but they received just token payment; consequently, many laboured for utterly inadequate remuneration while their white supervisors crowed about income from the sale of their work.⁵⁷

For non-black women, the process of introducing domestic science instruction continued after the war alongside a need to legitimate it as a worthwhile path of study. The Department of Public Instruction was concerned that with the immediate economic stress brought on by war seemingly reduced, some young women might not see the importance of formal instruction. In 1917, 'at the instance of the Minister', and with 'the concurrence of the Victorian Education Department' it arranged to borrow

⁵⁵ *Ibid.*, chapter two.

⁵⁶ Scott and Evans, 'The molding of menials: the making of the Aboriginal female domestic servant in early twentieth century Queensland', p.139 ⁵⁷ *Ibid.*, p.144

the services of another expert, Miss Cecile Bright, to 'report upon the Domestic Department of the Central Technical College. ⁵⁸ Bright submitted her work – 'the Bright Report' – in December. A simple document, it affirms the curriculum in place, and makes only one significant recommendation: that students also study 'history and geography so that they could present themselves at the Junior Public Exams in English, History, Geography, Arithmetic, Drawing and Physiology'. ⁵⁹ Bright believed that a Certificate in Domestic Science held little credibility on its own. This was no problem for girls or women who wanted only to apply their skills at home, but those who wanted to teach domestic science needed to demonstrate an educational standard at least as high as that of their students. In a letter with her report, Bright expressed thanks to 'Mrs Brydon' – later linked to the Sociological Survey – and her staff for their assistance. Bright added that:

(considering the fact that few of the teachers had had previous experience in teaching domestic science) that the work achieved during the two years that the college has been opened, has been on the whole very creditable. ⁶⁰

Brydon faced the challenge of training teachers in a new vocation that required special equipment and amenities as well as a deep personal commitment to teaching and learning that they in turn could convey to their future students. Successful introduction of facilities to teach domestic science instruction appropriately was not too distant, but creation of the desire to learn may have needed more work. This was a concern throughout the state, but especially so in the north where intended recipients of domestic science instruction had an urgent racial function to fulfil.

In December 1918, in response to invitations for students to sit entrance examinations for Townsville's first domestic science school, Letitia Crowder of Central State School advised the DPI that Madge Clifton and Rita Anderson 'gave their names' for the examination, but 'owing to domestic reasons', Rita withdrew. 61 Crowder continued that

⁵⁸ QSA, A/15676, 18/16948, memo, unsigned, n/d.

⁵⁹ *Ibid.*, 18/04063, letter, Bright to Minister, attachment with Report, December 10 1917

⁶⁰ *Ibid*. She also noted that 'Mrs Brydon's task in reaching this stage has not been an easy one and was only brought about by her indomitable courage and personal exertion.'

⁶¹ *Ibid.*, memo, Crowder to Under-Secretary, 'Domestic Science Scholarships', December 9 1918, 47594

On enquiry this afternoon I find that no Central State School girl has entered for the examination. I am sorry but the class does not seem to be the most popular. ⁶²

Whether it was unpopular with prospective students or their parents is unknown; more information on the reasons behind Rita's withdrawal might have provided some indication of the extent of parental barriers to post-school study. The schools at Ross Island and Townsville West replied the same day; between them, they initially found only seven interested students. The Department eventually located thirty girls; it had offered scholarships for 20 places for 13 and 14 year olds. Most of those who sat the scholarships failed to achieve a mark above 50 per cent in English and Arithmetic tests, while roughly one third received marks around 30 per cent. The department gave places to the top twenty applicants.

The Department may also have been premature in its advertisements: it had intended to have a Domestic Science school at Townsville Technical College in time for the 1919 school year, but work was still in progress late in 1918. The Brisbane Colleges perhaps had less difficulty in finding students. A Clara Colbourne wrote to the Under-Secretary on behalf of Girl's State School teacher Ida Norris to advise that one student would not be taking her place in the next domestic science course:

Ivy left school because she had made little improvement especially in manners and I thought it best to let her go to the Nuns to see if they can improve her. ⁶⁵

There is no mention of whether Ivy had any choice about her part in such institutional pass-the-parcel; regardless, Girls' State School may have had a waiting list. Norris wrote separately that 'I have nominated Enid Kershaw to take [Ivy's] place at the Technical College.'66 In the meantime, plans for the first Domestic Science school in the north continued alongside sustained efforts to make domestic science a desirable field of study.

⁶² Ibid.

⁶³ Ibid., memos, R. Moncleuth to Under-Secretary; J. Lynum to Under-Secretary, December 9 1918, 47620, 47590

⁶⁴ *Ibid.*, (5) Domestic Science – miscellaneous correspondence, anon., memo, 'Domestic Science School in connection with the Technical College at Townsville', Feb 23 1918. The files do not include exam samples and it is impossible to judge their age appropriateness. ⁶⁵ *Ibid.*, memo, Colbourne to Under-Secretary, April 7 1919

⁶⁶ *Ibid.*, memo, Norris to Under-Secretary, 'Nomination of Pupils to Technical College', April 7 1919, 19/13214.

These endeavours incorporated a need to make further education itself attractive to young women and their guardians. In the early years of the twentieth century, most girls would leave school and 'stay home to help' at some point after turning twelve; it was a custom that provided mothers of growing families with full-time assistance, and enabled supervision of pubescent girls, some of whom who might enter the outside workforce after they turned seventeen. Judith Smart refers to the interim period as a post-educational episode of 'civic nonentity and invisibility'. ⁶⁷ With medical support of the idea that adolescence was a physically and intellectually tiring time for young women, it may also have given them a safe space in which to become used to menstruation and other hormonal changes. A book published in Canada and Australia through several editions between 1910 and 1922 (and purchased in Townsville) mirrored similar publications when it suggested that:

At this time of life it is well not to study too hard but to pay attention to the health... The flow usually begins at the age of fourteen or fifteen... At this time the girl is generally very busy with her school work and is often pushed to the limit... From the ages of 13 to 17, girls should not study too hard... The menses come earlier in warm climates and in girls who live indolent and luxurious lives; and later in working girls. Race also makes a difference. ⁶⁸

In her oral history (recorded in 1990, when she was 91), Ethel M. worried that 'kids now stay at school until the sexy age of fifteen: she meant girls, and thought this was a time when they were most likely to 'get into trouble'. ⁶⁹ Whether or not the onset of puberty was a factor in their decisions, some parents insisted their daughters leave school while others left the choice to their daughters. Economic need, location and parental penchant determined educational choices in the early 1900s as much as opportunity or individual preference.

The NQOHP stories show considerable variation in experiences at this time. Amy, born 1888, left school at twelve in 1900 and 'stayed home for a while'; in 1910, fourteen year old Florrie left school and went to work immediately.⁷⁰ Fifteen-year-old Daisy S. also left school in 1910: she had reached 'the highest class', was top of the

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⁶⁷ Smart, 'Feminists, flappers and Miss Australia', p.1

⁶⁸ R.T. Barnum (ed.), *The People's Home Library*, (The Oceanic Publishing Company: Toronto and Sydney, 1922) p.385

⁶⁹ NQOHP, ID40, 93-5. As a student teacher, she said she had been too busy studying to do so. ⁷⁰ *Ibid.*. ID15, 41-5

school for reading, and had won prizes for that and for elocution, but left by choice.⁷¹ Daisy K, born in 1902, only attended school for just over two years – she and her grandmother lived on isolated farms near Charters Towers.⁷² In 1904, four years after her formal education ended, Amy left Charters Towers to be a companion to a woman in Townsville but became sick and had to return home; apart from visits to married sisters (which sometimes included local casual shop work) she stayed there until her marriage.⁷³ Florrie took an apprenticeship as soon as legally possible: her mother supported a family that included a physically handicapped husband, and this inspired Florrie to go to work; she became a mother less than two years later and was a single parent for most of her adult life. In old age she regretted her lack of education.⁷⁴ By the 1920s, the age at which girls left school often extended to 14 or 15.

Marjorie was the same age as Florrie; her experiences however were different, mostly because her family's economic situation allowed more choice. She lived at Charters Towers in 1911 when the State School introduced scholarships for girls who wanted to go on to further studies, and initially wanted to sit for a scholarship. However, the family was about to move to Townsville and her father explained that she 'mustn't do it' because she was going away, and all she would do was 'stop another little girl from doing it.' Marjorie, 'weepy at the thought of all the little friends' who she did not want to leave, studied for the scholarship with her classmates but did not sit the exam. Her father was a large employer who maintained that jobs should be kept for men. Her sister Ethel spent some time working in her father's office during World War One but left when the 'men came back'. Both sisters conformed to parental expectations.

From these examples, it seems that parental and student changes in attitudes to female schooling occurred relatively slowly. Nonetheless, there was a shift, and as the 1920s

⁷¹ *Ibid.*, ID4, 7-1, 2, 4

⁷² *Ibid.*, ID111, 312-1

⁷³ *Ibid.*, ID15, 40-4

⁷⁴ *Ibid.*, ID13; 35-1, 2, 4, 5, 6; 36-1, 2

⁷⁵ *Ibid.*, ID6, 13-2. Marjorie would soon go to boarding school.

⁷⁶ *Ibid.*, A strong contributor to the Townsville community, Marjorie travelled extensively overseas from a young age, and worked as a volunteer in the AMWAS in the Second World War, but never took paid work.

⁷⁷ Ibid.

⁷⁸ *Ibid*.

approached, increasing numbers of young women followed their compulsory schooling with enrolment in secretarial courses, or undertook classes such as those offered in domestic science. For domestic science advocates seeing a health crisis, the provision of domestic science instruction could not come soon enough.

The idea of modernity and postwar emphasis on individual responsibility for societal health may have helped domestic science schools attract potential students: it certainly seems to have helped marketers. With personal hygiene an important aspect of domestic science, the makers of The Hygena Spray Syringe, a vaginal douche marketed as being 'Invaluable to ladies', were just one company selling in Australia that used the growing emphasis on women's health to their advantage in these times. Hygena spray had been available since the 1880s, but its message of health and hygiene undoubtedly acquired fresh potentcy in the female public consciousness of the 1910s and 1920s. ⁷⁹ Similarly, American women might see the words 'health', 'informed', 'modern' and 'virile' on advertisements for the Marvel Hygienic Spray sold there. 80 The central message of such promotions was that modernity demanded scrutiny of older ways, for 'old methods' and 'old practices' were 'as obsolete as the hoopskirt'. In fact, the idea of obsolescence was widespread in literature of the time: new discoveries and new conditions in almost every aspect of life made old ideas as 'obsolete and unworkable as is the horse car or the "one-hoss shay". 81 Modern, reputable and conveniently located in most large centres, Queensland's new technical colleges provided ideal further education venues for progressive young women.

Technical colleges also provided employment opportunities for domestic science teachers. In 1918, the DPI received requests for employment from three Victorian teachers, but advised them that they had no vacancies. ⁸² By 1919, students in the Department of Domestic Science and Art studied Domestic Economy, Cookery, Fruit Preserving and Pickling, Confectionery, Cake-icing, Scientific Baking and Milling,

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1918; Letter, Edith B. Jones and Hannah Highland to Under-Secretary, August 23 1918. QSA, A/15676, 23693, 31649

⁷⁹ Powerhouse Museum: 'The Rags: Paraphernalia of Menstruation',

http://www.powerhousemuseum.com/rags/index.asp

⁸⁰ 'Virile' would mean healthy and energetic in this sense. Museum of Menstruation and Women's Health, 'Marvel Douche Ad', http://www.mum.org/Marvel.htm

 ⁸¹ *Ibid.* Obsolete ideas, 'horse car and one hoss shay', in Isabel M. Stewart, 'The Evolution of Nursing Education', *The American Journal of Nursing*, vol. 22, no. 6, 1922, p.420
 ⁸² Letter, A.R. Dunbar to Under-Secretary, 'Letter of interest re teaching position', June 25

Starching and Ironing, Dressmaking, Millinery and could achieve a Diploma in Domestic Science and Art. ⁸³ Eugenic ideas do not leap from such a curriculum until it is remembered that by the education of health-conscious erudite young women into the skills to create an efficiently organised and healthy home for themselves and their future families, domestic science programs intended to enhance race betterment. If infant and child mortality rates were to be subdued, physician Caroline Hedger argued in *JHE* in 1922, 'There must be an understanding and a participation in race perpetuation'. ⁸⁴

For the new Townsville college, time was of the essence – but costs remained important. Mr Lafferty, Director, wrote to the Under-Secretary of the DPI about a change to an earlier intention to remove and sell a cottage that stood on the site of the planned school. Rather, in a 'most irregular action by the Committee of Townsville Technical College', the building had been repaired. ⁸⁵ The Committee justified their action by the argument that

Had this building not been made available, the establishment of a Domestic Science school would have been long deferred, necessitating as it would have done, the erection of a special new building.⁸⁶

The intended domestic science building however required ongoing improvement in many areas. For example, free-ranging goats were a problem in Townsville, as Gorman noted in her inspections; in this case, they broke through the fence around the house, and the property consequently needed a new fence. Additionally, the house needed gas points, a new laundry tub and enough kitchen installations to suit the expected twenty students. The department eventually outgrew that first building, but domestic science was part of ordinary upper school curriculums by then.

That domestic science instruction in the north (as much as anywhere else) was needed to combat the dietary practices bequeathed to 1920s women by generations of role models is emphasised by various cookery and health hints that appeared in the *Bulletin*. Present dieticians would wince; Cilento and Gorman undoubtedly did.

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⁸³ Syllabus of Technical Colleges, Department of Public Instruction, Queensland, 1918, in Eddie Clark, 'Technical Further Education in Queensland. A History 1860-1990', Historical Perspectives on Contemporary Issues in Queensland Education, no. 7, 1992

⁸⁴ Caroline Hedger, 'What the Community Owes the Child', *JHE*, 1922, vol. 14, no. 11, p.524

⁸⁵ Letter, Lafferty to US, DPI Brisbane, December 2 1918 QSA: A/15676

⁸⁶ Ibid.

Recipes full of sugar tempted 1920s women: practically every cake was iced, and the Bulletin's Ladies Page inevitably included more recipes for desserts, sweets and toffees such as barley sugar, toffee, coconut ice, fudge and coffee fudge than it did for savoury foods. Ethel M spoke of her family's fondness for cakes and desserts: she often made steamed, date or bread and butter puddings, cooked in a 'big dish to go around a family' as well as iced sponges. Her husband enjoyed a sponge for afternoon tea, as well as her annual Christmas pudding served soaked with whiskey which was then lit – her children hated the whiskey taste but the adults were happy. Happy they might be, but their dental health could only suffer. Cakes and desserts invited sugar, but it had much broader use. Domestic science experts recommended that cooks should not add sugar to food, but the practice of doing so might have been difficult to combat. 87 Sugar was a component of many cooked foods, as with its use as a browning agent: 'half a pound of loaf sugar' was boiled with 'half a pint of hot water' until the mixture thickened; it was just caramel, important because it added colour and flavour to gravies, stews and stocks and enhanced their visual appeal.⁸⁸ In respect to sugar consumption and the fondness for cakes, probably nothing has changed, but dentistry at the time involved painful repair more than prevention.

Ladies' columns offer varied insights into culinary practices and customs. Other common pantry items were used diversely; an onion, for example, could remove rust from bicycles and 'the family two-seater' plus induce sleep and combat a 'bad cold'; additionally, 'onion porridge, thickened with milk and cornflour, with a lump of butter stirred into each bowl' would 'send children warm and well nourished to school.' Stews of mutton, cooked offal and beef were prepared in bacon fat or other lard. Seafood, using tinned or fresh ingredients such as salmon, lobster or fried fish was crumbed or masked with sauces; vegetable additions consisted of onion, carrot, celery and (rarely) tomato. Pumpkins, beans, cauliflower, sweet-corn, potato and marrow were vegetable side dishes; basically, nutritious food was that which was hot – not a bad idea before the wider availability of refrigeration, provided that it was cooked for

⁸⁷ As shown later for example in Mary Truby King, *Mothercraft*, Sydney, 1934, p.221

⁸⁸ Townsville Daily Bulletin, February 9 1924, p.9

⁹⁹ Ibid.

⁹⁰ Cilento considered bacon fat as less problematic than others, and thought some fat essential to a good diet, but cautioned against excessive usage. Bacon fat, he said, was 'granular and easily absorbed; mutton fat was 'heavy', and 'fat of game and chicken very prone to decomposition.' Cilento, *White Man in the Tropics*, p.150

long enough to kill existing bacteria. Soups are popular in 1920s recipe pages, but salads appear rarely, and fruits are inexorably stewed. Domestic scientists worried that people were not eating enough fresh vegetables, fruit or salad, and while the recipes alone do not imply low consumption, the lack of advice on the benefits of fresh foods supports a preference for those that were cooked. The *Bulletin* shows that fillings for sandwiches, which in 1924 had 'never before enjoyed so much popularity', consisted mostly of cooked ingredients: minced chicken, scalded tomatoes, minced tongue, olives and anchovies were combined with boiled eggs, mustard, cress, cheese and capers; hot sandwiches were a new vogue, with minced roast beef, ham or haddock served between slices of toast. ⁹¹

Dietetics was a critical component of domestic science. While they might accept moderate use of powdered formula after a baby had experienced at least nine months of breast-feeding, domestic science advocates vehemently disagreed with the use of mass-produced or processed foods, which they contended challenged dietary balance. That domestic science bête noire appears often in 1920s recipes, through products such as anchovies, salmon and tinned fruit. 92 At least one manufacturer countered health concerns by arguing that tinned fruit had benefits for 'your own and your country's good'; it would 'preserve the health of the nation'. 93 Cilento disagreed. 'Food-deficiency diseases', he argued, were on the increase because of tropical preferences for convenient food: now, 'Having vanquished some of the enemies of man, represented by tropical diseases, we are building up to replace them new foes to health.'94 To racialise his point, Cilento referred to 'natives living under native conditions' and argued that high-carbohydrate eaters might have more 'endurance at monotonous physical tasks', but lacked 'energy, initiative and progress'; they were destined to be 'the hewers of wood and the drawers of water for the more vigorous nations.'95 Hence, home-prepared food not only promoted individual wellbeing but

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^{91 &#}x27;Care of Sponges', Townsville Daily Bulletin, January 19 1924, p.7

⁹² These 'well-advertised' products, Cilento acknowledged, were popular because of the 'ease with which they are prepared and to their portability'; with their 'attractive labels' however they cost consumers valuable vitamins. Cilento, *White Man in the Tropics*, pp.151, 153 ⁹³ Advertisement for 'Australian Canned Fruits'. *Townsville Daily Bulletin*, January 5 1924, p.9. These advertisements also often justified purchase of their goods by showing that they provided rural employment opportunities for young city women, who might marry farmers.

⁹⁵ *Ibid.*, p.155. Fortunately, Gorman found that tinned food was 'far from being the staple diet in any home'.

connected with concepts of racial difference and superiority. Cleanliness or dirtiness, balance or lack of it, primitive or developed: these dualisms aligned with concepts and characteristics familiar to proponents of race hygiene, in Australia and overseas.

In 1926, American Cora Winchell described the ideals of earlier domestic science proponents. ⁹⁶ They were, she said, 'frontiersmen' for whom 'scientific theory worked hand in hand with practice', and who had a goal in which home economic ideas represented 'the ideal homelife'. ⁹⁷ 'Unhampered by the traditions of the past'; domestic science could utilise 'all the resources of modern science', but was much more than a balanced diet, efficient home and a germ-free environment. ⁹⁸ Home economics as Winchell knew it included education in psychology, 'sex hygiene' and 'eugenics and euthenics' as well as an understanding of 'philosophy and spiritual values'. With her only real worry that day being a family member who was 'depressed and puzzled over an unwise investment', Winchell most likely could not see that future generations might view the eugenic aspects of domestic science as philosophically bankrupt. ⁹⁹ Most 1920s North Queensland women probably shared such a lack of recognition.

As she attempted to balance her family's and her own health needs, maintain her home to a sanitary standard, provide a proper diet, with ample fresh ingredients and controlled proteins and carbohydrates, and ensure that she was being as efficient as possible, even a trained domestic scientist may not have worried about the long-term impressions of her efforts on behalf of the white race. The Survey women who had fewer ideas about what constituted a balanced diet – and there were many of them – similarly may not have considered the relationship of domestic science in Queensland or other states to White Australia, or even thought too deeply about the latter at all: by 1924, it was a part of a northern culture that had changed radically in just two decades as they lived through political change, war, the prospect of racial degeneration, disease and shifts in labour patterns and significant industrial and scientific developments. Despite those and the challenges of exasperating committees and free-ranging goats,

 $^{^{96}}$ Cora M. Winchell, 'Home Economics at the Crossroads', *JHE*, vol. 18, no. 10, p.554 97 *Ibid*.

⁹⁸ *Ibid.*, pp.558-9

⁹⁹ *Ibid*.

domestic science instruction and ideals were established in North Queensland by the year of the Sociological Survey.

Survey inspirations at a local level.

What I now desire to point out is the importance of a more exact examination and careful record than is now made of the physical qualities and hereditary antecedents of candidates for employment in tropical countries. We desire to judge how far medical forecast is justified by the result, and more especially to find out the conditions in youth that are prevalent among those whose health subsequently endures the change of climatic influence satisfactorily, and conversely as regards those who fail.

Francis Galton, 1891

The house to house visitation took much longer to get through than anticipated.

Annie Gorman, 1924

The Sociological Survey encompassed practically all 1920s scientific and social concerns about the sustainability of white tropical residence. For example, neurasthenia was a prominent feature in early twentieth century tropical medicine discourse because of its apparent tendency to affect white people more than others. Cilento saw neurasthenia as a symptom of inappropriate tropical conduct, soon remedied by adherence to healthy living principles. The Survey provided an opportunity for him to prove his ideas, just as it did for the personalities who first raised the idea of a door-to-door investigation. Despite the earlier intention to employ skilled researchers and interviewers to conduct the project, ultimately only Annie Gorman bore responsibility for conducting a large research exercise along guidelines that reveal the influence of domestic science on its designer.

Various personalities, groups and social concerns contributed to the Survey's realisation. In his introduction to the survey in *White Man in the Tropics*, Cilento states that the Institute undertook it 'at the initiative of Dr. Elkington, Director of the Division of Tropical Hygiene, Commonwealth Department of Health.' Elkington had experience with survey work, was supportive, and supplied the mandate for the survey; however, in files concerning the appointment of potential researchers,

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¹ Cilento, White Man in the Tropics, p.75

Cumpston emerges as the central protagonist. Regardless, it was not a new idea: in 1917, Elkington had suggested a similar program for the Croydon area. ² The first Director of the Institute of Tropical Medicine, Anton Breinl, referred to that proposal in 1919 when he submitted his Annual progress report.³ Breinl argued that there was 'another aspect in the settlement of Northern Queensland which hitherto has not received any consideration' and that the Institute should move beyond studies of disease and parasites to explore the way that social conditions might affect human wellbeing in the tropics. ⁴ To this end, he proposed that 'investigations should be carried out mainly upon two lines, namely the study of the physiology and of the pathology of the Northern Australian inhabitants', and, 'if at all possible as a side issue, information should be collected on general conditions, which influence personal well being'. Such research should be carried out 'primarily by personal inquiry carried out by a sociologist and secondly by a statistical enquiry into conditions which influence life in Tropical Australia', and then 'tabulated by a sociologist with statistical training.' 6

Breinl reinforced his argument with economic considerations. During their investigations, he said, he and fellow researcher Dr. Young:

> have often been impressed by the influence which general social conditions, environment, etc. exert upon the mental attitude and consequently upon the working capacity of the individual, and our conversations repeatedly turned of

² Croydon is inland west of Cairns. It experienced a gold boom during the late nineteenth century and was once the fourth largest town in Queensland but was in decline by the 1920s. Elkington's idea for Croydon seemed to be a statistical analysis. In his proposal, Breinl suggested that investigations should consider 'the cost of living and other general statistics taken out according to districts, and many other aspects such as the incidence of lunacy according to districts etc., etc. Dr. Elkington has already suggested an enquiry for the Croydon district, which is referred to in your letter 17/16050, and in Dr. Elkington's letter dated February 20th, 1918, the contents of which came up for discussion at the last Committee meeting, 'A Breinl, Letter to Secretary, Dept of Home and Territories, September 27 1919. NAA, SP1061/1, 350

³ An Austrian by birth (although his family were Bohemian), and a naturalised Australian, Breinl's greatest scientific talents lay in protozoology. He experienced anti-German prejudice during the Great War and faced a number of professional obstacles related to his nationality. R. A. Douglas, 'Breinl, Anton (1880 - 1944)', Australian Dictionary of Biography, vol. 7, Melbourne, 1979, pp. 394-395. For the issues and personalities (including Breinl) involved in the study of tropical disease and health problems at the time, see MacLeod & Denoon, Health & Healing in Tropical Australia and Papua New Guinea, 1991

⁴ Breinl, Letter to Secretary, Dept of Home and Territories, September 27 1919, NAA, SP1061/1, 350 ⁵ *Ibid*.

⁶ Ibid.

[sic] the need of inquiry into economic conditions. The Officer who could carry out this investigation would require a statistical mind and a tactful personality which would enable him to gain confidence within a short period, and he would require at the same time a wide Australian experience.⁷

Breinl left the Institute in 1920.⁸ Alex Maplestone served as Acting Director until Cilento became available, overseeing another change in 1921 as control of the Institute moved from the Department of Home and Territories to the new Commonwealth Department of Health.⁹ Cilento did not bring his unique enthusiasm to the Institute until almost 1923, but arrangements for his employment were formalised during a meeting with Elkington and Cumpston soon after Breinl's resignation.

Cumpston shared Cilento's conviction of a link between health and social welfare, but was less certain that better personal health practice would be enough for women to thrive in the tropics; Elkington had similar ideas to Cilento. The support of both men was important from practical and theoretical perspectives, and Cilento was confident that despite some differences in opinion, their shared beliefs helped in persuading his potential employers that he needed specific qualifications in tropical medicine. This led to a taxpayer-funded trip to the London School of Hygiene and Tropical Medicine, the U.S.A and Panama; the latter because health problems associated with the Panama Canal construction had produced new ideas about insect vector and tropical disease control. In his draft biography, Cilento showed a hint of opportunism as he recalled

⁷ *Ibid*. Breinl had by this point concluded that tropical diseases did not pose an overwhelming threat to white settlement. According to Anderson, he was reluctant to continue investigations into white suitability for tropical life. See Anderson, *The Cultivation of Whiteness*, pp. 130-3 ⁸ He developed a private practice in Townsville.

⁹ Anderson argues that Maplestone was an 'unsatisfactory' replacement. Anderson, *The Cultivation of Whiteness*, pp. 130-3. The Secretary of the Home and Territories Department (J.G. McLaren) advised Maplestone that the Commonwealth Department of Health 'came into existence as from the 7th day of March, 1921.' Letter, McLaren to Maplestone, March 29 1921, NAA, SP1061/1, 350

¹⁰ Elkington was previously Tasmania's first Director of Public Health, and in 1906 reported on a survey of 1,200 Tasmanian schoolchildren.

Elkington and Cumpston were contemporaries of eugenist Dr Harvey Sutton, then President of the Sanitary Science and Hygiene Section within the Australasian Association for the Advancement of Science; Harvey Sutton also engaged in survey activities. See Rodwell, 'Professor Harvey Sutton: National Hygienist as eugenist and educator', pp.164 -178 Cilento cites the work of Panama scientist William Gorgas in detail in White Man in the Tropics. For a contemporary account of Gorgas and his influential findings on malaria and its prevention, see William C. Gorgas, Malaria prevention on the Isthmus of Panama, 1910, in R. Ross, The Prevention of Malaria, London, 1911, pp. 346-352. For more on the London School of Hygiene and Tropical Medicine, see Lise Wilkinson and Anne Hardy, Prevention and cure:

those arrangements. Besides the heading 'How my trip to London in 1921/22 came about', there is a penciled note saying that 'This is highly significant'. 13 The trip eventuated, he began, because he 'talked a lot of bulldust' - but then he had second thoughts about saying 'bulldust', and substituted 'enthusiastically'. 14 It was an odd remark to leave on a 'highly significant' entry, which ultimately read as follows:

I talked a lot of bulldust enthusiastically to Cumpston and Elkington, urging that the knowledge gained at the London School of Tropical Medicine would serve as a means of developing north Queensland and tropical Australia. Elkington believed such development was possible and feasible – Cumpston did not. However, my whole concept was agreed to by the Commonwealth Minister of Health & I was appointed Medical Officer for Tropical Hygiene. 15

Cilento saw his brief as converting the Institute into 'a propaganda centre' to advance the idea that tropical white settlers could be 'as healthy, as fertile, as long-living and as competent in all or any activity as white men elsewhere. 16 Before long, he would have an ideal propaganda tool: the Sociological Survey.

While Cilento travelled and studied, preparations for the Survey proceeded. By March 1921, Breinl's idea of a statistical and tactful male had been overlooked in favour of three females. ¹⁷ Conversely, his 'side-issue' became more important when Cumpston adapted the concept for an 'investigation into the domestic conditions of housewives in the tropical portions of Australia' that would enquire into

the conditions of domestic architecture, particularly in relation to the kitchen, the methods of preparing and cooking food, the hours of work and difficulty in obtaining domestic assistance, and the effect of all these factors on the

the London School of Hygiene & Tropical Medicine: a 20th century quest for global public health, London, 2001.

Fryer Library, R. Cilento, FL44/Box 1, folder 2, unpublished autobiography, Chapter Three ¹⁴ Bulldust in Australian terms generally indicates a 'tall tale' intended to deceive.

¹⁵ Cilento, unpublished autobiography, Chapter Three

¹⁷ The idea of engaging females to conduct research seemed shared: in correspondence to Cumpston, Maplestone included fellow researcher Dr Sundstroem's program for the next twelve months. Sundstroem was interested in physiological changes through generations of white immigrants and their descendants; his research agenda included 'investigations directed to find out whether the hygienic habits of the people in North Queensland contribute to accentuate the effects of the climatic environment. I still believe that an inquiry into the dietetic habits would be instructive under the condition that it is conducted among those classes of the population that are free to choose their [own] diet. After receiving necessary equipment I expect to make a few preliminary trials and if these are successful I would be grateful if an intelligent female field worker could be employed for a number of weeks to continue the collection of material.' Of course, women were cheaper to employ. Letter, Maplestone to Cumpston, May 9 1921, NAA, SP1061/1, 350

health of the women of Queensland and the Northern Territory and on the whole problem of the development of Northern Australia by white races. ¹⁸

Unofficial arrangements seemed well advanced: to conduct the research, he said in a March letter to Elkington, 'three women with the necessary training are available....' He wrote to Freda Bage the same week, but it was not their first contact. (Some person had also approached Gorman, but there is no written record: perhaps contact was made by telephone.) The Commonwealth Department of Health should prioritise the proposed survey, he argued, because the development of tropical regions depended upon there being 'an adequate proportion of women among the residents'. Cumpston added that if Australia could not provide appropriate conditions and resources for white women in the tropics, such a lack would 'become in the end a matter of domestic economy. Conveniently located in a city with rail, car and ocean transport services that provided access to the inland, south and further north, the Institute was well positioned to conduct such vital research.

Harloe argued that 'disinterest and lack of funding' delayed the Survey project until surplus funds inspired Cilento to proceed in 1924. Cilento wrote to Elkington that 'The matter was recalled to my attention partly by the conclusion of this financial year, and the need to recapitulate the programme for the next ensuing.' The timing for an Institute venture into social science seemed right. Concern about northern women was still current in 1924; indeed, Press cuttings in the Institute's files, the records of the QCWA, and numerous Department of Public Instruction files, together

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¹⁸ Letter, Cumpston to Minister, March 9 1921, NAA, A1928/1, 447/1

¹⁹ Ibid

On March 19, Bage wrote to Cumpston 'In answer to your letter of the 9th inst.' A personal acquaintanceship is possible here, as it was with Gorman, with her request that 'Should my mother or sister try to get in touch with you, I shall be most grateful if you can find time in your very strenuous occupations to tell them something about the possibilities. While they quite realise the "nebulous" state of the arrangements at present, they are naturally anxious to know something about the proposals, and I referred them to you.' Letter, Bage to Cumpston, March 19 1921, NAA, A1928/1, 447

²¹ Gorman wrote to Bage on March 22 in a letter marked 'Request for information' that Bage retyped and attached to another letter to Cumpston on March 30; giving her address as 'c/- A. Pointer, Esq., 'Dungore', Hamilton' (where she was nursing an invalid), Gorman added 'Do you think I would go up in value if I mentioned that I am a bush woman and can ride and drive a horse?' Attachments with letter, Bage to Cumpston, March 30 1921, NAA, A1928/1, 447 ²² *Ibid*.

²³ Ibid.

²⁴ Harloe, Claims on Common Humanity, p.212

²⁵ Memo 657/23, Cilento to Elkington, June 28 1923, NAA, SP1063/1, 277

with northern newspaper reports on a variety of matters concerning women, suggest that it had steadily increased in the past three years. Domestic science was integral to that interest. The view that there was a need for deeper education in domestic science appears consistently in *Queensland Parliamentary Papers* throughout the 1920s; similarly, reports by Public Health Commissioners suggest that many women were thought to lack domestic and maternal skills. When Cilento opened a 1924 press release by saying that he had 'for some time been anxious that a Sociological Unit... be established in Townsville to obtain definite figures relating to white people resident in the tropics', he undoubtedly expressed concerns shared by a number of professionals. However, when the survey eventually took place, it did so because of the concerns articulated by the CWA, not those associated with the Institute who happily took advantage of the new situation. If the survey was a means to an end, it was so to the Institute and the Queensland Country Women's Association.

In July 1923, CWA President Ruth Fairfax formalised an earlier discussion when she visited Cilento at the Institute and handed him copies of a memo recording a motion at the inaugural QCWA Conference in Charters Towers.²⁸ It recommended:

That the Country Women's Association approach the Australian Institute of Tropical Medicine with a request to further the interests of Country Women by appointing a capable travelling female officer...

- 1. to investigate & report on conditions affecting the well being of women resident in remote areas or living under unfavourable conditions
- 2. to lecture & give demonstrations to these women on problems of tropical life.

We would also ask the Institute to issue a series of simple pamphlets dealing with these problems.²⁹

Cilento had been waiting on just such a contact. The Institute and Association would serve each other's didactic purposes and finally enable the survey to proceed, and he wasted no time in moving it from idea to event. In June, he wrote to Elkington that

²⁹ Ibid.

²⁶ The DPI became responsible for technical education under the *Technical Instruction Act Amendment Act* of 1918.

²⁷ Cilento, 'Sociological Unit for Institute', *Townsville Daily Bulletin*, February 13 1924
²⁸ As noted in the *Townsville Daily Bulletin* July 1923. However, the idea emerged earlier. At least one planning meeting for formation of northern branches took place at Cilento's home in 1923; Fairfax attended, and the memo presented to him was 'as discussed.' Cilento's wife, Phyllis, became Vice-President of the Northern Executive of the QCWA. See undated handwritten memo and typed copy, attached to letter, Cilento to Cumpston, July 20 1923, NAA, SP1063/1, 277

based on 'personal acquaintance', the work 'would be best delegated to Nurse Gorman of Brisbane', who could 'proceed from town to town as the guest of the Country Women's Association, giving a series of lectures orientated towards our own propaganda.'³⁰ (He also mentioned the possibility of cost-saving through utilising CWA hospitality during Gorman's travels, but it is unlikely that this eventuated.)³¹ The CWA, Cilento noted later, 'is at present undergoing that process of wide dissemination which is usual to the early stages of movements founded on popular sentiment....'³² It would be a good medium.

In January 1924, Cilento telegraphed Fairfax to advise that the Sociological Survey would proceed: there was now a 'Nurse appointed to investigate womens [sic] problems north'. Cilento followed that communication with a letter to the CWA at Cairns, reminding them that they asked the government to appoint an officer to:

enquire into the particular needs and disabilities of the country women of Queensland, with a view to recording conditions and possibly suggesting measures which might make for the alleviation of many of the discomforts which now prevail.³⁴

Annie Gorman had then already arrived in Townsville.³⁵ Cilento was preparing to move to an Institute-linked research post in Rabaul, New Guinea, and she would not

³³ *Ibid.*, telegram, Cilento to Fairfax, January 1 1924

³⁰ Memo 657/23, Cilento to Elkington, *ibid*. They may have met during Gorman's employment at Lytton Quarantine Station. See enclosure with letter, Bage to Cumpston, March 30 1921. NAA, A/1928, 447/1

³¹ *Ibid.*, memo 657/23. Most of the CWA office-bearers in Institute correspondence lived on rural properties, and accommodation was at a premium for locals, let alone visitors, in many places. In Cairns, for example, Gorman found overcrowding 'pronounced' and 'land... for building purposes' scant. Flanked and restricted by mountains, the city runs along a narrow strip of coast and expansion was proceeding slowly in 1924. See Report, p.6, and Letters, Gorman to Baldwin, June 2, July 5 and July 20 1924, NAA, SP1063/1

³² *Ibid.*, memo, Cilento to Cumpston, July 20 1923

³⁴ *Ibid.*, letter, Cilento to CWA Cairns, January 16, 1924

³⁵ Gorman was born to Irish immigrants at Yarrawonga, Victoria in May 1891. She joined the first school for lay nurses at the Mater Misericordiae Hospital in Brisbane in 1914, and graduated in 1918 as 'the outstanding nurse of the first graduation class, obtaining the highest pass in the third year and the 1916 Good Conduct Prize.' See R. Longhurst, *In the Footsteps of the Mercies*, Brisbane, 1992, p.41. Although shown as being 24 at the date of her application for registration as a General Nurse, Gorman was 26. Registered on June 25 1918, she left the Mater, 'had charge of an influenza ward at St Lawrence's during the epidemic', and worked for a time at Lytton. See Register of General Nurses with Exam Results 1915-1925, QSA, B/3072, 4HI, Registration no. 338; Register of General Nurses 1912-1924, QSA, A/73216; State of Victoria, Births, Deaths and Marriages, Entry no. 1125, Certificate no. 18571, Births in the District of Yarrawonga, Victoria, 1891, and enclosure with letter, Bage to Cumpston, 30 March, 1921, NAA, A/1928, 447/1

deal with him directly in her work, but generally follow the schedule he set for travel between Townsville, Cairns and the Atherton Tablelands. Once the information that the survey would collect about their lives was analysed, Cilento believed, 'the best social and practical environment could be created' for northern women.³⁶

One former northern woman, and influential domestic science supporter, deserves mention for the part that she played in the promotion of domestic science education in North Queensland. In 1923, Inspector of Women's Work, Marianne Brydon, argued that women in isolated areas were courageous partners, responsible 'almost wholly' for the 'physical, mental, and moral training of children'; many, she said, lived in terrible conditions, and were in dire need of instruction about hygiene and child rearing.³⁷ Later that year, Brydon and the CWA collaborated in the introduction onto northern railways of an adapted carriage that became the State's second Travelling Domestic Science School. The *Townsville Daily Bulletin* lauded the arrival of 'Car No.2' on its inaugural visit to Townsville because it would give isolated girls and women the 'opportunity to study domestic science.' While Brydon recognised that some economic and environmental conditions were beyond the control of the ordinary woman, she maintained that women needed training in order to provide effective family care: it was not a natural but a learned ability, and it should not be left to be taught by old-fashioned and uninformed mothers and other role models.³⁹

If the original plan to employ three researchers had eventuated, Brydon might have been one of Gorman's supervisors. ⁴⁰ In 1921, the Health Department considered her along with Queensland University's Freda Bage for two of three anticipated Survey positions. Bage was a scientist who liaised or perhaps performed a vetting role in

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 ³⁶ 'Introductory Lecture – Country Women's Association or other', NAA, SP1063/1, 277
 ³⁷ Marianne. H. Brydon, 'Women's Life in North Queensland', *Journal of the Commonwealth Department of Health*, 1923, vol. 1, no. 6, pp.165-9.

³⁸ Travelling Domestic Science School', *Townsville Daily Bulletin*, 11 February 1924, p.7

³⁹ Brydon, 'Women's Life in North Queensland', p.166

⁴⁰ Marianne Brydon had a distinguished career in education that began at the age of 12 with her appointment as a pupil teacher in her birthplace of Charters Towers. She taught in Brisbane until her 1885 marriage, until (widowed with five children) she returned to work in 1895. Brydon fought for salary rises in her later career, rarely receiving more than £300pa: the position with the ITM must have seemed attractive. For more on Brydon, see M. Marendy, 'Marianne Brydon. The Respected Inspectress of Women's Work, 1919-1932', in E. Clarke & T. Watson, (eds), *Soldiers of the Service. vol. II. More early Queensland educators and their schools*, Brisbane, 1999, pp.133-153

regard to her potential co-workers, retyping Brydon's biography and a letter from Gorman, and forwarding them to Cumpston as 'details as promised re Mrs Brydon and Miss Gorman'. 41 Three years later, the budget allowed for just one researcher. In January 1924, the Institute engaged Gorman for six months on a salary of £350 p.a., the equivalent of that paid to a Technical Assistant: good pay nonetheless but half that earlier proposed for Bage as intended head of investigations. 42 By the time of Gorman's appointment, Bage was overseas, and Brydon was busy in North Queensland, organising classes for the Domestic Science Train. 43

Before considering Gorman's methods and the chronological progress of the Survey, it is important to recall the perceived racial significance of her research agenda. For example, one of the matters that Cilento wanted her to investigate was the prevalence of tropical neurasthenia. Neurasthenia diagnoses were contested: in 1915, for instance, neurologist Edward Angell described the condition as:

a very convenient expression to designate a rather large group of nervous disorders which cannot easily be classified under any other name... within recent years, it has been applied rather loosely by the general practitioner....⁴⁴

Nonetheless, Angell believed in its existence, and numerous medical practitioners and researchers in the tropics considered their diagnoses appropriate: they took

⁴¹ NAA, A/1928, 447/1, letter, Bage to Cumpston, March 30 1921. Anna Frederika Bage (born 1883, died 1970) was a University of Melbourne biology graduate with a B.Sc. and M.Sc.; among other professional activities, she was first principal of the University of Queensland's Women's College.

⁴² *Ibid.*, Cumpston, letter to Minister, 9 March, 1921. 'It was provided for this purpose that there should be one woman investigator at £700, one technical assistant at £400 and one junior assistant at £350 per annum.' Brydon was still raising a family on £10 less a year.

⁴³ Bage left Australia in January 1924 to travel through Asia and Europe for some months with Wilbur Sawyer (of Rockefeller Institute's Hookworm Campaign) and his family; she had staved with Mrs Sawver in Colombo in 1921 during his absence on an Australasian trip that included meetings with Cumpston and Elkington in Melbourne, and a visit to Anton Breinl in Townsville, Margaret Sawyer was involved with women's colleges; she and Bage must have had much in common, and the three shared scientific interests. Sawyer and Bage are pictured at Sigiri Rock, Ceylon (now Sri Lanka), in 'Profiles in Science', U.S. National Library of Medicine, http://profiles.nlm.nih.gov/LW/B/B/D/M/; also, letter, Wilbur Sawyer to Margaret Sawyer, April 27 1921. U.S. National Library of Medicine: 'Profiles in Science', http://profiles.nlm.nih.gov/LW/B/B/K/K/ /lwbbkk.pdf>. The 'Cloncurry Notes' noted that Brydon, 'to whom much of the credit is due for the provision of this Travelling Domestic Science School, has been in the district... to make the necessary arrangements for classes.' *Townsville Daily Bulletin*, February 2, 1924, p.7 ⁴⁴ Edward Angell, 'Neurasthenia', *The American Journal of Nursing*, vol. 15, no. 5, 1915, p.

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neurasthenia seriously as a condition 'commonly regarded as being due to climate'. ⁴⁵ Anderson shows that commentators believed that tropical neurasthenia affected whites more than the lower races because a tendency to nervousness became more heritable according to an individual's racial status; at the height of human development it was also manifested differently according to gender. ⁴⁶ Hence, 'the most refined or productive members of society, the caretakers of civilization' – white people – were particularly at risk. ⁴⁷ Eugenics-biased researchers (one of whom was Charles Davenport) provided support for that idea in 1919 when they found that neurasthenia was decidely more likely to occur in white troops. ⁴⁸ Sengoopta cites Janet Oppenheim's argument that although the symptoms were difficult to distinguish from those of hysteria, a neurasthenic diagnosis provided a 'far more respectable affliction for British men'; he adds that neurasthenia still provided a diagnostic option for women, because 'female "nervous" ailments that did not display standard hysterical stigmata fell quite naturally into the neurasthenic category. ⁴⁹

Cilento dismissed any idea that it was the tropics *per se* that wore people out, rather than their behaviour in them. He allowed that tropical neurasthenia might have a 'definite organic cause', but more probably took two forms, to be 'neurasthenia due to indolence and self-indulgence, and a neurasthenia due to the depressing monotony of hard work under extreme circumstances.' The causes of tropical neurasthenia, he postulated,

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⁴⁵ Cilento, White Man in the Tropics, p.35

⁴⁶ Anderson, 'The Trespass Speaks: White Masculinity and Colonial Breakdown', p.1344 ⁴⁷ *Ibid.*, pp. 1343-5. Anderson adds that 'this outbreak of colonial "nerves" was thus as much a cultural event as a biological crisis, in the sense that it was recognized only within distinct social and temporal boundaries and never became epidemiologically dispersed like diseases such as cholera or tuberculosis.' It 'burned out', he says, 'in the 1920s,'

⁴⁸ A. G. Love, C.B. Davenport, 'A Comparison of White and Colored Troops in Respect to Incidence of Disease', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 5, no. 3, 1919, pp.58-67.

⁴⁹ Sengoopta, "A Mob of Incoherent Symptoms?", p. 99. For more on hysteria, see Mark Micale, 'Hysteria Male/Hysteria Female: Reflections on Comparative Gender Construction in Nineteenth-Century France and Britain', in Marina Benjamin (ed.), *Science and Sensibility: Gender and Scientific Enquiry, 1780-1945*, Oxford, 1991, pp. 200-239. Brumberg's study of another complex illness of the time, chlorosis, links neurasthenia to the Victorian 'sentimentalization of sickly women' that produced a 'generalized invalidism as well as both hysteria and neurasthenia.' See Joan Jacobs Brumberg, 'Chlorotic Girls, 1870-1920: A Historical Perspective on Female Adolescence', *Child Development*, vol. 53, 1982, p.147 ⁵⁰ Cilento, *White Man in the Tropics*, p.35. These perceptions were common to ideas about neurasthenia.

are the causes found everywhere – namely the errors of faulty habits of life – the overfeeding, lack of exercise, the faulty daily routine, excesses, absence of any creative interest or work or hobby, unhygienic surroundings, and the depression of previous or coincident parasitic diseases. Cumpston has well described most of the neurasthenia of the north of Australia as "kitchen neurasthenia."⁵¹

With tropical neurasthenia apparently locatable at the kitchen door, Cilento instructed Gorman to measure its occurrence.

Occupied eventually through two humid wet seasons and in 'winter' visits to places where the midday mercury rarely dropped below the mid 20s Celsius (or high 70s Fahrenheit), Gorman might have been forgiven for feeling hot, sweaty, dusty, or even a little faint when she stood at many of those kitchen doors: she may have had a heart condition at that time, if not since childhood, that the heat exacerbated.⁵² Her employer however saw the tropical environment as having little relationship to health. In the lectures he wrote for Gorman, and in his autobiography, Cilento almost entirely discounted the wider surroundings: tropical certainties such as heat and humidity, damp and dust were minor obstacles rather than impediments to successful tropical life because they were surmountable; science had proved that humankind could triumph over nature. Even before the Survey was completed, he expressed the certainty that sickly women were unwell because of their 'faulty daily routine' and 'unhygienic surroundings'. 53 Women who organised their homes, clothing, diet and daily lives to work with rather than against the heat would thrive, especially if they tailored the design and construction of their homes to tropical living. The new Institute Director's residence in Townsville provided an example of the type of architecture most conducive to dealing with the climate: its plan appears in White Man in the Tropics, with flow-through ventilation for the living areas, wide verandahs, a bathroom and a separate kitchen – with maid's room attached.⁵⁴

Most working-class women were less privileged in their homes, and the physical environment of Townsville at least, if not other centres, is difficult to discount.

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⁵¹ *Ibid*.

Fig. 22 Her death certificate records causes of death as Cerebral Embolus, Endocarditis and Syncope; James Cook University's Tracy Cheffins suggests that the latter may indicate childhood rheumatic fever. Pers.comm., Tracy Cheffins, 2002.

⁵⁴ The home was completed in 1924. Cilento, White Man in the Tropics, pp.123-124.

Townsville's midyear months are balmy and convivial, but the period from about November to March is characterised by oppressive heat broken erratically by heavy downpours, creating high levels of humidity. Gorman had arrived in Townsville on such a sultry wet day, and officially commenced work as a Sociological Investigator for the Australian Institute of Tropical Medicine on the next. ⁵⁵

Preparation for the survey absorbed her for six to seven weeks. She had to study Cilento's notes about the 'purpose of the Sociological Unit', use the Institute's library to research 'life in tropical climates, also infant diseases in such,' and also 'prepare a suitable form which will condense within the scope of an ordinary card, suitable for a card index, the main mass of the information there set out'. ⁵⁶ White Man in the *Tropics* includes a copy of the Index Card she designed, while a separate set of cards recorded her work with school children; of these, there is no sample. ⁵⁷ Cilento was also under some pressure at this time, as he prepared for his move to New Guinea. ⁵⁸ He was replaced by Alec Baldwin, who seemed sympathetic to Gorman's efforts to complete a huge task within the scheduled six months. She had to weigh and assess over 600 schoolchildren before she could begin her survey but in May, Baldwin advised Dr Holmes in Brisbane that she had begun the 'house to house visitation'. ⁵⁹

Measurement of the extent of neurasthenia and other conditions depended upon her skills in observation and interrogation; probably the only tools she carried were a tape measure and her Index cards. She found nonetheless that between 3.8 per cent and 10 per cent of the women in each area suffered from 'nerve trouble (neurasthenia, neuritis etc.)', and provided a similar range of figures for conditions as diverse as rheumatism, goitre, gastric illnesses, alcoholism, 'nasal catarrh', bronchial asthma and 'uterine complications'. ⁶⁰ Cilento saw these conditions as avoidable or curable by exemplary personal hygiene and conduct: poor physical health was related to the condition of the

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⁶⁰ *Ibid.*, p.80; Report, p.3.

⁵⁵ 'Miss A. Gorman' was an inbound passenger on the Wyrema on Friday, January 4. *Townsville Daily Bulletin*, January 5, 1924, p.4

⁵⁶ Letter, Cilento to Gorman, January 16 1924, NAA, SP1063/1, 277

⁵⁷ *Ibid.*, letters, Gorman to Baldwin, July 5 1924 and July 20 1924. She requested 'another five hundred copies of the school forms for the Atherton District' on July 5. A margin notation on a later letter records that the forms were 'forwarded 24.7.24'

⁵⁸ Townsville Daily Bulletin, February 11& 27 1924, p.4

⁵⁹ Memo, Baldwin to Holmes, May 23 1924, NAA, SP1063/1, 277. Gorman examined 2080 children in the schools of the towns visited. See Report, p.16.

setting that northern women created or permitted, and evidenced in details as particular as the modernity or condition of their household implements, furniture and general decor. Outside the house, water, toilet and waste facilities, gardens and livestock control similarly displayed the health attitudes and hygiene commitment of a resident to Cilento, Gorman and other domestic science adherents. Gorman conducted a crockery and cutlery survey, together with a house and yard inspection for this reason: examination of the domestic physical environment was essential to the complete assessment. It is unsurprising to see her note in the Report that 'The house to house visitation took much longer to get through than anticipated.'

Records do not indicate the real extent of public compliance with the Survey (for example, by indicating how many door-knocks went unanswered), but of those women who participated, some found certain questions invasive, as Cilento showed in the *White Man in the Tropics* version of the survey. Although her subjects generally welcomed advice on childcare, and were mostly polite, they took offence at comments they perceived as critical of their lifestyles and home management. They were also understandably cautious about providing details of their financial situation, and perceived an ulterior motive for some of Gorman's questions; thus

People, generally, were afraid that the enquiry was a political movement with the object of reducing wages, and others feared that they might be made to spend money on suggested improvements, and were reluctant to admit to any defects in their house or house management. ⁶³

Given that the surveyed women were mostly from a low-income group, it is unsurprising that in Townsville, Cairns and more isolated locations, a number dealt with high rents by subletting rooms. Economics dictated such choices: renters were apparently quick to agree when Gorman pointed out deficiencies in their accommodation but 'were not desirous of paying a higher rental....'⁶⁴ Cilento did not publish Gorman's observation of 'as many as 4 adults and 8 to 10 children', and 'a private asylum for orphans... occupied by 5 adults and 6 children' in Townsville's city centre.⁶⁵ The tenants of the latter house were probably aware that 'overcrowding can be restricted by the Health Authorities' and may not have welcomed Gorman's

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⁶¹ Report, p.20

⁶² Cilento, White Man in the Tropics, p.80

⁶³ Ibid.

⁶⁴ *Ibid.*, p.4

⁶⁵ Ibid.

visit.⁶⁶ Although almost half of the surveyed women in Townsville rented, those who owned their homes were 'disinclined' to hear Gorman's advice, and 'not anxious to incur any extra expense in altering or adding to them.'⁶⁷

The problems implicit in overcrowding lay with the inevitable by-product of humans in cramped lodgings: whether cesspits or pan systems were used, and especially where piped water was scarce, primitive 'conveniences' close to the house (as found in the 'private asylum') created a health risk. ⁶⁸ Gorman noted other health hazards: she found that domestic animals roamed freely in the yards and subspaces in many homes, and that as many of those yards and subspaces were also littered with refuse. Quite apart from the known risks of typhoid, clutter, dirt and food scraps attracted vermin. A domestic scientist avoided such problems by constant vigilance and sanitary precautions: in each case cited in *White Man in the Tropics*, and in the original Report, Gorman linked poor standards to a lack of domestic science knowledge.

Gorman was probably astute in doing so, but it is difficult to imagine that Cilento realistically expected a developed understanding in the women who allowed Gorman into their homes. The women surveyed ranged in age between the early twenties and fifties, with about one third over the age of thirty. ⁶⁹ Many would have reached womanhood prior to the Great War, when domestic education began in childhood but increased after a girl reached twelve or fourteen and began to work full-time in her parent's or another family's home, where mothers, aunts, sisters and employers provided training in household skills. The Survey results suggest that a small number of younger women may have received domestic science instruction externally or attended baby clinics and consequently grasped the new scientific approaches. Of the older women, just a privileged few may have had further formal education; most however did not, and it must have been difficult to see their knowledge invalidated in one visit from a stranger. Gorman's assessment negated knowledge that failed to meet the new standards; it emphasised that domestic science had superseded older ways, and gave salience to 'defective' knowledge standards and practices.

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⁶⁶ *Ibid*.

⁶⁷ *Ibid*.

⁶⁸ Ibid.

⁶⁹ For Cairns, Atherton and Townsville combined, 150 of 467 women were over 30, and almost half of those were aged between 40 and 50 years. Report, pp. 5-15

It is necessary to place Gorman's complaints of poor knowledge in the context of the manner in which women in North Queensland had embraced opportunities to learn new behaviour: they were probably keener than the Report suggests. Baby Clinics opened in Townsville in December 1923, and in Cairns just a few weeks later, in January 1924. In its first month, 161 women attended the Townsville Clinic. To Gorman later reported an 'average daily attendance' in this time of fourteen at Townsville, and eight at Cairns'. The number of parents visiting the Clinic soared in February, when it saw 370 babies; nurses also made 134 home visits. By contrast, only 213 women attended Rockhampton's Baby Clinic that month, although it had been established two months longer, and only seventy-two home visits were made. Nearly a quarter of all deaths in this time occurred in children under five: the clinics indubitably provided reassurance as much as monitoring and instruction. While she remarked that 'the nurses are having an uphill fight', Gorman acknowledged that the clinics were 'gradually being more appreciated by the mothers'.

Gorman's assessments do not always reflect such positive adoption of new techniques. This is partly the result of Cilento's instructions that the results be 'negatively skewed', with the 'defects specially emphasized'; hence, 'good' meant that a woman had excellent knowledge, while a woman who could not at least display a 'fair' understanding of sanitation was recorded as having 'nil'. Still, the researcher was committed to the new health standards: her preference for scientific mothers and women was clear and predictable throughout the Report, as shown in her study of Chillagoe, where she found the following:

⁷⁰ Townsville Daily Bulletin, January 10, 12 and February 22, 1924.

⁷¹ Report, p.19

⁷² QSA, A/31671, Maternal and Child Welfare, Health and Home Affairs, Home Secretary's Department, memo no. 07010

⁷³ *Ibid.* Rockhampton's population made it slightly larger than Townsville at that time: see ABS, *Queensland Year Book*, various years: 'Population by city'. ⁷⁴ In 1920, three of the leading causes of death for children under five years of age were

In 1920, three of the leading causes of death for children under five years of age were infectious diseases: diarrhea and enteritis; diphtheria; and measles. G. Hugo, *Australian Bureau of Statistics Year Book Australia*, 2002, Health Special Article – Long-term mortality trends, pp. 2,3

⁷⁵ Report, p.19

⁷⁶ Gorman was 'instructed to base opinions upon the highest standard, so that "good" was the highest encomium bestowed even on the excellent, and sanitation which was merely fair was registered "nil".' Cilento, *White Man in the Tropics*, p.90

Mother's Knowledge of Domestic Science

1. Infant Welfare	Good	27.0	per	cent
	Fair	27	٠.,	"
	Nil	76	"	دد 77

As in several other cases, the figures do not make sense; the content however does. The women with a 'good' rating had been confined in Chillagoe's State Maternity Hospital; Gorman gave her highest rating for knowledge of infant welfare to the thirty-seven women she surveyed there. Cilento omits those findings in *White Man in the Tropics*, but this is expected: the material he included served his purpose by displaying conditions in three types of tropical climate, and supported his themes for tropical settlement.⁷⁸

Because of its interest in minute details of individual practices and circumstances, Gorman's report contains a number of insights into women's lives. The Index Card questions covered many aspects of their days, and while the requirement for such detail is a great deal to ask of an interviewer, the findings provide a distinct historical record. For example, Gorman observed high levels of tooth decay in the women interviewed in Townsville: the majority had rotten stumps or teeth missing altogether. Concerning children, who suffered similar levels of decay, she remarked that 'most of the State Schools' had access to a Government dentist, but 'many parents through ignorance, neglect or a sense of false pride, are not availing themselves of this privilege.' Whether parental reticence was due to real or 'false' pride, such comments provoke images of unsmiling great-grandmothers: perhaps it was more embarrassment than convention that kept lips sealed in austere family photos.

Teeth were just a small part of what Gorman observed: not only did she notice how meat was stored, but established whether crockery and utensils were modern and

⁷⁷ Report, p.9

⁷⁸ Cilento chose Townsville, Atherton and Cloncurry to represent 'three distinct climatic divisions... the hot moist coastal, coastal plateau and hot dry inland'. Cilento, *White Man in the Tropics*, p.75

⁷⁹ Report, p.17. She similarly found a high incidence of decay in school children: over '74 per cent had defective teeth', and '35 per cent of these had had their teeth filled or replaced.' Queensland's school dental inspectors in 1923-4 examined 32 336 students and found only 20.3% with 'sound mouths.' They carried out '18,394 extractions, 18, 967 fillings, and 8,053 dental treatments.' *QPP*, Report of the Secretary for Public Instruction for the year 1924, p. 27

untarnished, whether or not babies were breast-fed or given comforters (dummies), and when their mothers weaned them. She asked about menstruation and menopause, assessed the overall health of her subjects, appraised the kitchen design, laundry and sanitary conditions and inspected the house yards. Cilento repeated her comments on Townsville, where in some yards she found urine-stained soil, lidless closets (toilet pans) made worse by the residents not covering their contents with ash or sawdust, pools of kitchen and bath water, food scraps and general rubbish. She found no better inside the homes; half of these, she argued, had 'filthy' kitchen sinks, dirty utensils and cloths and musty, dirty bedrooms; all of this was worsened by the smell and byproducts of various free-range domestic animals. ⁸⁰ These comments inspire powerful images, as do other observations.

Gorman remarked that 'there was no proper drainage system in about 98 per cent of the yards'. She noticed that water tended to drain away quickly rather than lie in pools to encourage mosquito breeding, but mosquitoes also bred in uncovered toilets, discarded containers, tanks and gutters without appearing to worry the householders concerned. 'Although many of them are aware that disease is transmitted by mosquitoes,' she complained, 'few take any steps towards destroying these insects.' This comment reflects the potential and enduring survey problem presented by a lack of local knowledge: she might have remarked differently had she surveyed Townsville in its rainy season when water often lay about in pools – or visited its newer suburbs. Drainage was a problem that Townsville City Council was under constant public pressure to remedy because the city centre and several suburbs flooded in heavy rain; at the same time, the city had a water supply problem. A droll letter to the *Townsville Daily Bulletin* reflects that reality. Its author or authors suggested to the Council that:

An engine connected with our street would fill both water storage basins on the hill, probably protect some poor individual from drowning, and allow us to get in and out of our homes.⁸³

The letter also complained of 'The growth of frogs and mosquitoes in the creeks, ponds, lagoons and slush holes in our street....' 84

⁸⁰ Report, pp. 1-5; Cilento, *White Man in the Tropics*, pp.78-9 ⁸¹ *Ibid*.

⁸²*Ibid*

⁸³ Squak, Squak and Buz. Frog Villa, Slush Street, Somewhere on the estate, 'Letters to the Editor', *Townsville Daily Bulletin*, March 8 1924, p.13

Gorman spent twenty-four weeks in Townsville, so it is not surprising that her remarks on that city are the most detailed. The Report is critical of Townsville's hygienic standards and presents an unflattering perspective of the daily realities for some, perhaps many, tropical women in the mid 1920s. Health and hygiene standards in the towns and cities would improve with the provision of better municipal services, but for the people on the farms and plantations that provided distant consumers with meat, vegetable and dairy products, life was hard.

Most of Gorman's subjects lived in towns or cities, and her visit to the Atherton Tablelands provides the Report's only insights into farm life. Women and girls there generally managed without electricity or motorised transport, and sometimes schooling. NQOHP participant Daisy K recalled rising at three in the morning to milk cows and goats and later leading a horse down a slippery wet hill to get the milk cans to the road for collection by the dairy. That was the reality of isolation: as she said, 'when you go into that back country, you don't go there expecting a ton of fun. For country girls, she said, there was no life until they got married – and then they could not live their own life anyway.

Gorman's six month contract was extended late in May, and she travelled from Townsville to Cairns in June. ⁸⁸ There she found conditions much like those in Townsville and moved on to the fertile Atherton Tablelands late in July. ⁸⁹ Between July 28 and August 7, Gorman examined two schools, forty-four houses and 143 children in the Atherton area. ⁹⁰ She found that most of the homes had detached kitchens, 'ventilated' and on the hot side of the house, which would have made them a mixed blessing on the Tablelands. ⁹¹ At over 700 metres above sea level, the Tableland pastures are fringed by rainforests and sprinkled with waterfalls; summers are humid,

⁸⁴ Ibid.

⁸⁵ NQOHP, ID 111; CD311-4; 312-1

⁸⁶ Ibid.

⁸⁷ *Ibid.* This woman had 3 years of school, and married at 14. In maturity, she served as a shire councillor and fought for better services.

⁸⁸ Memo, Holmes to Baldwin, May 28 1924, NAA, SP1063/1, 277. She then had until January 1925 to complete the work

⁸⁹ *Ibid.*, letter, Gorman to Baldwin, July 5 1924

⁹⁰ *Ibid.*, letter, Gorman to Baldwin, July 11, 1924. In this letter, Gorman wrote that she intended to visit 'one hundred and fifty' homes, and thought this would take 'about twelve days.' She completed the work in ten days.

⁹¹ Report, p.7, Cilento, White Man in the Tropics, pp. 82-84

and winters chilly. It was winter when Gorman visited, and she found that the cold had a direct effect on local children's cleanliness. About 80 per cent of the children inspected throughout the survey were 'cleanly and suitably clad', but at Atherton:

The clothes are of a heavier texture, less readily washed... the colder climate renders bathing a weekly and sometimes a monthly ordeal rather than a daily occurrence as is usually the case with the children of the warmer climate. Those showing the greatest signs of neglect and uncleanliness were children of some of the dairy farmers outside Atherton. ⁹²

In this case, the Report proceeded to link apparently deficient scientific knowledge to a poor understanding of infant welfare, but the findings may not accurately reflect the situation there. Despite their shortcomings, the women of the Atherton Tablelands were by far the healthiest of all in the survey: 81.6 per cent (about 35) reported normal health. Some of their children may have been grubby, but Gorman provided no evidence that they were particularly unhealthy. Records from 1866 onwards show that the Infant Mortality Rate for the Tablelands was slightly lower than that of Tropical Queensland in general, and both the latter were about 60 per cent lower than the rate for Brisbane.

After Atherton, Gorman visited Chillagoe. Her visit to that seasonally hot, dry and dusty inland mining town was not part of the original survey plan. It came about as a result of a request relayed by Gorman from the Mayor of Cairns, Mr Draper, and the area's Health Inspector, Mr Austen, who were concerned that 'some cottages recently erected by the State Government... [were] unfit for habitation.' Chillagoe at that time was in economic decline: after fluctuating fortunes, its copper smelters and mines would eventually become unviable, and its 1910 population peak of about 20,000 thoroughly reduced. Its once privately owned smelter had closed earlier, but reopened as a State operation in 1920, and provided some work and accommodation. ⁹⁷ In

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⁹² *Ibid.*, p.16; Cilento, *White Man in the Tropics*, *ibid.*

⁹³ *Ibid.* They also had the second highest rate of neurasthenia (7% or 3 women) and highest rate of goitre (2.3%, probably one woman), but with such a small group, these latter findings are hardly extrapolative.

⁹⁴ The school-aged children of Atherton were not salient for any other reason than their clothing in Gorman's summary of her examination of schoolchildren. See 'Report on the Examination of School Children in Tropical Queensland', NAA, SP1063/1, 277

⁹⁵ See Gordon, Health, sickness and society, p.161

⁹⁶ Letter, Gorman to Baldwin, July 23 1924, NAA, SP1063/1, 277

⁹⁷ For information about Chillagoe and neighbouring mining and agricultural areas, see Jan Wegner, *The Etheridge*, Townsville, 1990

Chillagoe, Gorman surveyed thirty-seven women, of who she reported that at least twenty-six were 'apparently in normal health', but two were alcoholics. 98 'About 20 per cent' of the 'privately owned cottages' were 'both primitive and unsanitary, built of petrol tins, hessian, without any flooring boards, some having no windows'. 99 Uncomfortable though such surroundings might be, one family of four adults and five children had lived that way for fifteen years and like their Townsville counterparts were 'disinclined to spend any money on building more comfortable cottages.' 100

Early in September, Gorman travelled to the hot, dry inland town of Cloncurry, where as 'A Visiting Health Expert', she delivered an 'interesting and thoughtful address' to the converted: the 'members of the Cloncurry branch of the Queensland Country Women's Association.'101 The Cloncurry lecture was Cilento's standard speech, followed by 'an extremely dainty repast' provided by the '20 to 25 women' who attended. 102 By contrast, Gorman found the eighty local women interviewed over the next two weeks to be just average cooks, and poor mothers. The Domestic Science Car had been there for six weeks, but few adult women showed interest in it: the 'majority of the pupils' were 'school children'. 103 Ultimately, Gorman found Cloncurry to be like most of the other towns visited: its cleanliness levels were substandard, and its surveyed residents had little knowledge of insects and dirt-borne disease. As usual, the Report linked a lack of domestic science expertise to overall health.

Because she had been 'doing so well in Cloncurry', Baldwin directed Gorman to 'spend the few extra days' in the small and hot town of Julia Creek before tackling the larger Charters Towers. 104 Accordingly, she interviewed at least twenty-four women out of Julia Creek's population of 150 people, which included forty school-age

⁹⁸ Report, p.9

⁹⁹ *Ibid*.

¹⁰¹ Cutting, 'A Visiting Health Expert', Cloncurry News and Mount Isa Record, Monday

September 22, 1924, NAA, SP1063/1, 277

102 Ibid., Letters, Baldwin to Day, September 2 1924, Day to Baldwin, September 5 1924; also, cutting, 'Afternoon Tea to Miss Gorman', The Cloncurry News and Mount Isa Record, Monday September 15, 1924, n.p. A Mrs Day of Cloncurry responded to Baldwin's note of September 2 advising her of Gorman's impending visit. She noted his interest in 'the 1st, 2nd and 3rd generations of children tropically born' and would 'endeavour to bring under Miss Gorman's observation children of each degree.'

¹⁰³ Report, p.11; 'only a small percentage of the women attended the classes'.

¹⁰⁴ Letter, Baldwin to Gorman, September 22, 1924, SP1063/1, 277

children and a number of babies. In Gorman's appraisal of their 'knowledge of infant welfare' Julia Creek women rated badly; with a nil ranking of 92 per cent, apparently only one of the twenty-four managed a 'good' evaluation, and one other attained a 'fair'. Despite that, the women compared well against their peers when assessed in other categories. Their knowledge of household and sanitation was equivalent, and the town boasted the most scientific cooks surveyed. If there were few older women or grandmothers in the town, new mothers may have felt isolated; being aware of the Baby Clinic movement, they may have welcomed the potential sanction of a qualified nurse. In such places, it was not so much the women who were lacking, but the facilities provided for them.

A similar problem existed at the mining town of Charters Towers, once Queensland's largest city outside of Brisbane, but smaller than Townsville by 1924. Homes in Charters Towers were more comfortable than in similar towns: they were 'provided with more verandahs' and had 'larger and better ventilated' rooms. 106 Many had detached corrugated-iron kitchens. Temperatures at Charters Towers average between 33-35°C in summer, which made separate cooking areas practical, but residents dealt with other environmental circumstances less effectively. 'The town', Gorman noted, 'is badly infested with mosquitoes', which she attributed to the breeding opportunities found in water-filled 'disused mining shafts'; furthermore, few of the households surveyed screened their household water tanks to prevent breeding there. 107 Gorman predictably remarked on the need for a Baby Clinic, because 'the majority of mothers are entirely ignorant as far as scientific infant welfare is concerned. The 'ordinary traditional knowledge' of food purchase and preparation was once more found inadequate in older women; for the young, there was more praise. ¹⁰⁹ Some condescension towards older women was to be expected: as a member of New York's board of Education pointed out in 1907, domestic science was best directed towards

¹⁰⁵ Report, pp.12-13

¹⁰⁶ *Ibid.*, p.12

¹⁰⁷*Ibid.* The mosquito of most concern is probably the dengue: an epidemic of dengue fever affected the area between 1897 and 1901, and there were at least 3 deaths in Charters Towers in 1918. See Deon Canyon, A Review of the Dengue Mosquito, Aedes aegypti (Diptera: Culicidae), in Australia, Tropical Infectious and Parasitic Diseases Unit, School of Public Health and Tropical Medicine, James Cook University, Townsville, http://www.tropmed.org/rreh/vol1_4.htm. Accessed July 16 2005

¹⁰⁸ Report, p.13

¹⁰⁹ *Ibid*.

the young because older women were often set in their ways.¹¹⁰ With domestic science ideals having formed a significant part of her nursing training, Gorman may have shared such a bias.

With that visit, the travel component of Gorman's work was complete. She spent the period from October until her contract expired in classification and tabulation of her work, and then moved into relative obscurity. On February 2 1925, a few weeks after leaving Townsville, she entered All Hallows Convent in Brisbane, and on November 24 1927, professed as a Sister of Mercy. In 1931, as Sister Mary Venard, Gorman joined the new Mater Children's Hospital as 'Night Duty & Reliever'. Five years later, suffering progressive heart failure, she died.

The Sociological Survey provided an opportunity for the Queensland government to measure female health and hygiene awareness in locations that it considered to have particular racial and economic importance. To that end, Gorman's Report shows that some northern white women unwillingly experienced personal and physical hardship; others however were prepared to forgo comfort in exchange for economic advancement. Women used facilities such as Baby Clinics and hospitals where available, but poverty and isolation combined to exclude others from such services. According to the precepts of domestic science, they could resolve many of those difficulties, for once personal practices were amended, everything else (theoretically) fell into place. For Cilento, other health authorities and social activists, the knowledge of white northern working-class women that the Survey promised to provide was as important to overall public health as it was to race betterment.

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¹¹⁰ Mary E Williams, 'Domestic Science in New York City Schools', *JHE*, vol. 1, no. 1, 1909, pp.79-80. 'It is much more difficult to make old mothers over than to form new mothers in the right way from our younger generation ...'

¹¹¹ Sr. Germaine Greathead, Sisters of Mercy, Brisbane, email to author, July 10 2003. ¹¹² John Oxley Library, OM 91-09, 1986, Sr. M. De Chantal James; Sr M. St Pierre, 'Memories & History of the Mater Children's Hospital'. Sr M. De Chantal James knew Gorman firstly when the latter was a trainee nurse.

¹¹³ Ibid. Sr M. De Chantal recalled that 'Sr M. Venard's... health was not the best after some few years and after a short illness she died on the 20th October 1936.' Gorman was 45 years old; she lies in Row 3, Column 6, of the Catholic Cemetery at Nudgee.

Her own little domain: experiences of home management and domestic science in North Queensland

The woman who utterly fails in the management of her home is personally at fault...

Mrs Joseph C. Gawler, November 1922

Having decided to have a miniature home of her own — and some girls are born homemakers — the business girl finds it often in a room and a gas ring....We will assume also that she has a hot and nourishing dinner in the middle of the day.... Monday to Friday dinners at, say, 1/3 per day will cost 6/3, and to this must be added a like daily amount for her dinner in her own little domain on Saturday and Sunday....

Australian Woman's Mirror, August 14, 1928

Effective domestic science required good management of time and money as well as health, and measurements for the Index Card subheading of 'Household economy' (beneath 'Housewife's Domestic Knowledge') were critical to Gorman's assessment. Domestic science standards for example emphasised the need for a balanced diet, with ample fruit and vegetable (preferably fresh), and low quantities of fat. Fresh was best and generally cheapest when in season locally, at which time the model domestic scientist purchased prudently, preserved what she could for out-of-season use and counted the savings. In winter, she could take a jar of preserved fruit or vegetables from the pantry and serve homemade produce with little preparation. Forward planning of this nature demonstrated good economic practice: time was money, especially when domestic servants were in short supply. Girls and women who had studied domestic science showed a better understanding of the economic requirements of domestic science and earned Gorman's approval. The remainder did not.

The Survey measured economic practice in three ways, firstly through 'Household economy'; secondly through 'Division of working day' (a subheading in the same category), and thirdly as 'Finance' in 'Mother's knowledge of Domestic Science'. The domestic science imperative for these groupings was apparent in a series of 1922

¹ Cilento, White Man in the Tropics, p.76

articles in JHE. For example, Isabel Bevier saw the need to improve household economic management as an urgent one. 'The passing days', she said, 'emphasize the necessity for wise expenditure of time, money, and energy on the part of everybody.' Whether or not they understood it, she continued, women were now locked into a national economic system because 'forces quite beyond their power are giving them a part in the economic and political life of the nation. With the family acting as producer and consumer, Agnes Donham agreed that good home economy had a wider impact. She explained that:

National waste has its beginnings in home and family wastes. Social wastes exist because of the attitude of the home. Our waste of natural resources, a national disgrace, will never be remedied until habits of saving have been established in the home. Waste of labor through idleness, poor adjustments, unemployment, lack of honest standards, is an economic problem, and becomes a home economics problem if we realize that the home standards are influencing business and industrial standards.³

Mrs Joseph C. Gawler of the General Federation of Women's Clubs, Yakima, Washington, saw the meeting of those standards as being the housewife's responsibility, with any who 'failed' culpable unless 'handicapped by illness.'4 It worried her that not all women saw 'homemaking' as a career, perhaps because:

generally speaking, the home is unorganized and it is not recognized as a real business in which there are two partners. The woman should realize that the strain of the husband in earning the income should be met by similar earnestness on her part in the spending of it. We need analysis of the essential things that comprise the management of the home, including cooking, marketing, cleaning, budget making; the care of the children, recreation, and community interests. Perhaps the second reason is that our mental attitude is wrong. When higher education offered opportunities to women it was in fields that took them away from the home, and there was, and still is, a tendency to look upon work in the home as menial. The management of a home is a business proposition, the true basis of which lies in a knowledge of the economic principles that underlie the expenditure of the family income. ⁵

As Graham has pointed out, the 1920s provided the setting for the 'domestication of efficiency', when householders in the United States positively received American

² Isabel Bevier, 'Some of the Larger Relationships of Home Economics', *JHE*, vol. 14, no. 11, 1922, p. 528

³ S. Agnes Donham, 'The need for application of the fundamental principles of economics in the home', *JHE*, vol. 14, no.11, 1922, p.561

⁴ Mrs Joseph C. Gawler, 'The home within and without', *JHE*, vol. 14, no.11, 1922, pp. 568-569 ⁵ *Ibid*.

home economist and scientist Lillian Gilbreth's adaptation of industrial ideas to domestic practices. Production lines and targets provided models for organisation in the home, and the domestic scientist's ability to manage a household's functions with industrial precision necessitated high-quality time management. In Australia also, efficiency became more important than ever as the proportional number of domestic servants declined. The Australian woman's implicit role as supervisor of cleanliness, capable and informed mother, talented cook and smiling hostess had acquired a new significance by the 1920s when even those who could afford domestic staff struggled to find girls interested. Middle-class women had to shoulder more of the burden themselves; working class women had done so for much longer, although both groups probably hired other women for particular chores. Theoretically, the progressive mechanisation of their homes helped to reduce that need.

Mrs Gawler noted the importance of mechanisation:

The modern kitchen simplifies work, too, with its sink and tables at proper height, and closets, range, and labor saving devices arranged to produce the maximum of work with the minimum of energy. Laundry work is also simplified by the advent of the washing machine and the mangle. Some progress is being made toward simplicity in dress, and towards the standardization of wearing apparel and materials. ⁸

In her study of the way in which post-Great War women's magazines reinforced 'the cult of domesticity' in Britain, Horwood notes that editorial discussions about 'the housework debate' were inevitably followed by advertisements from appliance manufacturers; nearly a third of British households acquired domestic electricity in the period between 1920 and 1930. Electric or gas appliances raised efficiency as well as company profits, and as advertisers were quick to realise, converged with a public interest in better hygiene. Ann Clendinning found similarly in her examination of the

⁶ Laurel D. Graham, 'Domesticating Efficiency: Lillian Gilbreth's Scientific Management of Homemakers, 1924-1930', *Signs*, 1999, vol. 24, no. 3, pp. 633-673

⁷ Several NQOHP women mention paying for 'help' for specific tasks. See Chapter Ten.

⁸ Gawler, 'The home within and without', pp. 568-569

⁹ Catherine Horwood, 'Housewives' choice - women as consumers between the Wars. (Influence of Good Housekeeping magazine on women living in the era between World War I and World War II)', *History Today*, March 1997, vol. 47, no. 3, pp. 23-29. See also J. Benson, *The Rise of Consumer Society in Britain 1880-1980*, London, 1994. For the U.S. in particular, but of equal relevance to the rapid increase of consumerism in Australia, see Bonnie J Fox, 'Selling the Mechanized Household: 70 Years of Ads in Ladies Home Journal', *Gender and Society*, vol. 4, no. 1, March 1990, pp.25-40

activities of British domestic science expert Maud Brereton: manufacturers utilised health messages to promote their products and domestic science experts were happy to help them do so. ¹⁰ The notional concept was that householders could use the time saved in turning on an appliance (as opposed to chopping or carting wood for the stove) in cleaning, other duties, or in relaxation. From the U.S.A, Mrs Gawler provided an industrial model:

And the time women are saving, the strength they are conserving is theirs for the enrichment of life; to do the thing which spells enjoyment, which supplements the workaday hours. Owners of big industrial plants have come to know that recreation is an essential to good work. Owners of little industrial plants like homes must recognize the fact also. To some the recreation comes in one way; to others differently. It is our reaction to our idle hours which distinguishes personality. ¹¹

The Office of Home Economics of the United States Department of Agriculture was so keen to promote the way that domestic efficiency could improve through modernisation that it measured the energy expended during household tasks by conducting 'respiration calorimeter experiments' on an average young woman while she used foot-operated or electric sewing machines and while she sewed by hand 'at different rates'. It estimated the way in which her efficiency varied while dishwashing with her 'working surface' at different heights, and while she ironed and swept, and unsurprisingly found that modern ideas and appliances considerably reduced her energy expenditure. ¹² Consequently, it showed that the modern woman could conserve calories and earn free time in exchange.

In keeping with such principles, the Survey attempted to establish whether northern white women used their supposed extra time wisely, and whether they spent their

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¹⁰ Clendinning, 'Gas and water feminism: Maud Adeline Brereton and Edwardian domestic technology', pp.1-23

Gawler, 'The home within and without', pp. 568-569

¹² For example, 'Expressed in terms of heat, the energy expended for the work alone in sewing on the foot-operated machine was 20.9 calories per hour; motor operated sewing machine, 8.9 calories per hour; hand stitching, 9.4 calories per hour in a test on sheets, at the rate of 30 stitches per minute; and 5.6 calories per hour at the rate of 18 stitches per minute. In ironing, the energy expended for the work alone was 24.0 calories per hour, and in sweeping, 41.0 calories per hour; with dishwashing the energy expended with too low a working surface (75 centimeters), was 32.3 calories per hour; with a working surface at the height of 92 centimeters, 24.9 calories per hour; with the working surface at a height of 107 centimeters, 22.6 calories per hour; and with the working surface at a height of 117 centimeters, 22.9 calories per hour.' C. F. Langworthy, 'Energy expenditure for household tasks', *JHE*, November 1922, p.573

money in ways that would produce further personal and family benefits. Cilento instructed Gorman to obtain that information according to its subjects' 'ideas of suitable economical food, clothing, [and] house furnishing' and through her other observations, as well as by enquiring as to their income and expenditure particulars. ¹³

Although she remarked later that it was 'a very difficult matter to estimate the amount of financial knowledge of any woman during an interview of half an hour or so', Gorman did her best to follow Cilento's instructions, looking critically at 'the quantity and quality of the home equipments', and noting:

what number of unnecessary articles are being used in a home, what labour saving devices there are and if possible finding out from the mother what her husband is earning, how often he has been unemployed since their marriage, and what expenses have been incurred through illness, accidents etc.

It was not just the brief time that she had to make such assessments that created problems: while her subjects seemed less reluctant to talk about the intimate details of their physical selves, Gorman's attempts to obtain knowledge about their finances met some resistance. She found that:

It is impossible to collect thoroughly all this information, as the majority of people resent keenly an enquiry into their financial affairs, and the very few who volunteer such information, exaggerate to a very great extent their failures or their successes.14

Nonetheless, she managed to extract enough information to reach conclusions.

According to Cilento's evaluation criterion of 'good' being 'the highest encomium', Gorman's entry on Economy for Townsville argued that 'About 33 per cent of [Townsville] women interviewed could be said to have a good knowledge of economy'. 15 For another 46 per cent, praise was subdued, while 20 per cent did not impress; they appeared 'to have very little knowledge of economy in any form whatsoever.' ¹⁶ Predictably, Gorman found that 'The housewife's domestic knowledge of economy' differed according to 'the amount of her intelligence and common sense'

¹³ Report, p.2; Cilento, White Man in the Tropics, p.78

¹⁴ Report, pp.3-5; Cilento, White Man in the Tropics, pp.80-81

¹⁵ *Ibid*.

¹⁶ *Ibid*.

and 'with the home training she has had.' In regard to the 'Finance' group, Gorman added that:

I venture to say that about 55 per cent of the mothers have a fair knowledge of finance, spending their money sensibly and wisely, supplying their families with sufficient nourishing food, and furnishing their homes with the necessary comforts and labour saving devices. Other women live extravagantly, buying expensive unsuitable food and unnecessary clothing, doing without such essentials as ice chests, comfortable chairs, baths, house linen, kitchen utensils and china. 18

These insights into economic attitudes and conduct in North Queensland at the time have some value, but their generalisations can mislead, for they reflect diversity in circumstances as much as good financial judgment.

NQOHP participant Elsie turned twenty-one in 1923; she spoke of her family's occasional poverty during the preceding years, and from her account, it seems that her parents had financial acumen but sometimes fell into circumstances where they lacked the income (or surplus earnings) to exercise it. If people owed rent, she said, property owners could take their furniture, 'all except the sewing machine', which had to be left 'so a woman could make a living'. 19 This happened to her parents 'time after time', and the family would sleep on bare boards until Elsie's father could make new beds. ²⁰ When they caught up with the rent, they did not get their furniture back: they would have to start again. 'New' beds were sometimes a type of palliasse: Elsie's father would get corn sacks from merchants and fill them up with paper, and her mother would cover them with cretonne. Her father's ingenuity extended to diverse pieces of furniture: he would get kerosene boxes, lay one flat, stand one either end, put a shelf between them, put all their shoes underneath and cover it with cretonne; it was a shoe-

¹⁷ Report, p.2; Cilento, White Man in the Tropics, p.78

¹⁹ NOOHP, ID 53, 123-5. This refers to the law for 'Execution and Distress' in 4 Ed. VII. no.15 (ss. 1, 3, 4) of 1904. In fact, they should have kept their mattresses, which were part of bedding. Debt collectors could not confiscate 'any one sewing machine, typewriting machine, or mangle owned by or hired to a female' in lieu of overdue rent. They also had to leave 'tools, necessary furniture', educational books, clothes and bedding to the value of £10. See Herman Cohen; W. F. Craies; Edward Manson; C. J. Zichy-Woinarski; W. Harrison Moore; A. Buchanan; R. W. Lee; Godfrey R. Benson, 'Review of Legislation, 1904, British Empire, Australasia', Journal of the Society of Comparative Legislation, New Ser., vol. 7, no. 1, 1906, p.105 ²⁰ NQOHP, ID 53, 123-5

box cum stool. In like fashion, butter boxes became chair seats and stools.²¹ Elsie's father was a strong union man, who she contended often suffered discrimination because of his politics. When he was out of work, two local plumbers were the 'only people who used to help'; they hired him to dig trenches up to houses for plumbing. ²² This income was inadequate, and Elsie's mother washed and ironed for extra money. If Elsie's parents were really victims of the husband's politics, then they adapted and coped extraordinarily well; regardless, they experienced economic uncertainty because of variations in employment opportunities.

Gorman made no mention of the fiscal wisdom of her Cairns subjects, and provided little detail on those at Chillagoe and Cloncurry. In her 'economy' category, only about four of thirty-seven Chillagoe women achieved the 'good' rating; about twentyfour were judged 'fair' and about eight received a 'nil' rating, with no further comment. ²³ These were the lowest ratings awarded to women anywhere. The women of Atherton did marginally better, with about seven of the forty-four surveyed rated good and twenty judged fair; the remaining sixteen or so had the dubious honour of achieving the highest rating anywhere for 'nil' knowledge. Cloncurry did better – just; with over seventeen rated 'good', about fifty-one rated 'fair' and about twelve 'nil'.²⁴ Charters Towers women were perceived to perform at the same standard found in Townsville, while of the fly-ridden town of Julia Creek's twenty-four interviewed women, four were deemed good, about thirteen fair, and about six were considered to have no knowledge of economics. Gorman seemed not to recognise that as wives or partners of working men in a town with apparently high employment, they were probably there by choice, and this was consequently an economic decision. ²⁵ Furthermore, it was probably not a decision taken lightly considering the hot uncomfortable homes in which they chose to live.

The central message of the Survey Report mirrors domestic science requirements in that the ideal domestic scientist not only provided healthy and balanced meals but

²¹ *Ibid.*²² *Ibid.*, 123-1

²³ Report, pp.9, 11

²⁴ NOOHP, ID 53, 123-5

²⁵ Gorman remarked that the population was 'made up of Government officials, trades people, Railway employees, Land Agents and teamsters [sic] families.' Report, p.14

organised her working day as efficiently as she did her pantry. In completing her chores, she thoroughly cleansed, tidied and screened everything from utensils to floors and toilets, and maintained her vigilance against insect vectors and bacteria while she rocked a cradle or managed petulant or hungry children. In the meantime, the scientist kept alert for the chance to purchase labour-saving devices, preferred her home to be cool and well-ventilated and made sure that – for the sake of her dependents – she was well-rested and healthy herself, but never so relaxed as to be lazy. She should, said *The Townsville Daily Bulletin*, 'watch for odd moments':

A cook often finds odd half-hours at her disposal, and slack days when, for some reason or other, fewer meals are required. Now, if she be a wise and methodical woman, after a certain amount of recreation she will seize the opportunity of replenishing her stock of various home-made stores which she knows by experience, greatly simplify and lighten her labors [*sic*] on the days when she is overwhelmed with work.²⁶

This would help her not to make the mistake of being the 'careless, unready cook' who might 'at the last moment' of gravy-making might find her gravy lacked a 'tempting brown colour'. Such an individual, the writer disapprovingly continued:

snatches up an iron spoon, fills it with sugar, thrusts it into the fire, and in order to obtain half a teaspoon of caramel ruins several spoons and constantly renders the kitchen, if not the house, unbearable with fumes of burnt sugar. ²⁷

Perhaps knowledge of this flaw arose from its common practice; the point was that preparation made good housewives. Nonetheless, the prudent use of 'odd moments' recommended above essentially kept the cook working; there was little choice but to do so if she wanted to be a good domestic scientist. However, some labours could certainly use lightening in terms of economy of time and effort, and a notable one of these involved the laundry. Most NQOHP participants mentioned the arduous nature of laundry chores, but one left a detailed account.

Ethel C. was born in 1902. Her mother died of cholera six years later, and Ethel, an older sister and younger brother grew up with their father in Townsville's flood-prone suburb of Railway Estate. Their father never gave them money for clothes; Ethel had to wash and iron her only two frocks on the weekend. Her sister left school at the age of twelve and took in laundry for money; occasionally, she paid Ethel sixpence to stay

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²⁶ 'Watch for Odd Moments', *Townsville Daily Bulletin*, February 9 1924, p.9

²⁷ *Ibid*.

home from school and help. They had to finish the work before their father got home because they feared he would want the money. (He never found out.) Ethel left school at the age of thirteen, at her father's instruction. Occasionally unemployed himself, he found her a job as washerwoman for a woman with 'three kids and a husband who wore full white suits to work every day'. Ethel found three weeks of washing waiting for her, and children to care for as well; she decided it was not worth the five shillings a week offered, and 'quit after a week'. Five shillings bought seven pounds of potato or a 'fair few groceries' then; sixpence bought a loaf of bread. Ethel looked for work of her own choice instead and soon found it as a companion to a woman whose sons worked many night shifts on the wharf; their mother was often alone.

Ethel received six shillings a week for being there and doing some housework – 'little jobs' like ironing and bed making. She went home on Saturday afternoon and returned to work Monday morning. The woman's sons made her nervous though; one would sit too close to her, so she was uncomfortable there and eventually left. Sometimes unemployed, she generally found work in local stores. Despite a poor relationship with her father, she still lived at home in the early 1920s; her sister had left to board because of their father's personality, but Ethel stayed to care for their younger brother.

In her early twenties, Ethel worked at Adcock's, a small store within walking distance of home. Her first task after work was to light the wood stove; after that, she could cook. She bought most of their vegetables at a little shop near her work, Chin Tai's, and meat from the adjacent butcher's shop: they 'mostly only had fried meats'. On Mondays, she did 'the washing'; she had a friend – a neighbour – who would help. There was no laundry tub: they used three kerosene tins placed atop bars on bricks, and the washing boiled in there. The women used a 'pot stick' (a broom handle, shaved down) to lift the washing out. A wooden box with holes in its base was laid across the top of the tub, and the washed items put in it, allowing the water to drain out through the holes and back into the tub. This allowed it to be re-used for other cleaning tasks such as floor-washing; in Ethel's case, that chore was sometimes

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²⁸ NQOHP: ID 119, 322-2

²⁹ Ibid.

³⁰ *Ibid*. Five shillings Australian in 1915 was roughly equivalent to A\$21.50 in 2001.

³¹ *Ibid.*, 322-2, 4, 5

completed much later. Her neighbour would often invite Ethel to the dance hall at the end of the street, and once the washing was almost finished, they would go. (Ethel might leave the last load boiling.)

The dance hall was called Fiddle College – the owner's name was actually Fiddle College – and he taught dancing. Monday night was for learners, and on Wednesday night, he had a dance of his own. If they went up and 'pulled the learners around' on Monday, he would let them in free on Wednesday night. 32 Afterward, the friends would come home. The house had 'lino' [linoleum] in the 'front room' ('it wasn't called a lounge-room then'), but otherwise bare boards. 33 The young women would use the day's washing suds to wash out the kitchen and dining room: it might be midnight when they did so. On weekends, Ethel cleaned the rest of the house: it was not very big, just one bedroom and the 'lunch room'. 34

From this, after her marriage, Ethel went to managing her own house nearby, with slightly more comfort but no real decrease in the work required to complete the laundry chores. Her new home was larger: it was a four-room cottage with two bedrooms, a kitchen and front room, and a skillion at the back complete with a water heater. All she had to do was chop the wood and light the boiler to have hot water for the laundry and bath. A skillion was 'like a big shed at the back, attached to the house' and her new home's skillion had a bench inside for galvanised iron washtubs.³⁵ Ethel used three laundry tubs: one for blues, one for whites, and one for rinsing. She scrubbed the clothes on a washboard, using pungent kerosene soap cut into squares. This house had another significant advantage over her childhood home: there was a detached bathroom just off the skillion, with walls of galvanised iron and a floor of wooden boards set slightly apart to let water run through. There was no 'plunge-bath' - the galvanised tubs served to wash humans as well, although they had a shower.³⁶

An item in the *Townsville Daily Bulletin* supports this story, noting that 'a successful washing day necessitates early rising' and some preparation: the housewife should

³² Ibid.

³³ *Ibid.*, 4

³⁴ Ibid.

³⁵ *Ibid*.

'collect all the soiled things, sort them, and soak over night.'³⁷ The 'Useful Hints' concerned were directed particularly towards the 'young and inexperienced housekeeper' and noted that good laundry management would 'prove a boon indeed, particularly to those women in country parts whose small homes are unprovided with the facilities found in even the poorest town house.' ³⁸ In this case, the *Bulletin* article meant the provision of a specific laundry area and running water, but it also described the kerosene tin and tub method used by Ethel and other Oral History women, which it portrayed as crude. Crude or not, the work had to be done. Correspondents to the *Australian Woman's Mirror* often mention laundry work, which it seems women still disliked strongly in 1927 and 1928. 'Thoughtfulness takes queer twists sometimes', one woman wrote:

A woman friend came to stay the night with us and just before retiring said, I've brought my own sheets with me. I'll slip them on the bed and it will save you washing yours.'39

This thoughtfulness might be familiar or even limited to women in areas with uncertain water supplies, but evidence of wider antipathy to laundry work was strong elsewhere in the magazine when 'Pysie' chose to respond with a 'metaphorical rolling-pin' to a male correspondent's previous claim that 'woman's housework' was all 'ease and pleasantness':

Doesn't he realise that the few days on which he *alleges* he did housework were merely a break from his ordinary job, and, therefore would not be likely to pall on him? He did not have time to notice the monotony and tedious sameness of housewifely duties. Has he ever washed all day and stood up at night and ironed for four hours as I have just done?⁴⁰

Although the laundry remained a separate building to most houses for some years to come, and laundry tasks remained strenuous and time-consuming, other aspects of women's lives changed considerably as domestic electricity enabled them to access Winchell's 'resources of modern science'. 41

Ethel's home and her account seem representative of others. The Report shows that in Townsville,

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³⁷ 'Washing Day. Useful Hints', *Townsville Daily Bulletin*, January 5 1924, p.9

³⁸ Ibid.

³⁹ 'Between Ourselves', Australian Woman's Mirror, vol. 4, no.16, March 13, 1928, p.14

⁴¹ Winchell, 'Home Economics at the Crossroads', p.554.

33 per cent. of the houses had no water laid on to the kitchen, the nearest supply being outside the kitchen door or in the bath-room, which is commonly situated 6 to 12 feet from the main building.⁴²

Alistair Yarwood found this part of the *White Man in the Tropics* version of the Survey surprising. ⁴³ It is in fact unremarkable. Kitchens in the 1920s were just beginning to become distinct areas: designs for many houses built before 1924 did not incorporate them. The use of gas rather than electricity for lighting by 35 per cent of homes surveyed also intrigued Yarwood. ⁴⁴ However, domestic electricity (managed by a Lighting Committee) only became available to Townsville consumers in 1922. Apart from householder reticence to adopt the new technology, installation was expensive, leading to a tendency for consumers not to request it until others in a street were ready. To alleviate labour costs, the Lighting Committee also sometimes deferred approval of connection applications until others in a street were ready. ⁴⁵ It is also significant that the Survey drew mostly upon people from a low socio-economic group. Certainly, some householders regarded their cooking conditions as less than idyllic, but cost was a factor. The Survey report adds that

The majority of householders were using kerosene lamps for lighting purposes, and a wood-stove for cooking. This is found less expensive than gas, but is more inconvenient and troublesome. 46

Gas may have been troublesome too: a 1924 letter to the *Bulletin* referred to a previous edition's advertisement promoting gas cookers. In her experience, the writer, 'Housewife', of Townsville said,

with the gas supplied at the present time, it would be advisable to those who are using wood stoves to stick to them until we are assured of a better quality

⁴² Cilento, White Man in the Tropics, p.77; Report p. 1

⁴³ He refers to it and other Survey findings in 'Sir Raphael Cilento and The White Man in the Tropics', in MacLeod & Denoon, *Health and Healing in Tropical Australia and Papua New Guinea*, p.58

⁴⁴ *Ibid.*; Report, p.1

⁴⁵ The streetlights were illuminated on 31 May, 1922. Engineer S F Roberts later remarked that 'when the lighting system was inaugurated, the public were doubtful and timid and one waited for the other to see what the result would be and it was 12 months or more before confidence was complete.' However, installation cost £13 (twice the weekly pay of a skilled workman) and supply came at a cost of 1s. a unit, discounted when paid on time. There were 751 consumers in 1923, 1274 in 1924 and 1764 by 1925. By 1931, there were 4525 consumers, although this number includes commercial users. See C Doran, *Partner in Progress. A History of Electricity Supply in North Queensland from 1897 to 1987*, Townsville, 1990, pp. 59, 62, 84 Report, p. 1

of gas... If one has the occasion to fry a piece of steak, it is necessary to wait till it is done before you think of putting the tea kettle on to boil, for the pressure will not supply two burners at the same time.⁴⁷

Consumers needed education about the new possibilities in domestic appliances. A 1928 correspondent to the *Australian Woman's Mirror* demonstrated that such a need was present and not restricted to Australia when she responded to a previous writer's story of naïvety about the way that appliances operated:

A friend in a hardware shop in Wellington (N.Z.) told me that it is quite common for country people to ask for a gas-ring, assuming that all that is required is to apply a match and obtain a light. Until I heard this I had doubted another girl friend's story of the customer who asked her for a couple of electric light bulbs, "because I'm so sick of using lamps." The customer was incredulous when told the lamps were useless unless the house was wired for electric light. ⁴⁸

Similar examples appear in the *Australian Woman's Mirror* throughout the late 1920s; while they reflect the sophistication of the writers who found such ignorance amusing, it is quite possible that they also saved some other women from humiliation. As income permitted, electricity became available, gas stoves became more efficient and the print media continued to promote the economic and hygienic benefits of refrigeration, 1920s kitchens would become more like those of the present.

Services and appliances facilitated the processes of washing, ironing, cooking and cleaning, but women had to adapt their methods and routines to gain most benefit: this validated the need for formal instruction, and when a lack of knowledge caused injury, such a need might be further emphasised. Some inventions could be dangerous. Fire was always a concern in places where houses were built mostly of timber, and while Townsville's Fire Brigade might have been over-enthusiastic in some ways, they were an essential service that was called to significant fires at least weekly in the first half of 1924, and sometimes more often. ⁴⁹ Townsville woman Daisy Hartley was a witness in a 1924 investigation of a fire in her home that was started by accelerants; she stated that she usually kept benzine (sometimes spelled benzene) in the house for her self-

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⁴⁷ 'Our Gas Supply', *The Townsville Daily Bulletin*, February 12 1924, p. 7

⁴⁸ Australian Woman's Mirror, March 13 1928, p.15

⁴⁹ As shown in *Townsville Daily Bulletin*, February 26 1924, p.4, with the remark that '... there is much comment concerning the speed at which the fire engines are being driven when returning to the station after attending fires. It is hardly necessary for them to travel at the same pace on the return as the outward journey.'

heating iron, and had purchased two bottles recently. ⁵⁰ If the thought of a fuel-using, hot, hand-held appliance is not enough to cause any safety-conscious person today to shudder, the act of cleaning could be just as hazardous: a few weeks later, a Mrs Bradbury escaped when a mattress in her rented home caught fire while she was cleaning; she had used benzene near a naked flame. ⁵¹ (If she followed a Ladies Page hint for removal of spots from material, she would have ironed the fabric 'immediately' after she applied benzene to the blemish. ⁵²) The NQOHP's Florrie hated the unsafe and unstable oven in a house she rented; its chimney once caught fire as she cooked. ⁵³ Fires were responsible for over 60 per cent of insurance claims paid by Queensland insurance companies in 1924; incidences had steadily increased over the previous few years. ⁵⁴ Industrial accidents also demonstrate the hazards of increased technology and mechanisation. ⁵⁵

For those without the newest conveniences, some families may not have had access to them, some may not have been able to afford them and others quite simply may not have seen a need for immediate change. Aesthetics may have played a part for a while. Early kerosene and electric refrigerators were cumbersome, expensive, noisy, and (particularly in the case of the kerosene version) potentially odorous pieces of machinery, completely different to the squat and silent ice-chests, and nowhere near as beautiful. Ice-chests crafted from fine woods such as silky-oak could be a source of pride, lovingly polished and displayed: Barbara certainly treasured hers, and showed

⁵⁰ Townsville Daily Bulletin, March 27 1924, p.4

⁵¹ *Ibid.*, May 3 1924, p.4. Benzene produced a similar result to dry-cleaning.

⁵² Ibid., 'Benzine stains', January 12 1924, p.9

⁵³ NQOHP, ID13, 37-3

⁵⁴ Seventy-nine government, Australian and overseas insurance companies paid out £324,752 for fire claims in 1922. In 1924, there were eighty-five companies, who paid £522,905 in fire claims; these formed 61.2% of claims paid by the insurance industry. Apart from the costs of hailstorm damage in 1922 and 1923, the next highest category of claims concerned marine accidents, which formed 27.7% of claims paid in 1924; personal accident payments constituted 42.8% of claims paid. OPP, Report of the State Government Insurance Office, 1925, p.30 ⁵⁵ *Ibid.*, pp.21-23. For example, while the State Government Insurance Office in 1925 found that machine accidents constituted only 5.15% of industrial accidents in 1921-22, they caused 9.13% of fatal accidents in 1923-4. Fatal accidents from 'hand-labour' increased even more, from 7.73% in 1921-22 to 44.06% in 1923-24, but the economic costs (through compensation) of the latter were far less. Permanent disability followed 172 machine-based accidents in 1924; altogether, there were 633 accidents from these and other causes including 'explosives, electricity, fires, and hot and corrosive substances'. Another 12,263 industrial accidents caused temporary disability. While figures in Insurance Office reports do not generally differentiate between injuries to males or females, women undoubtedly claimed compensation for industrial accidents: see Chapter Eleven's remarks on phthisis.

that progress towards the mechanised home did not necessarily come cheaply or without regret. Her ice-chest was a gift for her 1916 marriage. It was, she recalled,

made of all silky-oak. It was *beautiful!* [Her spoken emphasis.] In summer, it was quite cold to put your hand in, lovely. And we sold that to the man on South Townsville.... I sold the dining room table, and I got a fridge. I had a dining room table, [with] a wing on it. It was six foot, and then we put a wing on it, made it really nice and long, 'cause [by the 1920s] I had a big family. He came, and I sold him that icebox and that table – 30 shillings....Yes, I loved me icebox, but we were getting a fridge, you know, so I sold it to him. ⁵⁶

In this case, the fridge became more desirable than dining space and an attractive piece of furniture: its initial cost, noise and operating expenses undoubtedly diminished in significance against the prospect of having no more pools of water to contend with under the icebox, no need to watch for the iceman, and the ability to efficiently chill and store larger quantities of food. Householders constantly adapted or exchanged furniture and implements to their needs, as shown in Barbara's story of the enlarged dining table, and so might 'get by' or 'make do' for extended periods because of their ingenuity, but economics dictated the speed with which they changed their tools and thus their ways. Like Ethel, Barbara washed in kerosene tins balanced on open fires in the back yard until she could afford a boiler in 1924. The kerosene tins, she said, 'were good; you'd be surprised what a kerosene tin can hold. They were good... until I got a boiler. 57 With the exception of her rotary hoist (which she never thought an improvement on the prop-style clothesline), Barbara welcomed new ideas. 58 Bv contrast, Amy was unconvinced that all changes were for the better. She missed her Ironbark wood stove: wood stoves cooked better, she said, because they used different, heavier utensils, so the pans never burned. ⁵⁹ Nevertheless, she invested in domestic appliances as she could afford them.

While a number of NQOHP women expressed a fondness for a particular item and marked its passing from usefulness, regret was transient when progress brought a reduction in the labour needed for essential chores, or non-existent where economic pressures were less. Former nurse Nellie did not share Barbara's affection for ice

58 Ibid.

⁵⁶ NQOHP, ID3, 6-5

⁵⁷ *Ibid*.

⁵⁹ *Ibid.*, ID15, 41-5

chests: they were 'awful' things that needed cleaning every morning. Her family bought a refrigerator in the mid 1920s, which she found made them more comfortable. 60 She also disliked kerosene lamps, because the glasses needed regular washing, and detested ironing: the memory of ironing petticoats made her wince. In her days as a student nurse, hospital laundry staff washed and ironed the nurses' clothes for them. In her own home, she had firstly a flat iron with an iron handle, held with a thick pad; her next style of iron had wooden handles. Three irons had to stay heated on the wood stove at one time; by contrast, electric irons were wonderful. Nellie was the wife of former Institute Director, Anton Breinl. The family lived in comparative comfort, but was no different to any other in the sense that they originally had no electricity. 'Hand fans made with palm leaves' helped in the worst of the heat, although Breinl had a water-operated fan in his surgery. 61 From the late 1920s, electric fans stood on their tables and cooled the house instead; in a medical practitioner's home, this development was as important as a marker of middle-class prosperity as it was of connections between consumerism and health promotion.

'Ladies' pages enhanced the desire for modern utensils by making them accourrements of fashion as much as health – and potential buyers could see the wares themselves displayed in advertisements in the first few pages of the paper. 62 Advertisements used words like 'wholesome', 'economical' and 'healthy'; even icing sugar could be wholesome. 63 The exacting housewife's responsibility for family wellbeing veiled the promotion of new products under health messages; these identified the modern woman while acknowledging some truths of the time. Thus, a Ladies Page item titled 'Care of Copper' served the aluminium saucepan retailer advertised nearby as much as it did the consumer; 'in most households', the article

⁶⁰ *Ibid.*, ID20, 51-4

⁶¹ Ibid. Breinl added that her husband's water fan was one of only two in town - one turned on a tap, and the fan worked; water drained to the outside. American collector Terry Fisher notes that in the U.S., 'Water fans were used before electricity but were eventually banned by cities because the fans wasted so much water. Also there were so many of them in operation water pressure was drastically reduced throughout the city. Most places just let the water run out on the ground'. Personal communication, December 23 2005.

⁶² In fact, most of the first few pages of the *Bulletin* were devoted to advertisements in the years up until the mid 1930s. News generally began at page three. ⁶³ *Townsville Daily Bulletin*, March 15 1924, p.9

argued, 'cookery utensils of aluminium have replaced those of copper' because of the risk from 'the accumulation of verdigris – a deadly poison'. 64 Moreover,

It is a labor [sic] saving age. There is so much to do and so little time to do it that the busy housewife has practically retired copper in favor of a ware lighter than iron, more durable than tin, and containing no poisonous ingredient in its composition.⁶⁵

Certainly, the average housewife would want to save labour but many new products created further work because of the new emphasis on kitchen cleanliness. The good housewife became synonymous with fastidiousness; Glowax marketed its floor polish as being the product 'for particular women'.⁶⁶

Of course, 1920s women were not necessarily all passive or helpless recipients of media promotions, and not all newspaper or magazine content led women into consumerism, nor necessarily reinforced the arts of homemaking or being a wife or mother as being solely definitive of modern women. The Australian Women's Mirror for example included a 'Women in the World' section that cited professional, academic and other achievements of women from Australia and overseas. Other representations recognised women who attained power in urban business enterprises, law, medicine and various areas of science, education, arts and sport. Regardless of external or gender-unique success though, it was mostly a woman's home that reflected her accomplishments and allowed her to be judged against the benchmarks of womanly conduct. A woman might be portrayed as modern and independent in some areas of her life, but conformist in others. One Mirror issue mentions a single New South Wales woman who operated a poultry farm, maintained two female employees, ploughed, harrowed and sowed single-handedly and still found 'time to hold a position on the executive of the Country Women's Association.' As Marianne Brydon remarked in her 1923 paper, 'the condition of the setting' was still 'the measure of the woman.' 68 In the 1920s, the physical setting altered markedly.

The 1920s were a boom time for Queensland builders: as home architecture changed to accommodate new ways, it undoubtedly enriched builders able to take advantage of

⁶⁴ *Ibid.*, January 19 1924, p.9

⁶⁵ Ibid.

⁶⁶ *Ibid.*, April 26 1924, p.9 67 *Australian Woman's Mirror*, August 14 1928, p.20

⁶⁸ Brydon, 'Women's Life in North Queensland', p.167

demands such as those for larger kitchens with planned cooking space, as opposed to the familiar built-on stove annexe that supplanted ovens and stoves located in the open-air or subspace of many older houses. Home-ownership became more anticipated and possible by the 1920s. Queenslanders had had the benefit of their *Workers Dwelling Act* since 1909, plus the Workers' Home Scheme since 1919, which provided housing for a deposit of just five per cent for those eligible. ⁶⁹ The *Bulletin* demonstrated (and reinforced) the trend towards a 'kitchen scullery' in a 1924 Ladies Page:

There is a modern tendency in house-planning which is a very sensible one, and that is to make the kitchen the workshop of the house, well-equipped with all things necessary for keeping the house clean and ensuring the comfort of the householders.⁷⁰

The article went on to say that houses were 'being built more or less' in one of two ways. The first of these had a 'combined kitchen and living room'; such houses might have a scullery that was also the bathroom, but no 'parlor' [sic].⁷¹ The second, larger, design had 'either one big living room or two smaller sitting rooms' and a 'combined kitchen-scullery.⁷² Without a servant to 'use the kitchen as her sitting room', it added, 'the kitchen can be absolutely free from anything but what is strictly useful'.⁷³ Such changes took place rapidly but were affected by wealth. The 'Maid's room' at the Institute's new Director's Residence was a small space (12 foot by 9 foot, as opposed to a child's bedroom of 12 foot by 13 foot in the same house) with its own lobby. The latter area opened into the kitchen, which had a servery through to the dining room.⁷⁴ For the less advantaged, Cilento acknowledged the need to change the way that kitchens were built, noting that

Kitchen quarters are frequently placed outside, and are also frequently poorly built, hot and unsuitable. It cannot be too much emphasised that one of the main essentials of the tropical house of white people in Queensland, where domestic service is frequently unobtainable, is the proper construction of the kitchen, and its equipment with all time and labour-saving devices. ⁷⁵

⁷² *Ibid*.

⁶⁹ There was also a Commonwealth War Services Homes Scheme from 1919. See David Hayward, 'The Reluctant Landlords? The History of Public Housing in Australia', *Urban Policy and Research*, December 1996, pp.3-8

⁷⁰ Townsville Daily Bulletin, April 18 1924, p.9

⁷¹ *Ibid*.

⁷³ *Ibid*.

⁷⁴ Cilento, White Man in the Tropics, p.124

⁷⁵ *Ibid.*, p.112

The Director's house kitchen plan also shows space for a dresser (important for organisation) and incorporates a sink. The Survey counted such facilities because of the importance of a functional kitchen to hygiene and efficiency, and thus to domestic science. By the 1930s, kitchen layouts in Australia were probably affected by Gilbreth's designs for kitchens that made best use of space and reduced the distance between stove, sink and preparation areas.⁷⁶

Despite the external evidence of domestic architectural change, the NQOHP stories used in this work only refer to changes to the laundry of the 1920s home: not one oral history mentioned a brighter, better constructed or more efficient kitchen, or applauded the manner in which the kitchen became the centre of a woman's domestic functions. There is little doubt that it did so. In her essay on the development of the Queensland home, Craik refers to two dominant ideas about the 'home', founded on the notion that it 'constructs the parameters of the social practices of domesticity.' 77 Under the first premise, the home is 'closely related to the construction of the contemporary position of women'; women are bound to the house and isolated there; secondly, such isolation results in the construction of 'a realm of domestic power which is distinct from, and subordinated to, other domains of power' - the public/private dichotomy. 78 Women's activities in the kitchen changed alongside new practices and utilities; through these changes, Craik notes the development of the kitchen 'as mother's panopticon: the room from which to see and be seen'. 79 While the surroundings may have altered, woman's role as cook, carer, cleaner and health monitor intensified, and this was perhaps even truer of the middle-class woman. With a domestic labour shortage, she supplanted the paid worker; to do so effectively, she had to specialise – and perhaps proselytise.

De Francis argues that the 'New Woman... sought to better motherhood and marriage' rather than just challenge convention, and could do so by taking motherhood out of the

⁷⁶ Graham, 'Domesticating Efficiency: Lillian Gilbreth's Scientific Management of Homemakers, 1924-1930', pp.633-673.

⁷⁷ Jennifer Craik, 'The cultural politics of the Queensland house', *Continuum: the Australian Journal of Media & Culture*, vol. 3, no.1, 1990, p.188

⁷⁸ *Ibid.*, p.2 ⁷⁹ *Ibid.*, p.6

home and 'to the streets... to reduce public problems'. ⁸⁰ This 'special social mission to improve society', she argues, was part of being a New Woman: domestic science helped define her. There was room for the 'old' woman too: De Francis also notes that many early 'labour-saving' devices did no such thing; still, most women, she says, were not concerned because housekeeping 'provided them autonomy and authority' and offered more variety than the work available outside the home at that time. ⁸¹ Work at home also 'represented family-valued work' and consequently 'allowed women, by proxy, to contribute to society through their care of the family.' ⁸² By these criteria, there was empowerment within domestic science because the domestic scientist was a professional who deserved greater societal esteem; at the same time, De Francis argues, motherhood remained a holy office. ⁸³

Despite its middle-class associations and examples from American experiences, De Francis's argument about the way in which domestic science interacted with changing definitions of early twentieth century femininity is relevant in many ways to Queensland: domestic science ideas varied little in Anglo-dominated societies. In each case, national fervour played a part: a strong connection between national economy and domestic science competence emerged in other countries as well as Australia during World War One. In war, governments tend to be as economically aware as they are sensitive to national feeling, and these programs had their origins in reformist ideas well before that time.

The popularity of domestic science instruction in Queensland had increased discernibly in rural areas by the late 1920s. Young white women dominated attendance at the cooking, sewing and laundry classes provided on the domestic science trains in isolated areas. Education Department files from 1927 show many requests for train visits to outlying areas. ⁸⁴ In rural locations, teachers might be QCWA members: one letter requesting a visit from the Travelling Domestic Science

⁸⁰ *Ibid*.

⁸¹ *Ibid*.

⁸² *Ibid*.

⁸³ Ibid.

⁸⁴ See letters from Godfrey Morgan of Condamine, December 19 1927; WA Brand to the Hon T Wilson, Minister for Public Instruction, with attached letter from Thomas Harley, Wallaville, November 9 1927 QSA, RSI15191 (A/19801) General correspondence, Education Department, travelling domestic science cars.

train shows the writer as secretary of her local branch; she was also Head Teacher at Kulara State School on the Atherton Tablelands. Accordingly, Easter Bradley wrote to say that 'the members of the QCWA Kulara Branch asked me to write to you'; the members 'would be pleased if during the coming year', the car would visit Kulara so that pupils from 'Kulara, Barrine and Lakebank could take advantage of the instruction given by these instructors'. ⁸⁵ The popularity of domestic science in Queensland, and its diverse delivery methods, interested others: in 1930, Assoc. Professor Welty Lefever of the University of Southern California's School of Education wrote to Mr King, Queensland's Secretary for Public Instruction, for information to contribute to a study of 'Domestic Economy' courses in Australia. ⁸⁶

As they promoted ways to increase efficiency and economy, developments ranging from the increasing availability of labour-saving devices through to improved utilities supported and reinforced domestic science incentives. The availability of running water, refrigerators, washing machines, better irons, vacuum cleaners and other domestic appliances alone did not increase productivity: for domestic science supporters only an organised woman – a domestic scientist – could draw the full benefits of science and technology, and develop economic habits that flowed into the wider community. At a household level, the expanded choice and designs available in household devices and appliances, together with architectural development and electrification, were positive developments by past and present standards. Stories of domestic drudgery and discomfort certainly dispel potential nostalgia for backbreaking and inconvenient ways, but these aspects of domestic science should not overshadow its importance as a means of inspiring better family and racial hygiene. In ways subtle and overt, as domestic science knowledge became bound to female identity, it also became the medium, measure and arbiter of racial health.

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⁸⁵ *Ibid.*,letter, Bradley to Under-Secretary, DPI, November 23 1927. The site of the former town of Kulara now lies beneath Lake Tinaroo on the verdant Atherton Tablelands; Lake Barrine is nearby.

⁸⁶ QSA, A/15719, letter, Lefever to King, August 8 1930.

"What was all wrong in our Victorian mothers' days is all right now." Courtship, marriage and divorce for the 'shingled and tubelike' flapper.

The old generation always thinks that the losses are more than the gains, and that the younger generation is leading us headlong to ruin, but when we size up the whole thing, calmly, we usually find that we have moved ahead, that men do "rise on stepping stones of their dead selves to higher things."

Isabel Stewart, 1922

[In Australia, there is] a brand new girl in the process of evolution.

Jessie Ackermann

Social commentators committed to domestic science and race preservation had a particular interest in 'new women' as they bridged the period between their childhood and adult lives amid a consumer-centred society in which they had a fresh legal and social standing. In Queensland and in other places, most young women went on to engage, contentedly or not, in the legal unions needed to ensure more happy white husbands and babies. This reality did not calm the fears of racially-worried observers: there were still not enough babies. Moreover, the innocence of modern young adult femininity risked being lost as young women flouted their modern apparel and adopted overtly flirtatious, even promiscuous behaviour. Rather than heed the advice and models provided by their elders (such as a dislike of divorce and a reluctance to discuss or give the appearance of pleasurable engagement with female sexuality), modern women seemed determined to disassociate from anything old and Victorian. In 1923, American sociologist William Thomas observed:

girls with new but social behavior norms who have adapted themselves to all kinds of work. And some of this work is surprisingly efficient... But no one of these girls, neither the orderly nor the disorderly, is conforming with the behavior norms of her grandmother.¹

Those grandmothers probably came from the era commonly referred to as Victorian, and for many young women, anything Victorian was archaic. In Queensland, as

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¹ William I. Thomas, 'The Unadjusted Girl: With Cases and Standpoint for Behavior Analysis', *Criminal Science Monographs*, no. 4, 1923, pp. 230-1

elsewhere, deviation from older social models accentuated and complicated the perceived need for young white women to reject many other old ideas; according to domestic science tenets, they should discard maternal and grandmotherly approaches to hygiene, conduct and diet, but retain the idea of marriage and babies as the ultimate feminine and racial fulfillment. Edward Ross argued that (for America at least) the solution lay in 'instruction of girls in domestic science', training in the 'ethics and ideals' of marriage, and education about the risks and means of contacting sexually transmitted infections. There were merits in his ideas at a time when sexual knowledge was likely to be acquired through experience or hearsay rather than parental instruction, and when older ideas about marriage and femininity risked being seen as, frankly, old. Nonetheless, despite the fears of their elders, young white Queensland women seemed quite capable of untangling the paradox that old was both good and bad, and that which was new might be the same.

The association of old-fashioned ideas with the reign and times of Queen Victoria is evident in Isabel Stewart as she spoke of the need for respect for the modern nurse with the complaint that:

Our older brothers, particularly the medical ones, are inclined to be rather superior and early-Victorian in their attitude. They don't like any of these new feminist notions about education and independent careers for women. They prefer the real "womanly" woman who is perfectly satisfied to let her male friends and relatives manage all her affairs for her, while she busies herself in waiting on them and doing as they tell her. ³

Other writers similarly identified retrospective ideas of a 'Victorian' moral model. James McGovern quotes H.W. Boynton in 1916 as celebrating modern ideas with the remark that 'Heaven defend us from a return to the prudery of the Victorian regime!' He also notes the way in which a 1918 novel's heroine remarks that 'What was all wrong in our Victorian mothers' days is all right now.' Later in the 1920s, as historians and literary analysts debated 'Victorian' life, Williamson cautioned against

² E.A. Ross, (Response to Howard) in George Elliott Howard, 'Is the Freer Granting of Divorce an Evil?', *AJS*, vol. 14, no. 6, May, 1909, p.793

³ Stewart, 'The Evolution of Nursing Education', p.423. Perhaps Edward and Alexandra seemed more progressive.

⁴ H. W. Boynton, 'Ideas, Sex, and the Novel', *Dial*, no. 60, April 17 1916, p. 361; Robert W. Chambers, *The Restless Sex*, New York, 1918, p. 143; in James R. McGovern, 'The American Woman's Pre-World War I Freedom in Manners and Morals', *The Journal of American History*, vol. 55, no. 2, 1968, p. 316, f/n 10

perceptions of a heterogeneous Victorian society: 'as time goes on', he said, critics would realise that 'Victorian must be used of time only, not of character.' Nevertheless, Victorian times were a convenient peg from which to hang old ideas. For Williamson, this tendency reinforced a frustrating 1920s development. 'The full shaft of disdainful criticism... launched mainly against the women of early and mid-Victorian days', he said came 'principally from their tubelike and "shingled" successors, assisted by:

journalistic young men who admire the feminine modes and "manners" of the present period. The grandmothers, or great-grandmothers, of these young persons are stated, without reservation, to have been collectively a poor, anemic set of girls who lived mainly by the fireside of airless, sheltered homes; who fainted on every conceivable occasion, ranging from the appearance of a mouse to the proposal of marriage, which was their only aim and object in life. In reply, we may point out that some proportion of women have fainted all through the ages and (whisper it not) they do so even in 1927.

Despite such defences, the 1920s disdain for that which was old was steady. For this, the media and its advertisers carried much of the responsibility.

Portrayed in print and film as sensuously clad, her hair bobbed or shingled, with lipstick, blusher and cigarette at hand, the 'tubelike' 1920s woman or flapper (as she might be known) owned more clothes than her mother might have dreamed of and seemed as intent on hedonism as a good typing speed. Liz Conor argues that the flapper personified the 'sense of scandal which was attached to the new visibility of women in public....' The modern woman, she continues, was 'spectacularised in the intensified visual scene of modernity'; this created a paradox for the ostensibly

Ibid.

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⁵ C. Williamson, 'Private Views of the Last Fin-De-Siecle', *International Journal of Ethics*, vol. 37, no. 4, 1927, pp. 362-3. This piece is written in the style of librarian Charles C. Williamson. Williamson went on to say how 'Oscar Wilde, the apostle of beauty, the John Baptist of aesthetic clothing and blue china, spent his youthful and most impressionable years in the early sixties, when crinolines and chignons were most exorbitant, pot-hats and peg-top trousers most pestiferously predominant, in rooms ornate with gilt consoles and glass shades and hung with heavily corniced and festooned curtains of rep or plush.'

⁶ For related but more recent discussions, see Carol Zisowitz Stearns; Peter N. Stearns, 'Victorian Sexuality: Can Historians Do It Better?', pp. 625-634, and Alex Tyrrell, 'Samuel Smiles and the Woman Question in Early Victorian Britain', *The Journal of British Studies*, vol. 39, no. 2, 2000, pp. 185-216

⁷ Williamson, 'Private Views of the Last Fin-De-Siecle', p.373

⁸ According to Conor, a 'flapper' was a 'very young harlot' in the late nineteenth century. The term came to have a wider meaning. Conor, 'The Flapper in the heterosexual scene. (Representing Identities)', p.43

liberated flapper, for despite an appearance of modernity through individuality and progressiveness, such conditions reinforced her subjectivity by making her a public spectacle: an object. ¹⁰ In a world full of imagery, Conor argues that the flapper fell into a dichotomous relationship with society, for in magazines marketed towards males she 'was both indulged and made deviant', while in the women's equivalent, 'she was at once the darling and the disdained' in Western society. ¹¹

Such media-fed social conflict seems true also of perceptions of the New Woman generally, as evidenced in the Ladies' Pages of the Townsville Daily Bulletin. Under centred bylines, accompanied by sleek and detailed illustrations, new fashions, recipes and decorating ideas are promoted as benchmarks for every modern and discerning woman, while in the unadorned columns nearby other recipes and home hints juxtapose continuity and tradition with novelty. Many young and mature women were quick to espouse many new fashions, as the Bulletin demonstrated in a comprehensive account of clothes and accessories worn by women attending the Charters Towers races: this was natural cultural movement, and their mothers and grandmothers had done no differently in adopting the fashions of their own youth. 12 However, there was a difference between the fashion crazes of past years and those of the late 1910s and the 1920s. When earlier transformations occurred, single or married women's activities remained under the control or scrutiny of older adults or spouses, while the 1920s changes followed the widespread Great War emergence of the young single working woman who might spend twelve hours a day without family supervision (even more if she boarded), then in her free time attend the movie theatre to watch audacious and enterprising celluloid heroines. Conor is justified in her argument that concerns about the flapper were particularly strong because the general exposure of young unmarried women coincided with the appearance of new forms of media.

Films accentuated conduct deemed promiscuous by 1920s standards. Heroes – sheiks – were brooding and swarthy but always wealthy, strong and romantic. Such men provided ideal heroes as they drove fast cars, fought fierce battles and overcame all

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¹⁰ Ibid.

¹¹ *Ibid.*, p.44; Conor adds that 'As a shared figure she points to the increasing cultural resonance between these countries through visual technologies such as print media and film.' ¹² As for example in *Townsville Daily Bulletin*, March 22 1924, p.16

obstacles until by cunning or brute force they swept their prizes into passionate and sexually suggestive closing embraces. Beautiful heroines in turn smoked, drank, pouted, danced and constantly needed rescue until the moment when they breathlessly dropped their delicately draped bodies into the hero's arms. It was all sexy and dramatic, and demonstrated liberated, even reckless modernity: just what young audiences wanted. These images were powerful. An American teacher discovered just how pervasive they were when she asked a group of 13 to 14 year olds to translate Chaucer into modern terms. The class produced this representation:

THE SHEIK

A Sheik they hadde with hem for the nones
Ful big he was of braun and eek of bones.
With lockes crulle with hair groom leyd in presse
He used vaseline richt wel I gesse.
Long wer his trousers, near the bottom wyde
Wel coud he daunce, and eek it was his pryde.
A Delta Theta pin of costly shene
Upon his coat he bar wich coud be sene.
And he coud drive a car, and fast woud ryde
Alone or with a mayden by his side...

THE FLAPPER

A Flapper was ther in this companye
Who had been sometime in societye
In Hollywood, in Paris, and Venice
And borne her wel in Turkey and in Greece.
Powdering her nose she was, or making eyen al day
She was as fresh as is the month of May....¹³

Perhaps the more conservative members of society were right in their suspicion that Hollywood models might at best encourage egoism or at worst sexual exploration in young people.

In 1920s Australia, the British Isles and the U.S.A, young female conduct was inevitably perceived as topical and presented as problematic by the press. One reviewer wrote of a book about 'that person so much shrieked about by voice and press – the flapper.' Mary Cowper noted of *What's Wrong With Our Girls* author (English female suffrage advocate and feminist Beatrice Forbes-Robertson Hale) that

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Mary Sylvester Cline, 'The Chaucer Club', *The English Journal*, vol. 14, no. 8, 1925, p. 649
 Mary O. Cowper, 'Utopias, Biographies and Things', *Journal of Social Forces*, vol. 1, no. 5, 1923, p. 621

'Mrs. Hale admits that the creature is over-dressed and under-chaperoned, that she seems to be a compound of precocity, selfishness and light-mindedness', but it was not her fault. These young things', Mrs Hale believed, were:

trying feverishly to adjust to an environment so foreign as to entail a complete revolution in racial tradition. Their work, their hours, their homes, are all equally strange and opposed to natural unities...¹⁶

Hale defended the new against the old:

If older women object to certain fashions for the young, let them, through their clubs and other groups, boycott the stores which display them, and avoid wearing them themselves....¹⁷

Conor also observed that the flapper upset some older feminists: Vida Goldstein and Rose Scott for example accused flappers of 'misusing women's hard won independence and newfound liberty on frivolous pursuits'; other older female critics were accused of jealousy. ¹⁸ Their problem stemmed mostly from their observation that modernity emphasised sex, money and gratification. Hale argued that late nineteenth and early twentieth literature demonstrated those societal shifts; in comparing the literature of the 1920s to that of the 1870s, she said, 'we find sensual, rather than spiritual, love emphasized; ability in lieu of faith, energy in place of patience.' Accordingly, modern life lacked:

a unifying concept of life and its purposes. We have too many dogmas and too little doctrine, too many material interests and too few spiritual ones, too little abstract thinking to motivate our concrete acts, too many expressions of undigested convictions, too much information and too little knowledge. ¹⁹

Another commentator on American society similarly dated changes in young women to the 1870s when he remarked on the difficulties of establishing normal and abnormal behaviour for a large survey of 'unadjusted' girls. According to William Thomas, there was a 'social revolution' occurring and 'the norms which regulate' social activities were also evolving. Hence:

¹⁵ *Ibid.*, cites Beatrice Forbes-Robertson Hale, *What's Wrong With Our Girls: the environment, training and future of American girls*, New York, 1923. The Hearth project lists but does not provide a copy of the book; New York Public Library has brief biographical details for Hale. See The New York Public Library, Humanities and Social Sciences Library, Manuscripts and Archives Division, Swinburne Hale Papers 1901-1924,

http://www.nypl.org/research/chss/spe/rbk/faids/hale.pdf Accessed 1 June, 2007 Ibid.

¹⁷ Ibid

¹⁸ Conor, 'The Flapper in the heterosexual scene. (Representing identities)', p. 48

¹⁹ Cowper, 'Utopias, Biographies and Things', p. 621

a society going on the assumption that a certain norm is valid and that whatever does not comply with it is abnormal finds itself helpless when it realizes that this norm has lost social significance and some other norm has appeared in its place. Thus fifty years ago we recognized, roughly speaking, two types of women, the one completely good and the other completely bad—what we now call the old-fashioned girl and the girl who had sinned and been outlawed. At present we have several intermediate types,—the occasional prostitute, the charity girl, the demi-virgin, the equivocal flapper....²⁰

The 'occasional prostitute, charity girl and demi-virgin' were American terms that described young women who accepted rewards (as gifts or money) for casual, informal or extra-nuptial sexual relationships. ²¹ British and Australian social commentators and media referred to such women as amateurs; according to Lake, the term was used to differentiate between prostitutes (reluctantly viewed as members of 'a special occupational category') and other 'working-class, sexually active women.' Haag (albeit in reference to the U.S.A) argues for an initial middle class location for such debates; eventually, however, she acknowledges, 'sexual profiteering' became differentiated from 'premarital sensual expression legitimized by an idealized, all-consuming love.' Some young women labelled amateurs might have dreamed of marriage, but chose to exercise their sexuality freely rather than adhere to the old notion of retaining a virginal status until their wedding ring was on, or almost on the finger; regardless, although some married women might engage in amateurism for fun or reward, the term seemed mostly applied to young unmarried women. Conor cites a 1919 article describing 'tarts', who might work 'in offices and shops during the day,

²⁰ William I. Thomas, 'The Unadjusted Girl: With Cases and Standpoint for Behavior Analysis', *Criminal Science Monographs*, no. 4, 1923, pp. 230-1

²¹ In Britain, they might also be 'dollymops' or 'demoiselles de comptoir'; see Woollacott, "Khaki Fever" and Its Control: Gender, Class, Age and Sexual Morality on the British Homefront in the First World War', pp. 326-8. Lake cites Peiss re the 'charity girl', a term that working-class New York communities used to describe women who "offer themselves to strangers, not for money, but for presents, attention and pleasure, and most important, a yielding to sex desire." Kathy Peiss, "Charity Girls' and City Pleasures" in Ann Snitow, Christine Stansell, and Sharon Thompson, (eds.) Powers of Desire: The Politics of Sexuality, New York, 1983, in Marilyn Lake, 'The Desire for a Yank: Sexual Relations between Australian Women and American Servicemen during World War II', Journal of the History of Sexuality, vol. 2, no. 4, 1992, p.624, f/n 11. Lake shows that the idea of the amateur reappeared essentially unchanged during the Second World War.

²² Lake, 'The Desire for a Yank: Sexual Relations between Australian Women and American Servicemen during World War II', pp. 623-4

Pamela S. Haag, 'In Search of "The Real Thing": Ideologies of Love, Modern Romance, and Women's Sexual Subjectivity in the United States, 1920-40', *Journal of the History of Sexuality*, vol. 2, no. 4, 1992, p. 550

and seek the bright lights at night'.²⁴ When Director-General of Health in 1937, Cilento was blunt about such women: an amateur in his eyes was either an 'ardent erotic' or "good time" girl' deemed responsible for spreading more venereal diseases than professional sex workers.²⁵

Discussions on young women's social behaviour reflect wide disquiet about male and female sexuality, based essentially upon a parental and societal reluctance to inform their offspring properly. Oral History accounts show that parents clearly did not consider that outside employment and unmonitored contact with the opposite sex were reason enough to inform their unmarried daughters (and often, sons) about their sexual potential. In theory, parents had reason to worry; in practice they generally did not, for most young women retained the modest habits taught from childhood. The truth is though that those unapprised and biologically vulnerable young women were at risk. Larger businesses and factories might have matrons to watch over their female charges during work hours, but after hours, they had no control over the sexual conduct or contacts of their generally naïve employees.²⁶

As Ellen Warne has shown, recognition of innocence as a potential factor in increased cases of sexually transmitted disease and unmarried pregnancy was an important motivation for demands for sex education (sex reform) late in the nineteenth century and into the twentieth; this was the case in Australia and overseas. ²⁷ While there were other stimuli to sex reform movements, they were practically all connected to recognition of the need for sex reform and practically all developed from *fin de siècle*

²⁴ 'Tarts About Town: The Lure of the Bright Lights: Flirtatious Flappers, "Love Birds" and "Privateers", *Truth*, 29 March 1919, p 5, in Conor, 'The Flapper in the heterosexual scene. (Representing identities)', pp. 43-63. Conor explains that such a woman 'rejected the national mythology that associated rurality with authenticity' and 'utterly rejected the lingering entanglements of morality surrounding the ideal of the decorous, modest and discreet young woman, choosing instead to pursue pleasure ostentatiously'.

There were fewer sexually transmitted diseases identified in sex workers than in the general public in Queensland in 1936. *QPP*, Report of the Director-General of Health and Medical Services, 1937, p.16

²⁶ Arthur Marwick also provides a good account of Great War concerns about young women's moral safety at and after work in Britain. See Arthur Marwick, *Women at War. 1914-1918*, Glasgow, 1977

²⁷ See Ellen Warne, 'Sex Education Debates and the Modest Mother in Australia, 1890s to the 1930s', pp. 311-327

incentives.²⁸ Supporters of sex reform brought ideas from political and medical backgrounds, from sociology and psychology and from female emancipation groups, with race issues often involved, but campaigners met considerable societal resistance, sparking vigorous debates about whether parental (but essentially maternal) responsibility should extend to informing children and young people about sexual matters. Despite such activism, by the 1920s most parents and guardians were still deeply uneasy about providing their daughters and sons with information about their reproductive processes and abilities.

The concept of the 'good' white Christian mother was as central to such debates as that of the innocent virginal daughter, who despite her acquired or natural modesty chanced being seduced and transformed into a 'good-time' girl cum virago unless closely overseen, but whether entwined with or separate from Christian beliefs, concepts of racial and social hierarchy remained critical to these arguments. De Francis notes that while Darwinian writings 'ushered in theories of evolution and biology', they followed older debates over "woman's developmental potential" rather than inspire entirely new ones; Darwinian ideas did not challenge some earlier assumptions, two of which endured and became critical to later perceptions of the New Woman. ²⁹ These were firstly that humans (like other animals), formed hierarchical systems in which the white male saw himself as supreme, and secondly, that a woman was, by nature, 'essentially a reproductive, domestic being'. ³⁰

That being the case, it is important to consider attitudinal continuities and changes in North Queensland from the perspective of the Survey's targets: the women who would or had produced even more Queenslanders. It seems that domestic science supporters thought that new women were fine so long as they maintained modest ways alongside their traditional interest in marriage and motherhood and channelled any 'new' ideas into the manner in which they cared for their future families, and it does seem that in

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³⁰ Ibid.

²⁸ Overseas lobby groups were eventually powerful and organised enough to hold conferences such as those presented under the banner of the World League for Sexual Reform in the late 1920s. See Chapter Six for more on sexual naïvety.

²⁹ Elizabeth Helsinger, Robin Lauterbach Sheets, and William Veeder, *The Woman Question: Society and Literature in Britain and America, 1873-1883*, New York, 1983 in DeFrancis, 'The woman question: a multi-faceted debate', p.166

that respect, they had little cause for concern. Northern women's ideas about the value of marriage as a social statement did not alter discernibly in the period up to and during the 1920s. Wedding practices however did change, alongside fashions. Both developments worried social commentators, as did the increasing ease of obtaining a divorce. Eugenists were divided about the racial costs or benefits of the latter, which actually affected only a small part of the childbearing aged population, but there seemed more cohesion in disquiet about broader developments.

Fashion changes had deeper implications than just being representative of cultural shifts, because dress conventions and hairstyles had provided the means to identify a female's legal maturity. Barbara, born in 1895, entered the workforce between 1909 and 1911, and left her work as a sales assistant in 1916 to prepare for her wedding.³¹ In those years, a young woman's age was apparent even to strangers, and the transitions equally patent. Thus,

when you turned 21, everybody then those days, down went your skirts to the ankle, and your hair went up. You wore your hair down low, you know, with a big black bow at the back of it... but it was always down.... Then, when you were 21, your hair went up: everybody knew when you were 21...³²

These signifying events changed radically within the decade after Barbara left the outside work-force: hemlines rose, and after leaving school, girls and women of diverse ages wore their hair 'shingled' or 'bobbed' to suit close-fitting hats. With its devotees in their shortened locks and often seen in dresses that promoted 'the boy look' (which included naval-style collars and flattened chests) female fashion pretended at being masculinised and militarised in the early post-Great War years. In fact, dresses clung or draped more revealingly, and underwear accordingly became softer and more flexible, creating a need for subtler menstrual accessories. As age and marital status became less obvious to strangers, perhaps the increasing number of twenty-first birthday notices in 1920s newspapers provided another way to announce adulthood, but the press also heralded and inspired other changes.

As they marketed the 'new' or 'modern' clothes, accessories, cosmetics and leisure activities that she should adopt for the sake of personal development and increased domestic efficiency, every press reference to the 'new' type of woman emphasised her

³¹ NOOHP, ID 3, 6 - 3

³² Ibid.

novelty as they drew her attention to her appearance, accessories and lifestyle. It was not selfish to focus on oneself: rather it was a good thing to appear healthy rather than wan, to have a slender and sporty rather than full-figured physique, and thus demonstrate an overall *joie de vivre*. This may seem to be a challenge to the Victorian middle-class ideal of the self-less woman, sister and mother whose spiritual enrichment came from service to others. However, the idea of 'self' was a marketing tool for commerce and for advocates of domestic science and scientific motherhood. The notion of woman as unselfish nurturer was not lost: during and after the Great War, it intensified. With the addition of the concept of the female patriot, devoted to the economy and the nation, the altruistic ideal endured, cloaked in the notion of responsibility for personal health, hygiene and development for the sake of one's family and as a positive example to society. That does not mean that women left the kitchen or the nursery: in fact, the servant-less wife or sister's domestic location became more identified with those two areas.

Although patriarchal authority retained its dominance, some renegotiation of family structure was inevitable at this time. George Howard observed changing dynamics in 1909, noting that 'More and more, wife and child have been released from the sway of the house-father and placed directly under the larger social control.' This may have been a pessimistic perspective before the changes brought by the war, but Howard was certain that:

Through a swift process of individualization for the sake of socialization the corporate unity of the patriarchal family has been broken up or even completely destroyed. The new solidarity of the state is being won at the expense of the old solidarity of the family. The family bond is no longer coercion but persuasion. The tie which holds the members of the family together is ceasing to be juridical and becoming spiritual. More and more the family is dominated by the sociogenetic or cultural forces.

Cultural forces also generally made middle-class parents responsible for the provision of opportunities for their daughters. Reminded of that social responsibility as the meaning of 'opportunities' changed from that of helping her encounter eligible males to imply instead the opportunity for employment and independence, they faced losing some parental power when they did so. It was a dilemma: protect vulnerable daughters

³³ George Elliott Howard, 'Is the Freer Granting of Divorce an Evil?', *AJS*, vol. 14, no. 6, May, 1909, pp. 771-2

by keeping control of their social life or free them and hope that common sense would prevail – coerce or persuade. That separate life concerned many parents, for it meant that people and ideas outside of the home might influence their daughters.

Challenges to the old model of familial adult supervision of young women are particularly evident where working daughters are concerned: by the 1920s education for girls generally extended to at least fourteen, and for the next few years or even longer, a girl would stay at home to 'help' her mother. This practice enabled supervision of pubescent and unmarried girls for a variety of reasons, including its economic benefits. Anna Spencer noted in 1914 that:

The social requirement that girls and women should labor at useful employment between the days of their schooling, whether those days be long or short, and the days of their marriage, is as old as peaceful industry itself. Except for an almost negligible minority of the privileged classes, unmarried girls and married women have never been allowed to "idle". They have had less time for recreation allowed them than boys and men have secured for themselves. They have never had a chance to go a-fishing in house-cleaning time, nor to limit their labor to an eight-hour day. Moreover, their work-capacity has always been counted as a part of the family treasury. ³⁴

In Queensland by about the age of sixteen or seventeen, a twentieth century girl might go 'out' to work; as the years passed, this became even more likely. Employment options such as domestic service in a private home or hotel, or as a sales assistant required no additional training; the reverse was generally true for more skilled occupations such as stenography, but secretarial courses (whether government or privately operated) and broad employment choices were available only in the larger centres. By the 1920s, some young women regularly studied or worked away from home, boarding privately or in boarding houses that consequently came under increased government and municipal scrutiny. They were not always well-operated, but enabled work away from home.

³⁴ Anna Garlin Spencer, 'Marriage and Social Control', *The Harvard Theological Review*, vol. 7, no. 3, 1914, pp.325-6

³⁵ The *Bulletin* noted in 1924 that 'The Health Department had already taken action to see that Boarding House proprietors conformed to the sanitary regulations.' See *Townsville Daily Bulletin*, January 5 1924, p.3. According to O'Hanlon, 'boarding' or 'guest houses' accommodated 'between 5 and 10 per cent of the population in most Australian cities' until the interwar years; see Seamus O'Hanlon, ""All found' they used to call it": genteel boarding houses in early twentieth-century Melbourne', *Urban History*, vol. 29, no. 2, 2002, p.240 ³⁶ Gorman spoke of 'those numerous so-called boarding houses, noted for their lack of hygiene, heat and overcrowding. A prolonged residence in any of these places tends to make the person discontented and unhappy, while the badly cooked unappetising food is the cause of

Parental authority could continue in such environments, transferred to boarding house managers or relatives as the case may be: for example, young women in boarding houses were generally subject to strict rules of conduct.³⁷ Nonetheless, independent living meant that young women wearing remarkable new fashions could go on outings together, without parental supervision in a freedom and independence enhanced by the increasing availability of motor vehicles. Freedom could be sexual: Spurlock and Magistro remark that in the U.S.A, 'socializing among young people in mixed groups and as couples on private dates had become acceptable in most social circles'; unchaperoned courtship could develop into a sexual as much as romantic exploration, with 'petting' accepted by many young women as either an indication of their commitment to the male, or as part of their independent right.³⁸ For most young women, marriage (as the badge of the adult woman) remained the ideal, yet in the interval between their leaving school and receiving the social mandate of marriage, their lifestyles created concern. There was, as Smart remarks, a 'girl problem', and it had a direct relationship to eugenics.³⁹

Smart suggests that social changes brought about by the Great War created a real and newly apparent social arena for young women because wartime work had 'normalised' their public presence. 40 Young working-class girls, less attracted to

indigestion and dyspepsia'; she meant Cairns, and noted also that the 'nurses in charge of the Baby Clinic in Cairns found it impossible to obtain board of a suitable nature under three guineas (£3/3/) per week... there are hundreds of girls willing to pay 35/- to £2/2/- per week for suitable board and yet cannot obtain it....'; by contrast, two Townsville hostels for young women provided 'good nourishing food and had facilities for rest and recreation'. Report, pp.18-19. The Townsville Daily Bulletin often ran advertisements from women wanting private board within walking distance of the business district; they generally read along the lines that 'A young business lady desires board and residence with refined family...' and 'Respectable young lady wants board and residence with private family...'; see Townsville Daily Bulletin, April 25 1924, p.2; April 29 1924, p.2 for these examples; there were two or three a day from women in 1923-4. Health Department rules may have inspired a rush on registration in 1922: there were thirteen 'Lodging Houses' registered with the Townsville City Council in 1922, and forty-four in 1923. Townsville Daily Bulletin, January 5 1924, p.3

³⁷ But some obviously managed to flout them, as shown by stories of pregnancy and abortion in a Cairns boarding house in NQOHP, ID 53, 122-6

³⁸ John C. Spurlock and Cynthia A. Magistro, "Dreams never to be realized": emotional culture and the phenomenology of emotion', Journal of Social History, vol. 28, no. 2, 1994, p.296. Pollock described petting as one of 'two recent words of the "flapper" period', the other being 'necking'; the terms, he said, "apply rather to transitory engagements in sexual excitations with the one happening to be nearest at hand or most readily available.' F. Walter Pollock, 'Courtship Slang', American Speech, vol. 2, no. 4, 1927, p.202

³⁹ Smart, 'Feminists, flappers and Miss Australia', p.1

⁴⁰ *Ibid.*, p.2

domestic service, grew more visible to middle-class reformers who became concerned about their private activities. The concept of adolescence had entered science, literature and society in about the 1900s; Wegs saw it as a development of 'the fear engendered by the growing numbers and perceived precocity/independence of working-class youth in the urban environment' and thus applied in terms of the working class. Eleanor Cohen found gender to be more of an issue, arguing that adolescent discourses referred primarily to males. This was not apparent in reports of the Secretary for Public Instruction in Queensland, where there was no differentiation between male or female students in remarks on the challenges of adolescence; in 1927, for example, L.D. Edwards (as Chief Inspector of Schools in Queensland) noted that:

In Queensland, as in other countries, the nineteenth century may well be regarded as the century of the child. Owing to the attention that is now being devoted in different parts of the world to the problem of secondary education, "The Journal of Education and School World" considers that the twentieth century will be the century of the adolescent. 43

Male or female, the adolescent body bothered medical and educational authorities; as Smart notes, adolescence was perceived as 'a dangerous and inconvenient period'. 44 Even contemporaries saw it as 'not the loveliest or the happiest period either in human or professional life', but, as Isabel Stewart commented, it was 'still a time of great promise, ushering in full manhood or womanhood. 45 Adolescence therefore marked a potentially troubled passage to social and sexual maturity. For reformers, youth promised hope and advancement, but the transition period could easily be marred. Smart shows that when reformers worried about the 'girl problem' in Australia and overseas, their expectations of the new generation were inseparable from eugenist anxiety about young female sexuality at a time of perceived racial crisis. 46 The Commonwealth and Queensland governments shared these concerns. White Man in the Tropics ignores them – it had no need to raise them in its work of positively displaying women's lives in tropical Queensland.

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Abert Wegs, 'Review of Neubauer, "The Fin-De-Siecle Culture of Adolescence", *Journal of Social History*, vol. 27, no. 3, 1994, pp.625-628
 Eleanor Cohen, 'From solitary vice to split mind: psychiatric discourses of male sexuality

⁴² Eleanor Cohen, 'From solitary vice to split mind: psychiatric discourses of male sexuality and coming of age, 1918-1938', *Australian Historical Studies*, vol. 30, no. 112, Apr 1999, pp.79-95

⁴³ QPP, 'Report of the Chief Inspector of Schools', Report of the Secretary for Public Instruction, 1927, p.43

⁴⁴ Smart, 'Feminists, flappers and Miss Australia', p.2

⁴⁵ Stewart, 'The Evolution of Nursing Education', p.422

⁴⁶ Smart, 'Feminists, flappers and Miss Australia', p.2

NQOHP women as they recalled their younger days did not seem concerned about their sexuality or racial potential, yet most of those cited in this work worked outside the home at some time. ⁴⁷ As Barbara showed, outside work had various motivations. Some young women worked for financial independence while contributing to household economy; some parents gave back only a stipend and retained the bulk of their daughter's (and sometimes, their son's) wages. Others asked either for a token or realistic amount of board. Parents encouraged their daughters to save towards their wedding; many contributed to their own trousseau. Engaged or courting women often worked to save for a house – many paid their new home off before their marriage, or only married after they accomplished home ownership. One Oral History participant tells of using her wages only for her trousseau; encouraged by her parents, another used all of her savings in a pre-wedding holiday. Overall, nearly all of the women in the oral histories considered saw economic as well as social benefits in working outside. Still, while many experiences were common, the path to full adult and womanly status was as likely to have been a uniquely individual journey.

As did most of her peers, Barbara left school at fourteen; about a year later, probably late in 1910, she found employment at McKimmin's store: as a large retail business with separate departments attended by polite and subservient young women and some boys, all supervised by capable mature female or stern male section heads, it was a modern department store. Her life in the period between starting outside work and her 1916 marriage reflected pre-war fashion and conduct mores. Her commencement pay in the haberdashery department was half a crown a week: five years later, her pay had risen to twenty-seven and sixpence a week, and she had 'four girls and a boy underneath me.' She worked hard at McKimmin's: the hours were long, and the work involved periods of standing interspersed with frequent ladder-climbing. All the merchandise was kept in 'big green boxes' on shelves behind the counters, and sales staff had to 'climb these little ladders and pull them down, put them on the counter.'

⁴⁷ These women's histories were useful because they worked outside, but that they did was coincidental to other shared and different experiences and should not be taken as evidence that all young women did so. Employment details of sixty-six NQOHP women born between 1884 and 1923 suggest that about one-third (26) never worked outside the home: 13 of the latter were raised on farms and worked on them, but this meant they did not leave parental control. For the known outside workers, there were many variations in age, location and social status. ⁴⁸ NOOHP, ID 3, 6-2

⁴⁹ Ibid.

Once the customer left, staff had to tidy and replace the boxes. After her engagement, as was usual, Barbara withdrew from the workforce to 'stay home for a while' as she prepared for her wedding. This custom prevailed through to the late 1920s, but other rituals changed alongside the fashions that had sustained them. Thus, when she began work, Barbara wore 'short skirts. You had uniforms of course. We were in... navy skirts and white blouses. Short.' Her twenty-first birthday was marked by her proud attendance at work the next day with hair upswept and ankle-length skirts; with their higher hemlines and shorter hair, the move into legal and formal adulthood would be less apparent for many of the women who followed her.

However they changed, such passages retained importance. For Barbara and many other women, social stages emphasised their femininity and appeared critical to their womanly identity. For most, consequently, marriage was not subjugation but privilege: it brought a status (and power) unattainable in any other form of male/female relationship. The expectation that males were the main providers probably placed pressures upon husbands and fathers, particularly so in times of economic depression: failure to adequately provide or to be the sole provider, even in a Depression, reflected the individual rather than the broader economic situation, making a man who struggled or failed 'a poor sort of man.' This may be a uniquely urban concern; the situation could have been different for primary producers. However, if it was true of all groups and classes in urban areas, then even when additional income might make a difference to the family's overall wellbeing, early twentieth century males faced a loss of masculine standing by permitting their wives or daughters to work for non-philanthropic reasons.

Use of the word 'permitted' above is deliberate: while young men and women today generally expect to achieve and exercise autonomy once they achieve legal adult status, parental authority continued for much longer in the times concerned. Parents taught children to respect their judgement: the Oral Histories contain many examples of mature daughters who were saddened by a parental decision but still complied or gave a good enough appearance of compliance to be able to maintain positive

⁵⁰ *Ibid.*, 6-3

⁵¹ A man who 'let' his wife go out to work because of their financial situation was 'a poor sort of man.' NQOHP, ID40, 94-1

relationships. Outwardly, at least, despite the concerns of critics, this was an obedient society. Similarly, by present standards, the apparent choice of no-choice-but-marriage for females may appear oppressive. Nonetheless, few Oral History women expressed frustration with the restrictions imposed upon them, and in each case, they related such regrets to having been unable to pursue or develop a higher education. Marriage was a preferred and almost inevitable outcome of maturity for 1920s women, but was not essential to being a complete woman so long as single women displayed other feminine or maternal traits that demonstrated their ability to nurture and serve.

Grace is an example of a woman who lived on the edge of several social norms, but apparently managed to combine her independence and difference with some degree of deference to 1920s mores. Born in 1900, she entered the workforce at fourteen. Over the next twenty-eight years, unlike most of her Oral History peers (who tended to work for one or few employers) Grace worked for a number of companies, moving from one to another as circumstance or personal preference dictated, and leaving the workforce at times to stay with her mother. She remained single until a brief marriage in 1942.⁵² On several occasions, Grace experienced psychological problems; as a woman from a time when society normalised female emotional lability, she spoke freely of her fragility. In choosing whether or not and when to work outside, Grace assumed, resumed or discarded the role of spinster-daughter. In this way, she was able to take advantage of changing attitudes to women and work during the 1920s and 1930s: for the middle class daughter, work was more an option than necessity and where there was no pressing economic need to work outside, the home was a socially legitimated haven. When she did work outside, Grace often travelled; as a commercial traveller, many of her workmates were male. The recorder expressed some surprise at her autonomy, but Grace argued that her experiences were not unique for single

⁵² NQOHP, ID48, 111-2:4. A year after the marriage, and eleven days after the death of her mother, Grace with some difficulty delivered her only child. Eight months later, one of her brothers died. The shock, she said, was too much, so she 'transferred down' (from Cairns) to live with another brother. Grace's husband accepted work in New Guinea, where he died eight months later: she remained a sole parent. After World War Two, she 'lost some popularity' when she would not drink with her male work mates.

women.⁵³ Her general conduct, she said, reflected the fact that she had been 'well brought up.,54

Some women saw conformity as a burden at times but may have felt they had few choices other than to accept their filial duty in their society. 55 Sarah (born 1899) exercised some of those limited choices. She did not seem to mind having to leave school in Charters Towers at fourteen to help her mother, who had had 'a breakdown', but by the age of seventeen was 'tired of being home' with her mother, and went to Technical College in Townsville. 56 The remainder of the family moved to Townsville not long afterward.⁵⁷ At college, she took a secretarial course because she did not want to work behind a counter, and eventually obtained employment at a plumber's office, where she worked until her 1923 marriage.⁵⁸

Daisy S (born 1885) wanted to work, but her 'dad' (stepfather) preferred her to stay home because he worried that people might think he had made her work outside. She left school by choice at fifteen, and despite dad's concerns, took a 'place' not far from home as helper to a couple with four children. This type of work was socially and paternally acceptable: as a nurturing occupation, it reinforced feminine stereotypes, and Daisy remained with the family for five years. She married at 23, in 1908. Her stepfather worried that her husband would not be able to provide for her, and so opposed the marriage that he did not speak to her for seven years. He eventually softened, and on his deathbed, told Daisy that she had been a wonderful daughter, because she never answered back. This remark surprised her, she said, because she had never answered anyone back. 59 Yet, as in the case of working away, Daisy told of

⁵³ *Ibid.* Grace's older sister by nine years involved herself busily with church activities but did not engage in paid work; she remained single.

⁵⁴ *Ibid.*, 111-6

⁵⁵ See Laura Doyle, 'Of Race and Woman: Eugenics, Motherhood, and Racial Patriarchy' in Laura Doyle (Ed.) Bordering on the Body: The Racial Matrix of Modern Fiction and Culture, New York, 1994, pp. 10-34. Changing notions of obedience and womanly duty in this period as seen in Pentecostal religion in the U.S. are of interest for their relevance to the religious and other personal beliefs of the wider society: see Vivian Deno, 'God, authority and the home: gender, race, and U.S. Pentecostals, 1906-1926', Journal of Women's History, Autumn, 2004, vol. 6, no. 3, pp. 83-106

⁵⁶ NOOHP, ID51, 118-2

⁵⁷ *Ibid.*, 4:6 ⁵⁸ *Ibid.*

⁵⁹ Ibid.

several occasions where she challenged his authority: Daisy managed to assert herself and achieve her own way without recourse to direct argument.

A woman who did answer back sometimes was Florence (Florrie), born in 1896 to an invalid and sometimes violent father and a hard-working mother. 60 Her povertystricken family apprenticed her to a shirtmaker at fourteen, but Florrie was actually working at the age of eight – she wanted to go to the convent school, and ran messages for a local doctor to pay her school fees. Pregnant at 15 and a young mother during the 1920s, Florrie married and divorced violent men twice and supported herself and her children for twelve years between marriages. In and out of marriage, she sewed (as a dressmaker and piece-worker), held sewing classes, grew and sold vegetables; kept boarders (up to eight at one time), bought property and raised her two surviving sons. She knew 'plenty' of women who went out working after marriage, mostly as washerwomen. 61 Marriage it seems provided Florrie with social credibility and enhanced her self-esteem but offered no financial improvement, and she ultimately chose not to be taken advantage of by her husbands. She tells the story of her life with drama, conviction and wry insightfulness; balancing indignation with humour, she emerges as a strong and resourceful woman who challenged social mores. 62

Another Townsville identity seemed removed from such struggles. In her Oral History account, Nellie described the pleasure she found in her marriage and the opportunities (such as travel overseas) that it brought. Nellie clearly saw herself as an individual and achiever in her own right rather than as Mrs Dr. Breinl; she refused to discuss her husband and referred the recorder to other sources on him as she spoke of her own experiences of Townsville. 'We did things in a fine way in those days', she said; with 'help' in her home (a housemaid, a cook and a gardener that the couple 'had to' employ) because they 'entertained a lot'. 63 Nellie was fortunate: marriage was not always a fulfilling experience, and not always endured in such cases.

⁶⁰ *Ibid.*, ID 13, 35-1:6; 36-1, 2 ⁶¹ *Ibid.*, 36-6

⁶² As a paternal aunt may have done. Florrie told of an older half-brother from her father's 'first marriage'. Her father had two surviving children when he married Florrie's mother, but the names do not match: the 'brother' was born to one of his sisters, with no father recorded. ⁶³ NOOHP, ID 20, 51-4:6

For many women, marriage was a keenly anticipated and authenticating experience and when they accepted an offer of marriage, they planned their wedding carefully. Once a courtship moved into this quasi-legal state, the couple considered the economic needs of beginning married life as much as the emotional. In North Queensland, and probably elsewhere, the wedding itself might therefore not take place until a home was fully or partially paid for; this might take several years. When it did so, invited guests were generally restricted to close rather than extended family, and several close friends. A Bulletin report on the Ahern-Peut wedding (an event of 'considerable interest') remarks that 'only immediate friends' were present at their wedding in the drawing room at the rural property of Leslaw Downs, but these seemed to be parents, aunts and uncles rather than outsiders. Those unable to attend, or uninvited, sent telegrams, and the entire wedding party and guests fitted into three cars. ⁶⁴ Other reports varied slightly, but it seems that the average North Queensland wedding was more a time of shared family celebration than society event.

Nevertheless, even small weddings at this time attracted criticism.

Ideas and practices associated with marriage seemed to change alongside other early twentieth century developments. In 1912, a Chinese observer summed up Western families and societies simply: for Li Yieni Tsao,

The society that is based upon the old, is conservative. This is true of China... The society that is based upon the young, is progressive. This is true of the West. In China the young obeys the old, in the West the old yields to the young... Chinese home-life emphasizes solidarity... Western home-life emphasizes individualism. The Chinese family is a co-operative community which necessitates a constant self-sacrifice. The western family is an independent unit which develops a self-reliant aggressive spirit.⁶⁵

Two years later, Howard remarked that:

individualization for the sake of socialization, although attended by some temporary evil, is producing a loftier ideal of the marital union and a more just view of the relative functions of the sexes in the world's work. Immediately, from the very nature of the process, it has inured most to the advantage of the woman. In the family, it is releasing the wife from the husband's hand and making her an even member in the connubial partnership...⁶⁶

⁶⁴ Townsville Daily Bulletin, April 1 1924, p.6

⁶⁵ Li Yieni Tsao, 'The Life of a Girl in China', Annals of the American Academy of Political and Social Science, vol. 39, China: Social and Economic Conditions, 1912, p. 62

⁶⁶ George Elliott Howard, 'Changed Ideals and Status of the Family and the Public Activities of Women', Annals of the American Academy of Political and Social Science, vol. 56, Women in Public Life, 1914, pp.29-30

Career women, he continued, were not avoiding marriage but marriage where they lost their hard-won independence and entered into 'a sort of purchase contract in which the woman barters her sex-capital to the man in exchange for a life-support.' Eugenic marriage was different by Howard's standards: it was part of 'woman's fierce revolt against the ancient, man-made standard of the sex relations'. In the old 'double standard of sex morals', in prostitution, a lowered age of consent and the 'conspiracy of silence' about 'venereal disease', the modern woman saw personal degradation. Consequently:

It is in this connection that the new movements for sex education, sex hygiene, and eugenic marriage disclose their chief meaning. Hence they are invariably an accented part of the equal suffrage program. Two things are urgently needed in the process of socialization: that the woman should have an opportunity to do a full share of the world's work; and that the man should take a full share in the work of the home. It is very true that woman's place is in the home. It is not less true that man's place is in the home. But the home is not merely a house, a physical dwelling place. It is a psychic, a spiritual fact; a group of ideals, relations, activities. ⁶⁷

Other commentators agreed. Anna Spencer maintained that:

What is really happening is that the marriage ideal is becoming more and more exacting in the consciousness of both men and women; and that more and more freedom of choice, both in taking on and in giving up marriage ties, is operating to forbid content with less than the most satisfying relationship between men and women. ⁶⁸

Emily Balch saw positive changes for the best of the race:

It does seem to me that there is a certain turn of the tide already in the upper layer, measuring by social and moral refinement; that there is a good deal of force making for a greater desire for marriage, and happiness in marriage, and for larger families. ⁶⁹

This desire, she argued, was fine, so long as any marriage was a eugenic one. In society's 'criminal neglect of eugenics' and its relevance to 'the future of our children, the happiness and betterment of our race', marriage was being entered into thoughtlessly. ⁷⁰ Another commentator echoed eugenic concerns about marriage: as society went on in a 'happy-go-lucky slip-shod way', and couples became parents,

⁶⁷ *Ibid.*, p. 37

⁶⁸ Anna Spencer, 'Marriage and Social Control', p. 327

⁶⁹ Emily Balch, in Frank A. Fetter; William B. Bailey; Henry C. Potter; Emily Balch; I. M. Rubinow; C. W. A. Veditz; Walter E. Willcox, 'Western Civilization and Birth-Rate – Discussion', *Publications of the American Economic Association*, 3rd Series, vol. 8, no. 1, Papers and Proceedings of the Nineteenth Annual Meeting, Providence, R. I., (December 26-28, 1906), 1907, pp. 102-3
⁷⁰ *Ibid*.

Backeland argued, they jeopardised the 'health and happiness' of their children and grandchildren by their eugenic 'carelessness' in leaving mate selection to 'the whim of chance' instead of 'orderly, careful and methodic selection' of the people 'physically and mentally best fit for ennobling' the race. He also blamed popular culture for distracting people from their racial responsibilities, because:

under the name of belles-lettres our thoughts are still further perverted in prose and in rhyme by romantic novelists, who in their own way write on the subject of love and marriage.⁷¹

Romantic novelists however seemed to have found a resonant chord with couples who neglected their eugenic responsibilities, and sought instead marriages where sexuality and romance combined with shared interests to increase the likelihood of an enduring and rewarding relationship.

The 'new emotional standards and expectations' of marriage continued through to the 1920s; Spurlock and Magistro argue that they 'distinguish the 20th century from the Victorian period.'72 Young twentieth century Americans wanted romantic love but did so according to their culture; in place of the Victorian model where an engaged couple gradually came to know each other, the young 'embraced consumer choice', expecting to somehow find 'the right person' during their social activities. 73 In a world where every day showed improvement in some aspect of life, they would not suffer any less than the best and would not settle for the first available partner: engagement followed romance rather than inspired it. Concerning the actual wedding ceremony however, changes had been underway for much longer: from the 1850s onward, weddings had become more public. In general, this meant that a greater number of guests attended them, although there were practical and economic limitations to the length of guest list. ⁷⁴ There was also a contentious escalation in the habit of providing gifts.

⁷¹ L. H. Baekeland, 'The Danger of Overspecialization', *Science*, New Series, vol. 25, no. 648, May 31, 1907, p. 853

⁷² John C. Spurlock and Cynthia A. Magistro, "Dreams never to be realized": emotional culture and the phenomenology of emotion', Journal of Social History, vol. 28, no. 2, 1994, p. 295 ⁷³ *Ibid*.

⁷⁴ Roman Catholic families might use a 'chapel' created on a farm. 'Breakfasts' might be at home, or a hotel or café and ranged from small ('dainty cakes') to feasts, the latter likely with farm weddings, where the guests overnighted. Guests sang Ave Maria at Catholic weddings. Wedding cakes ranged from one to three tiers. Speeches and toasts began with a 'toast to the Bride and Groom'. Miscellaneous conventions followed the groom's response, with toasts such as 'To the Pastoral Industry', 'Absent Friends', 'Local Authority', and (with the Great War a

Consumerism created dilemmas for those who saw it as a challenge to the ideas of hard work and restraint. Vicki Jo Howard argues that 'ministers, college teachers, reformers, and editors set the boundaries of nineteenth-century public discourse on consumption'; complex and showy weddings with gift-laden tables challenged the whole idea of middle class moderation and attracted strong criticism. ⁷⁵ Practices differed according to ethnicity and class; in this way, Howard contends, weddings were 'layered with conventions that reproduced social hierarchy'. ⁷⁶ Increased giftgiving also inspired new wedding rituals, with etiquette guides appearing in newspapers and magazines, and model weddings described in fictional works, creating a discourse that was 'part of a larger critique of wedding consumption.' 77 Gift display raised critical ire; in America details of the more expensive gifts appeared in newspapers. The same applied in Australia.

At a national level, 44,731 Australian couples married in 1922. Of these, 8,445 females were under twenty-one years of age; six were 'spinsters' over sixty-five. Most grooms were between the ages of twenty-five to twenty-nine, while (according to the Bulletin) 'most of the spinsters and widows who forsook their state of single blessedness during the year did so when they were between 20 and 24 years'. ⁷⁸ These figures must have been welcomed by retailers engaged in catering for marriage needs. For most 1920s North Queensland couples, gifts were practical or decorative, or both - only parents provided expensive presents such as furniture, and after years of building a trousseau, the bride should already have basic linen and kitchenware. The fine china, ornaments, dainty linen and crystal however came from others. Mr and Mrs Stanbrook, a Townsville couple who held their wedding breakfast at her parents' home in 1924, received 'many handsome presents.' The bridal couple also might exchange and give small gifts as mementos, as seen with another Townsville couple

fresh memory) 'The Anzacs', Celebrations concluded with the National Anthem. The Wedding March was played as the newlyweds left for their honeymoon: most homes in those times had a piano or other musical instrument. The bride in the case of afternoon or evening weddings changed from her wedding dress into evening clothes for the reception. See for example The Townsville Daily Bulletin, April 1 1924, p.6 and those previously cited.

⁷⁵ Vicki Jo Howard, "The Evil of Elaborate and Showy Weddings": Taste, Power, and Consumption at the Turn of the Twentieth Century,' Mickle Street Review, no. 14, Summer 2001, http://www.micklestreet.rutgers.edu/archive/ Accessed June 8 2007 ⁷⁶ Ibid.

⁷⁷ *Ibid*.

⁷⁸ The Townsville Daily Bulletin, January 10 1924, p.10

⁷⁹ 'Boyett-Stanbrook', *Townsville Daily Bulletin*, April 1 1924, p.6

who married that week. The *Bulletin* reported that John Ahern presented his new wife, Edith, with 'a xylonite manicure set, initialed in blue enamel: her gift to him was 'a pair of xylonite gent's military hairbrushes, in case.' ⁸⁰ Advertisements for Xylonite goods appear near the wedding reports: perhaps it is just that xylonite was popular. The groom also gave the 'chief bridesmaid' a 'xylonite hand mirror' and the 'second bridesmaid' a xylonite hair brush: for Barbara Penner, this was no coincidence.

By the 1870s, Penner argues, 'almost every detail' of a wedding celebration, from jeweller to florist, and general retailer to caterer, 'represented some kind of commercial transaction', and jewellers were just some of those who met and created need. This practice as it emerged in Australia was particularly offensive to Jessie Ackermann, who had lauded the 'sound common sense' of Australia's 'brand new girl in the process of evolution' at the end on the nineteenth century. Ackermann found that rather than all being agents in the evolution of a 'new social order on democratic lines', many young women trod:

the same old disgustingly false and unreal social highway of past, decayed and buried generations, growing, if possible, more commercial, more selfish, and rejecting all sense of great responsibility. 83

Their weddings were 'coarse and commercial in the extreme', and 'gazed upon by the thoughtless and vulgar who are, neither by tie nor sentiment, in any way connected with the occasion – just curious'. Worse yet, gifts were 'ticketed and placed on view' to create an 'indecently commercial spectacle'. She would have been more irate by the 1920s, when the *Bulletin* reported any wedding it could in its Ladies' pages. Moreover, the practice of giving money seemed entrenched: at least among those whose weddings graced the social pages, the guests often presented the couple with cheques. In the Ahern wedding, the bride's mother gave the bride 'house linen'; the bride's father gifted the 'furnishing of residence; the mother of the bridegroom gave a 'handsome dinner set' and the couple received 'numerous presents' that included

^{80 &#}x27;Peut-Ahern', ibid.

⁸¹ Barbara Penner, "A vision of love and luxury": the commercialization of nineteenth-century American Weddings', *Winterthur Portfolio*, vol. 39, no. 1, 2004, pp. 1-21

⁸² Ackermann, Australia from a Woman's Point of View, pp.206-7

⁸³ *Ibid*.

⁸⁴ Ibid.

⁸⁵ *Ibid.*, pp. 209-10

'cheques totalling over £150'. ⁸⁶ John also received money from his Railway Department workmates in Julia Creek prior to the wedding when they 'organised a social in his honour in his home, at which he was presented with a wallet of notes.' ⁸⁷

Queensland brides-to-be may also have had a Kitchen Tea a few weeks before their wedding: it was another event that provided retail opportunities. Sarah was married at 23 in 1923 and lost the chance for hers: most people had them, she said, but she was 'down south' and only returned a week before the marriage. Refer mother thought she needed a holiday and persuaded her to go before the wedding, as she 'hadn't had a decent one' since she started work, and had holiday money to spare. Refer the couple was 'unofficially engaged' for a time; after the engagement became public, Sarah wore her ring for nine months. They were married at her local church, then went straight to their new house: Sarah was proud that they 'had a lot of the house paid off' before the wedding. The waiting period (during which Sarah could continue to work and clearly benefitted from doing so) allowed them to enter a marriage with financial security.

Stories of weddings and wedding dresses figure prominently in the Oral Histories referred to in this work: the women's memories of their weddings were clear, and any irritations or disappointments still as salient for some as the sheer romanticism of it all was for others. Elizabeth, for example, enjoyed talking about her 1912 wedding: her account of the events surrounding her courtship and nuptials occupied three of the eight tracks of history she recorded in her nineties, over seventy years after the event. She had anticipated her wedding since childhood, she said, when she began to build her trousseau. Her wedding dress was made of 'figured silk' that her future husband saw, liked and impulsively bought for her. A dressmaker friend made her dress, with matching slip. The slip had a 'beautiful kilty' on the bottom with a flounce to hold the skirt out; the dress had a silk cord around the waist, with silk tassels. There was a square train at the back, with guipure about four inches deep around the edge. Elizabeth borrowed her veil from her sister, and carried a horseshoe decorated by Florrie's sister, a milliner. She lived and worked in Townsville but returned to

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⁸⁶ Townsville Daily Bulletin, April 1 1924, p.6

⁸⁷ *Ibid*.

⁸⁸ NOOHP, ID51, 119-2

⁸⁹ *Ibid*.

⁹⁰ Ibid.

Charters Towers for her wedding at the family's church there; a reception at home followed. As usual, the newspaper reported it. Her grandmother had returned to Charters Towers to live with Elizabeth's family; she rented the newlyweds her house in Townsville's West End with furniture intact.⁹¹

Some women had less communal weddings. No family came to Isabella's: there were 'family troubles', she said. ⁹² It is safe to assume that these concerned Isabella's choice of husband, who she met while he was still married: at her mother's invitation, he and his wife stayed at Isabella's home for a while. His wife, she said, turned out to be an alcoholic, and 'drove him nuts'; she eventually 'went south'. ⁹³ Robert took custody of the children after his 1923 divorce, and soon married 32 year old Isabella, who at 34, in 1925 bore their only daughter. ⁹⁴ Isabella's reticence could be expected: divorce was a public event, reported on the *Bulletin*'s court report page alongside criminal behaviour. ⁹⁵ Perhaps some endured unhappy marriages rather than face exposure. Other marital dramas also made good copy; the Press did not hesitate to reveal the most tragic details if available, and the public seemed to relish them. ⁹⁶

Divorce laws in Queensland, indeed, in most of Australia, followed an English model for most of the nineteenth century, but as Governments began to debate facilitation of divorce in the late nineteenth century, they encountered resistance from social forces such as the church and middle-class organisations dedicated to preservation of the sanctity of marriage on biblical or social grounds. In England and Australia, women developed a louder voice and the beginnings of an economic presence after the turn of the century, and marriage law changes were slow but inevitable. Similarly, U.S.A laws

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⁹¹ *Ibid.*, ID227, 43-5:7; 44-2

⁹² *Ibid.*, ID64, 139-2, 3.

⁹³ Ibid.

⁹⁴ *Ibid*.

⁹⁵ Petition for Divorce, *Townsville Daily Bulletin*, March 15 1923; Notice of Decree Absolute, *Townsville Daily Bulletin*, June 27 1923

⁹⁶ On March 19 1924 the *Bulletin* reported on a 'Post mortem conducted on Mrs Gardner Palmer, who was found dead at the National Hotel on Monday. Deceased was 21 and had been married only six months.' It was, they noted 'Death by cyanide' and a 'glass with cyanide was found on the washstand.' Three days later, they published further: 'A Young wife's Suicide. Some pathetic letters.' This informed the public that the inquiry produced letters showing that Elizabeth Charlotte Palmer 'committed suicide because of her husband's supposed affair with Beulah Shepherd, with whom he had been seen lunching at the Geisha Café'. On April 2, 'A large crowd' attended the 'sensational inquiry.' *Townsville Daily Bulletin*, March 19 1924, p.4; March 22 1924, p.4; April 2 1924, p.4

changed according to popular demand, leading to debate about whether divorce was a good or bad for eugenic futures. In 1909, George Howard complained of the U.S.A that

Divorce is about three times as frequent as it used to be. This is the salient fact. In Europe, too, while the *number* of divorces is relatively small, generally the *rate* is rising. Clearly we are face to face with a phenomenon, huge, portentous. ⁹⁷

It was portentous because divorce, Howard considered, threatened the 'marriage institution.' He would prefer there to be no divorce, and saw marriage as the problem; like others, he felt that too many entered into it thoughtlessly: 'We are far more careful', he added, 'in breeding cattle or fruit trees than in breeding men and women.'98 In response, Edward Ross scorned the right of the church to rule on divorce, and disagreed with the church idea that divorce laws encouraged divorce, for 'divorce is not a monster going about breaking up happy homes. No harmonious union was ever ended by divorce.' The security of children was a concern, but less of an issue for older couples; 'is it not rather presumptuous', he added,

for society to tell two middle-aged people, probably without young children, who, after twenty-one years of experience, agree they would be happier apart, that it knows better than they do what is best for them? ⁹⁹

The solution lay in ensuring that more marriages were happy, and stayed so. This could be facilitated by:

- I. Instruction of girls in domestic science, housekeeping, etc.
- 2. Systematic instruction of the youth of both sexes in the ethics and ideals of the marriage relation.
- 3. Safe-guards in custom, perhaps in law, against the marriage of pure women to men tainted with venereal disease.
- 4. Marriage only at place of residence of one of the parties.
- 5. Repudiation of the "common-law marriage".
- 6. A filing of declaration of intention to marry not less than (say) six weeks before the issuance of a marriage license. (Statistics show that the success of a marriage is in direct relation to the length of time the parties have been acquainted before marriage.)
- 7. Where the volume of business warrants it, the creation of special divorce tribunals on which women shall sit as well as men. ¹⁰⁰

⁹⁷ George Elliott Howard, 'Is the Freer Granting of Divorce an Evil?', *AJS*, vol. 14, no. 6, May, 1909, p. 766. His italics.

⁹⁸ *Ibid.*, p. 775

⁹⁹ Ross, in Howard, 'Is the Freer Granting of Divorce an Evil?', p. 793

¹⁰⁰ *Ibid.*, pp. 793-4

The apparent gender equality of the last suggestion lost some valence in its opposition to the first: that domestic science instruction could improve the state of a marriage, and that marital accord consequently depended upon the level of domestic expertise possessed by a wife – but this was racially important. 'The permanence of the marriage relation', added J. P. Lichtenberger of New York City's Bureau of Social Research, 'will affect not only the birth rate, but the matter of race culture as well.' ¹⁰¹

Queenslanders embraced divorce with enthusiasm. Free to enter new relationships, many remarried, which may not have been as detrimental to the birth rate as Lichtenberger feared. The state's population increased by roughly 52 percent between 1900 and 1930 but its divorce rate increased by over 640 percent, most of which occurred after the Queensland government's 1922 amendment to the *Marriage Act of* 1864. In 1924, the *Townsville Daily Bulletin* seemed amused by this:

Allowing, cynics would declare, hope to triumph over experience, 2,935 widowers and 574 men who had been divorced remarried during the year. Of the brides, 3,225 had been at the altar previously, but had subsequently been divorced or left widows. Two widows and one divorcee under 20 years were married. 103

Despite their relaxation, the laws could still measure a woman's moral capacity to provide care, for the male in a divorce might gain custody of his children if he could prove the female to be an unfit mother. Children may have suffered regardless.

In 1925, Groves argued that 'To avoid divorce, marriage must, in these days of psychic cravings, develop into a human relationship that contains much more than sex.' These were ideals. Most ordinary people in the 1920s knew little about their sexuality anyway, and entered marriage hopeful that where there was love, marriage would endure. Some married recklessly, but did so also because society expected that where women and sexuality were concerned, goodness and marriage went together.

¹⁰¹ J. P. Lichtenberger, 'The Instability of the Family', *Annals of the American Academy of Political and Social Science*, vol. 34, no. 1, 1909, pp. 97-8

¹⁰² Enacted in 1923, the *Matrimonial Causes Amendment Act* allowed for divorce because of adultery by either party, or (after five years) for desertion. See No. 38 *Matrimonial Causes Acts Amendment Act* 1923 13 GEO 5 1922

¹⁰³ Townsville Daily Bulletin, January 10 1924, p.10

¹⁰⁴ Ernest R. Groves, 'Social Influences Affecting Home Life', AJS, vol. 31, no. 2, 1925, p. 236

The situation in the case of the divorce between Oral History participant Mary Jane's parents is unknown: Mary Jane's mother chose not to attend court. Her husband won custody of their two small children, left them with his sister at Charters Towers and went away to work. Mary Jane had been born in 1907. Her mother remarried in Townsville in 1910; Mary Jane did not remember her and at any rate was told she was dead. 105 In 1918, Mary Jane's aunt and father argued, and the aunt told Mary Jane that the two of them were going on a holiday. They travelled by train, and just before they arrived at Townsville, Mary Jane learned not only that her mother was alive, but that she was going to live with her. The aunt was travelling on: she put the eleven-year-old in a taxi, and sent her to her new home – almost. The taxi dropped her at an apparently deserted Cluden race track, a few miles short. Terrified, the youngster found a man getting manure from the stables, and he took her to meet her new family, who were just as surprised. It was, Mary Jane said, 'overwhelming'; suddenly, she had a mother, two half-brothers and stepfather: 'I didn't even know I had a mother... and then to come to a total stranger!' She 'got used to them after a while', and liked farm life. 106

Mary Jane's aunt had run a boarding house, and in a Dickensian way, Mary Jane had provided unpaid labour, waiting on tables and working long hours. It was different at her new home: she loved her new school, enjoyed helping her stepfather with dairy chores and later married the son of her mother's close friend. 107 The story might have had a worse outcome. Mary Jane suffered emotionally, but adjusted: with such an uneven distribution of power and the trauma of removal, others might have not. Since it effectively did no more than provide the right to punish or remarry, divorce provided a legal rather than economic or social solution to marital problems. For many eugenists, it was a social problem with direct racial repercussions.

Social factors considered, it is unsurprising that many divorcees remarried. A woman who remarried might become dependent on a male again, but gained obvious economic benefits for herself and any children. Money was not all: marriage also offered companionship and societal validation. When it lacked solace or status,

¹⁰⁵ No divorce records were found, but the mother's remarriage is recorded. NQOHP, ID 43, CD100-1

¹⁰⁶ *Ibid*.

¹⁰⁷ *Ibid.*, CD100-4

brought penury rather than financial security, involved cruel treatment or lacked sexual or emotional exclusivity, some people might have endured potential humiliation, but a few would not. All of these elements were factors in Florrie's marriages and divorces.

Florrie's first marriage ended because of his cruelty, perpetual unemployment, drunkenness and adultery – more than enough grounds for the courts. ¹⁰⁸ It is logical to assume that the emergence of more tolerant views of divorce as much as the laws themselves encouraged some petitioners, although Florrie waited until the Amendments, then acted swiftly once they were passed. Yet, her next marriage was to another violent and idle man. Eventually, she walked away. Some years after her second divorce, a local GP who had supported Florrie's grounds of violence asked why she married such a person: Florrie told him she was sick at the time, her mother had died and 'no-one seemed to give a hang' about her. 109 She had been on her own for twelve years, and he wanted to get married. She soon found out he did not want to work, was a 'womaniser', and expected her to keep him. She suffered the situation until after World War Two, when she left after experiencing a severe beating. Despite her first experience, Florrie risked marriage again for the sake of economic predictability and companionship, and found that an inadequate basis. Others may have endured such unsatisfactory situations; some clearly did not, but the romantic novels and movies in which girls and young women saw marriage depicted did not contemplate an unhappy outcome. Rather, patience and tolerance remained the media keys to the marriage fairy tale. 110

A 'Woman Solicitor' writing in the Australian Woman's Mirror in 1928 asked

Did they really marry and live happily ever after? Or did the fairy stories and the novelettes make a vast assumption the falsity of which we have not till today been willing to face? We do not know; but this we do know – the tragic

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¹⁰⁸ NQOHP, ID 13, 36-2

¹⁰⁹ *Ibid*.

As for example in a 1923 Patho film starring Creighton Hale and Marguerite Clayton. According to its promotion, *Women Who Wait* told the dramatic story of 'a woman's love that waited and burned as a harbor light'. Theatregoers could also see a less idealistic story of love and marriage in *The Lonely Road*, starring Katherine MacDonald. *Lonely Road* was 'the story of two women – two roads – two destinies. The by-way of love after marriage – Romance, when illusions are gone.' *The Townsville Daily Bulletin*, April 1 1924, p.3

ending of the modern love-story is too often "And they were divorced and lived happily ever after." ¹¹¹

The writer remarked further that:

Divorce is an evil: everyone admits that. But sometimes it brings partial happiness in the place of total misery and makes the life of the parties, if not successful, at least tolerable. 112

Echoing earlier observations of modern women's changing expectations, a *Townsville Daily Bulletin* contributor that year acknowledged that 'these are difficult times for matrimony', firstly because women unfairly compared their husbands to the charismatic characters they saw 'on screen', and secondly, the young married woman expected more of her marriage considering the independence that she lost in the 'dreary pretence of well-being which was her Victorian sister's concession to respectability.' It is the woman with possibilities of independence', it suggested,

who flounders most openly on the shoals of matrimony. Perhaps the fact that she does flounder openly is all to the good: it means that there are fewer white sepulchres than formerly – fewer women clinging to their husbands because they lack either funds or initiative to leave them. ¹¹⁴

Considering those possibilities, the writer thought that marriages which survived must be unions 'kept alive by affection and mutual inclination', not convenience.

Marriage for emotional and economic security did not guarantee happiness, but for a woman without personal or family wealth or support, the alternatives might be social isolation or even penury at a time when society expected a husband to meet a woman's needs. The trade-off by present standards was subjugation; by 1920s standards, for most women, there was no loss – marriage was an honourable medium through which to achieve and maintain wellbeing. Late nineteenth and early twentieth century white society placed its women centrally on a stage where the act of being woman framed the acts of keeping a house and caring for one's existing or eventual family. There were advantages in that attention, for as the rituals of adolescence, courtship and marriage re-emphasised women's social, economic and racial

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¹¹¹ "And They Lived Happily Ever After". Notes on Australian Divorce Laws, with Special Reference to N.S.W. by a Woman Solicitor', *The Australian Woman's Mirror*, vol. 4, no. 8, January 17, 1928

¹¹² Ibid

^{113 &#}x27;View on Matrimony', Townsville Daily Bulletin, November 26, 1928, p.8114 Ibid

importance, they brought social, economic (and for eugenists) racial benefit. Although critics of the New Woman uneasily perceived social freedoms that potentially provided young single girls and women with social and sexual opportunities previously only available to the married (those whose conduct monitoring had moved from the hands of their parents into those of a husband) Oral History accounts suggest that many fears about 'tubelike and shingled' flappers were unfounded.

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Figure 1: Annie Gorman (centre front) at her Graduation, 1918; Robert Longhurst, In the Footsteps of the Mercies, 1992

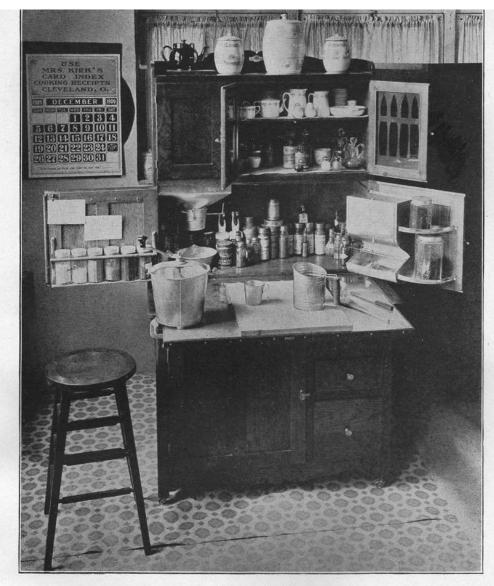


Figure 2: 'Sir Raphael West Cilento, 1923', State Library of Queensland

SOCIOLOGICAL INVESTIGATION.

	piers						Environmental Circumstances.
No.	Names.	Age.	Sex.	Years in Tropics	General Health.		Kitchen: Stove Recess? Ventilation? Ceilinged? On hot side of house?
							Water laid on? Gas? Light? Relation to dining-room and wash-house Servery window? Unnecessary walking? Rubbish shoot? Ice chest? Meat safe? Convenient dresser? Are safes, &c., away from walls? Are perishable foods covered? Proper supply utensils? Condition? Yard: Condition? Paths to outhouses? Drainage? Roof gutterings:—Good? sagging? broker Is house on piles? Sub-space clean? Do mango trees overshadow house? Are tanks screened?
							Housewife's Domestic Knowledge: Is tinned food the staple? Household economy? Household sanitation? Division of working day?
	Mother's kn	nowled borne	ge of	Domesti ises, Fr	c Scien	ce : (Info	unt Welfare, Cookery, Sanitation, Inse
(2)	Mother's kn	nowled;	ge of	Domesti	c Scien	ce : (Info	unt Welfare, Cookery, Sanitation, Inse
(2)	Mother's kn and dirt Are there of Nos. of	nowled borne uny 2n	ge of disected or cards	Domesti uses, Fr	c Scieninance:	ce : (Infa	unt Welfare, Cookery, Sanitation, Inse

Figure 3: Index Card, R.W. Cilento, The White Man in the Tropics and its Dependencies, 1925, p.76



(Photographed especially for this book.)

NO. 6. A KITCHEN CABINET AND CONVENIENCES IN A MODERN KITCHEN.

In the kitchen most women take too many steps in preparing meals or doing their ordinary baking. Much of this work may be accomplished while sitting on a stool which should be in every kitchen. Besides showing all the conveniences gathered in one spot for comfortable working this illustration shows utensils in readiness for bread making—the bread mixer to the left. Note the accurate measuring cup which is divided into halves, quarters and thirds and is very important to use in all cooking. In fact, there is no such thing as luck in cooking in these days and accurate measurement is absolutely necessary. With all supplies and utensils in one place much labor and drudgery are saved in the kitchen. Note Recipe and Expense Cards at left.

Figure 4: The ideal domestic science kitchen. Alice G Kirk, 'The People's Home Recipe Book', in R.C. Barnum (ed.), *The People's Home Library*, 1910 (1922 edn), photo. no. 6

Care of the Baby.

MOTHERS! NURSE YOUR BABIES ON THE BREAST.

They will not then Die of Summer Diarrhoea.

BABIES GET THIRSTY IN HOT WEATHER.

Give them Cold Boiled Water.

BATHE CHILDREN FREQUENTLY ON HOT DAYS.

In Cool Baths.

COMFORTERS MUST NOT BE USED.

FLIES CARRY DISEASE GERMS; PROTECT THE MILK FROM THEM WITH MOSQUITO NETTING.

DON'T OVERFEED. MORE BABIES ARE INJURED BY OVERFEEDING THAN BY UNDERFEEDING.

REMEMBER-NEVER WEAN BABY BECAUSE THERE IS NOT ENOUGH MILK IN THE BREAST.

Give what breast milk you have regularly every 3 or 4 hours, and make up the deficiency with diluted cows' milk. Cows' milk and breast milk may be given together quite well if you give baby 3 hours to digest the cows' milk. Do not substitute cows' milk for one or more drinks from the breast during the day, for if you do you will lose what little breast milk you have; give that little every 3 hours and it will then probably increase in quantity.

DON'T WAIT UNTIL BABY IS VERY ILL BEFORE SEEING YOUR DOCTOR.

Figure 5: Queensland Baby Clinics, ca 1924. Courtesy Nick Shailer.

BABY ASKS FOR FAIR TREATMENT.

Do you know what your Baby would say to you if it knew how? LISTEN—

- Please let me sleep in a cot all to myself and keep my window open. Let me out into the open air as much as you can. I love to be outside, so long as I am kept sheltered from cold winds, and don't have the sun shining on my head.
- Please let me have loose clothes, as I love to throw my arms about and kick with my legs. Give me a warm bath every day, and let me splash about as much as I like.
- 3. Please nurse me yourself (as God meant you to) until I am nine months
- 4. Piease feed me regularly every three or four hours during the day, but don't let me get into the habit of being fed at night, for this is the time I want to sleep, and my inside wants to rest too.
- 5. If you must give me a bottle, remember to clean and boil it every time; and don't give me bought milk without scalding it first, and then keep it in a col place and covered from flies until it is wanted.
- Please don't give me all the foods that your friends advise, or I am afraid
 I shall be very ill. If you want advice, go to your doctor or the clinic
 nurse, who understand babies.
- 7. Please don't teach me the bad habit of sucking a dummy, for I find it so hard to give it up. If you have started me on a dummy, don't dip it into honey or anything sweet, because I always get sick if I am fed on sweets all day long, and don't dip it into giveerine and borax, because that is a slow poison.
- 3. Don't keep on giving me doses of castor of or elive oil; olive oil often makes me feel sick, and castor oil riways makes me constipated. Don't worry me with teething powders: I can cut my teeth much better without them.
- 9. Don't get impatient with me because I cry. Sometimes I cry because I am hungry, sometimes because I have a pain inside of me, sometimes because I am not well and feeling cross, sometimes only because I want my own way. I always have a reason for crying, which I can't tell you, but which you can find out by taking a little trouble.
- Please don't let everybody kiss and cuddle me; they give me colds and eoughs and sore throats. I think that is too bad.

GIVE HIM A FAIR DEAL



Figure 6: Queensland Baby Clinics pamphlet, ca 1924. Courtesy Nick Shailer

'Innocent, not ignorant': sexual knowledge and conduct for white and northern white women

Mothers generally are not acquainted with the fact that a terribly large percentage of Australian boys and girls of tender years... unconsciously suffer from sins which may be wisely, carefully prevented by them.

Hannah Chewings, 1891

Woman, by virtue of motherhood is the regulator of the birthrate, the sacred disposer of human production. It is in the deliberate restraint and measurement of human production that the fundamental problems of the family, the nation, the whole brotherhood of mankind find their solution.

Havelock Ellis, 1920

These pestilent little societies should be suppressed.

Alfred Jefferis Turner, 1936

Regardless of their adoption of new fashions and ideas, marriage remained important enough for the majority of young women in 1920s North Queensland to exercise caution in their pre-marital conduct. Yet, according to contemporary accounts and supported by NQOHP evidence, they did so with little understanding of their sexuality or the processes of human reproduction. Young people such as these concerned sex reformers, who believed that sexual naïvety contributed to unwanted pregnancy, an increased likelihood of contact with racially damaging sexually transmitted disease, and eventual marital discord; they wanted sex education delivered especially to girls and young women, but also wanted all young people to learn about contraception. The whole idea of sex reform worried some groups: they feared that an informed youth would be more promiscuous, with the result that sexually transmitted infections would increase, and inflict racial damage. Anti-reformers also predictably opposed contraception, which was a contentious issue for pro-reform groups too. While most eugenists agreed that the situation was different for the least racially fit members of society, some argued that restricted reproduction by the racially fittest improved the chance of their survival as well as that of their babies; others saw child-bearing as a responsibility of the racially fit and worried that the young and hedonistic would embrace contraception out of selfishness at a time when the race most needed more

white children. Diverse in their opinions and methodological ideas, but committed to solving problems they considered to be of critical racial importance, sex reformers faced many challenges.

Developing in importance in the late nineteenth century, sex reform movements had continued and intensified in the first decades of the next, becoming a central issue for racial purists, natalists and women's rights supporters alike in Anglo-American and some European countries. Indeed, in those science-saturated days, the matter of sexual relations broadened altogether; from being a moral issue decided by religious authorities, they became the subject of social and medical research, inspiring the emergence of experts in sexology. ¹ Earlier discussions framed in terms of medical expertise had created categories of sexuality, and now that normal and abnormal sexual conduct had been defined and labelled, it was left only to promulgate these new understandings and perimeters of sexuality to the wider public through how-to-do manuals for the married couple.² Such publications explained human biology in generally basic terms as they accentuated the physiological and emotional benefits of sexual satisfaction for the wife; at the same time, they subtly kept her as recipient rather than instigator in her sensual but virtuous marriage, and most emphasised the importance of racial purity.³ Nevertheless, these books and pamphlets were for the married or almost-married couples who were fortunate or brave enough to obtain them: before one could think of acquiring a manual, one first had to know that there was something to learn, and for this, sex reform was essential.

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¹ Graham Hart and Kaye Wellings, 'Sexual behaviour and its medicalisation: in sickness and in health. (Education and Debate)', pp.896-901. The authors note that although some medical doctors researched and published as the interest in sexuality developed, it was mostly 'liberal intellectuals' who made the larger impact.

² *Ibid.* For example, the notions of homosexuality, heterosexuality, hysteria and nymphomania emerged as specific expressions of physical and mental health. Importantly, Hart and Wellings add that 'The long tradition of representing illness as a punishment for sin was continued when sexual behaviour was medicalised and transformed into morbidity.' Consequently, most such publications included warnings against perversity alongside means to control and prevent such evils as masturbation. Cohen provides an informative Australian perspective on such medicalisation: see Eleanor Cohen, 'From solitary vice to split mind: psychiatric discourses of male sexuality and coming of age, 1918-1938', pp.79-95; see also Alison Bashford and Carolyn Strange, 'Public pedagogy: sex education and mass communication in the midtwentieth century', p.71 for sex-education precedents.

³ For a useful insight into these developments, see Elaine Showalter, *Sexual anarchy: gender and culture at the fin de siècle*, New York, 1990.

There is no evidence of racial prejudice in the activities or memoirs of nineteenth century English sex education pioneer and neo-Malthusian Annie Besant, who with her friend Charles Bradlaugh had been concerned about the potential psychological traumas of entering marriage uninformed and the right of women to make choices about their fertility so that they would not be 'mere nurses of children throughout the whole of their active life'. 4 Other activists shared Besant's desire for women to have access to information about contraception and to contraceptive devices, but such ambitions were pointless when the majority of unmarried and many married women had little or no understanding of their sexuality or sexual processes. Late nineteenth century parents, religious and political leaders generally preferred it that way, and campaigners in Britain and the U.S.A battled to change societal attitudes to sex education for girls and women. Because of their support for women to access information on contraception, Besant and Bradlaugh faced (and successfully fought) an obscenity trial in London in 1877; this action inspired them to found a group for supporters of neo-Malthusianism when seeking support for their trial – it was known as the Malthusian League.⁵ In the U.S.A, Victoria Woodhull, similarly motivated, faced prosecution under the Comstock Act (1873) which prohibited the carriage of any contraceptive information or device.⁶

The situation, motivation and approach to sex reform but not the level of concern varied in Europe. Reformers in France began their work earlier and also struggled to achieve their objectives. Mary Lynn Stewart maintains that sex education programs and literature in France preceded Anglo-American incentives by at least a decade and argues that activities differed in several ways from those in Anglo-American societies. These are firstly that reformers directed their efforts primarily towards bourgeois girls; secondly, that mothers were the targets of sex advice that would help

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⁴ Nancy Folbre, 'Sleeping beauty awakes: self-interest, feminism, and fertility in the early twentieth century. (Part III: rethinking markets, rationality, and choice)', *Social Research*, vol. 71, no. 2, Summer 2004, p.347, cites Angus McLaren, *Birth Control in Nineteenth-Century England*, London, 1978, p.179

⁵ However, they maintained that the League did not represent their personal religious or political views. See D'Arcy, 'The Malthusian League and the Resistance to Birth Control Propaganda in Late Victorian Britain', pp.429, 432

⁶ Folbre, 'Sleeping beauty awakes: self-interest, feminism, and fertility in the early twentieth century', p.347

⁷ Mary Lynn Stewart, "'Science is Always Chaste": Sex Education and Sexual Initiation in France, 1880s-1930s', *Journal of Contemporary History*, 1997, vol. 32, no. 3, pp.381-394. The first manual urging mothers to sex-educate their daughters appeared in France in 1865.

them coach their daughters and thirdly that French activists complained that mothers delayed informing their daughters until the wedding. This latter point must at any rate have given French girls a knowledge advantage over those in Britain, Australia and the U.S.A who mostly received no such advice; regardless, sex reform activists in all these places focused on the need for much earlier sex education. Stewart continues that there was intense competition between secular and religious experts in France, divided over who should take responsibility for the extent of sexual knowledge that young women possessed, and that, finally, in contrast to Anglo-American assumptions that both bride and groom would be virginal, French grooms were assumed to be sexually experienced. Several French activists with medical backgrounds were acknowledged eugenists, most however were hygienists and natalists, all of whose fears of sexually transmitted disease coincided with worries about female physical trauma and contentious arguments that marriages were richer (and, by implication, more fertile) when women were sexually aware and content.

Dickinson provides insights into German ideas about sexuality through his focus on the middle-class German male, whose sexual conduct came under intense scrutiny in times of fear about national and racial deterioration; demands for sex reforms followed – the latter, as Kosta notes, coincided with the emergence of the apparently sexually active New Woman. Brandhorst argues that Malthusian concerns dominated early sex reform initiatives in Holland, where early twentieth century women's rights activists initially focused on prostitution controls and provision of legal rights and services for unwed mothers more than matters of sexuality; they interested themselves more in sex reform after the 1930s. In Spain, early twentieth century activists were primarily concerned about the right to divorce; although they differed widely in their attitudes to other aspects of legal and social reform, a desire to see marriage law

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⁸ Ibid.

⁹ Ibid.

¹⁰ Edward Ross Dickinson, 'Sex, Masculinity, and the "Yellow Peril": Christian von Ehrenfels' Program for a Revision of the European Sexual Order, 1902-1910', *German Studies Review*, vol. 25, no. 2, May, 2002, pp.255-284. Perhaps such activities were timely: by the 1920s, the German New Woman may have been more sexually aware than the older generation was comfortable with, as shown in Barbara Kosta's study of a contemporary novel. See Barbara Kosta, 'Unruly Daughters and Modernity: Irmgard Keun's *Gilgi-eine von uns'*, *The German Quarterly*, vol. 68, no. 3, Summer, 1995, pp. 271-286

World League for Sexual Reform', *Journal of the History of Sexuality*, vol. 12, no. 1, 2003, p.42

changes was common to organisations that might promote feminism, sex or prostitution reform, or have issues in regard to mental health and eugenics. ¹² Sex education was also an issue in at least one known Asian location, with nationalism a prominent motivator in a Japan that embraced modernity and the sciences as it adopted and promoted new sanitation and hygiene standards for nation building. ¹³ Considering the fears of Asian infringement in Australia, it is curious that mid to late 1920s newspapers (at least in the North) did not focus upon this Japanese interest in building national strength through careful reproduction and better child health; had the Chinese had such a program, the situation might have been different. ¹⁴ At any rate, activities in Britain and the U.S.A are more relevant because of their influence on Australian developments.

In nineteenth century Australia, appeals for the provision of sex education developed from concerns about the moral dangers confronting sexually uninformed youngsters. Ellen Warne shows how as early as the 1890s, the Woman's Christian Temperance Union (WCTU) and the Young Women's Christian Association (YWCA) began campaigns to increase knowledge about human sexuality on the basis that the moral responsibilities of the Christian mother included that of informing her daughters about their biology and its contested potential accompaniment of sexual desire. ¹⁵ Contested inside and outside of various organisations with diverse political and religious motivations, these activities often met social and official resistance and caused

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¹² Thomas F. Glick, 'Sexual Reform, Psychoanalysis, and the Politics of Divorce in Spain in the 1920s and 1930s', *Journal of the History of Sexuality*, vol. 12, no. 1, 2003, pp.68-97 ¹³ Sabine Fruhstuck, 'Managing the Truth of Sex in Imperial Japan', *The Journal of Asian Studies*, vol. 59, no. 2, May 2000, pp.332-358. There appears to be no English-language literature on any early reform movements in other Asian countries, possibly because there were none: see f/n 13 below.

¹⁴ Of China, Harriet Evans notes that late nineteenth and early twentieth century social reformers focused on stimulating changes to customary laws concerning monogamous marriage and sexual equality. To maintain bloodline integrity, ensure heirs and protect property, female sexual conduct before and during marriage was controlled rigidly for centuries; females could not initiate divorce, but could be divorced. Reform activities intensified after the May Fourth Movement in 1920-21 and sex education movements emerged in Communist China during the 1950s, but it seems that open discussion about sexual matters remains restricted because of cultural reticence. See H. Evans, 'Defining Difference: The "Scientific" Construction of Sexuality and Gender in the People's Republic of China', *Signs*, vol. 20, no. 2, 1995, pp.357-394; also, Jonathan Watts, 'China sex education lags behind sexual activity. (Dispatch)', *The Lancet*, 363.9416, April 10, 2004, p.1208

¹⁵ Warne, 'Sex Education Debates and the Modest Mother in Australia, 1890s to the 1930s', pp. 311-327

occasional outrage. Nonetheless, when the public lecture and pamphlet first served as popular media to deliver contentious ideas, then with the progressive popularity of radio and magazines, as well as new ideas about packaging and presentation of contemporary books, activists overseas and in Australia certainly attracted attention. Government and church caution and division over such activism continued for some time, but declining birth rates added new fuel to the debate as the twentieth century dawned, and eugenic arguments for racial preservation strengthened. Consequently, young men and women of the 1920s had a strong chance of encountering persuasive but controversial new thinking about sexuality and birth control: issues of importance to a prosperous, populous, healthy and hygienic White Australia.

It is necessary to return to the nineteenth century in order to understand the pain and passion that motivated characters such as Besant, born in 1847 and married in 1867. Deeply religious and from a conservative middle-class Victorian background, she entered her marriage despite misgivings rather than subject her widowed mother to the social humiliation of having a daughter with a broken engagement. Besant recalled that her mother completely protected her from pain and anxiety in a childhood that 'no knowledge of evil had been allowed to penetrate'; this included keeping her 'innocent on all questions of sex', so that she was 'defenceless to face a rude awakening' when she married: she had 'no more idea of the marriage relation than if I had been four years old instead of twenty'. ¹⁷ 'Perfect innocence', she said 'may be very beautiful' but was 'a perilous possession', and

Looking back on it all, I deliberately say that no more fatal blunder can be made than to train a girl to womanhood in ignorance of all life's duties and burdens, and then to let her face them for the first time away from all the old associations.... Many an unhappy marriage dates from its very beginning, from the terrible shock to a young girl's sensitive modesty and pride, her helpless bewilderment and fear. ¹⁸

¹⁶ Bashford and Strange point out that elements such as packaging, advertising and price played a strong part in the successful dissemination of controversial ideas about sex education. See Bashford and Strange, 'Public pedagogy: sex education and mass communication in the midtwentieth century', p.71. For the importance and use of public meetings in Australia, see D. Goodman, 'Public meetings and public speaking in colonial Australia. Paper presented at a symposium entitled Intellect and Emotion: Perspectives on Australian History [1996: University of Tasmania]', Australian Cultural History, no. 16, 1997-1998, pp.107-126

¹⁷ Annie Besant, *Annie Besant. An Autobiography*, 1893,

http://www.gutenberg.org/files/12085/12085-h/12085-h.htm. Retrieved November 20 2006 *** **Ibid.**

Besant acknowledged that men, with the benefit of education or 'the knowledge that comes by living in the outside world' might 'find it hard to realise the possibility of such infantile ignorance...' in some if not many girls; such assumptions made it even more important for women to inform their daughters. ¹⁹ Neither Besant's marriage nor Christian beliefs survived her traumatic introduction to life 'under the marriage yoke', but both inspired her to challenge Victorian middle-class concepts of good women and to spread some of her ideas in her visits to Australia. Besant wanted other women to learn ways to know and enjoy their sexuality as well as control their fertility and for many years committed herself to changing social attitudes about the sexual education of young women. More than forty years later, another woman came to prominence because of similar experiences.

A lack of knowledge about sexuality was one of the reasons why Marie Stopes (1880-1958), probably the most widely known early advocate of conjugal sexual awareness, was still virginal when her marriage ended. A scientist and university lecturer in palaeobotany, she had little if any understanding of human sexuality when she married in 1911 at the age of thirty-one; the marriage was annulled in 1914.²⁰ In 1918, she published *Married Love, or Love in Marriage*, 'dedicated to young husbands and all those who are betrothed in love' in an attempt to combat a lack of married sexual knowledge and teach married couples to understand, develop and enjoy their sexuality.²¹ The churches shunned the book for some time, but it had begun to gain religious acceptance by 1931, by which time it had sold nearly 750,000 copies in the British Isles and the U.S.²²

Public success of this nature did not mean that there was unanimity among the various pro-birth control and sex education organisations and organisers. Because individual ideas and approaches varied, there was sometimes more collision than collusion. Besant and Stopes were just two women who believed that subtle dissemination of knowledge about human reproductive processes and sexuality would never work in

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¹⁹ *Ibid.* See also Elizabeth Longford, *Eminent Victorian Women*, London, 1981, p.130

²⁰ Marie Stopes International, 'Biography of Dr Marie Stopes',

http://www.mariestopes.org.uk/dr-marie-stopes.htm. Accessed 15 November 2006

²¹ Marie Carmichael Stopes, *Married Love, or Love in Marriage,* New York, 1918. Excerpts at 'Museum of Menstruation', http://www.mum.org. Accessed October 30 2006.

²² Cyril Greenland, 'Dangerous women--dangerous ideas.(Sieccan Newsletter)', *The Canadian Journal of Human Sexuality*, vol. 11, no. 3-4, 2002, p.181

time to spare another generation from ignorance, physical strain and (for Stopes and many others, male and female,) the chance of racial degeneration: the battle had to be fought in the open.²³ Other prominent activists overseas shared Stopes's concerns about widespread sexual naïvety, non-fulfilment and the restraints placed upon women by society. Of these, Americans Emma Goldman (1869-1940) and Margaret Sanger (1883-1966) were well-known, the former more for her anarchist ideas than her considerable support of women's rights in general, and the latter especially for making the expression 'birth control' synonymous with the concept of reproductive choice. Eugenic ideas and eugenists were a presence in many activities of this type, but with the complexity and diversity of racial ideas, it can be difficult to indisputably locate individuals in a particular camp. For example, Esther Katz suggests that while undeniably racist, Margaret Sanger was firstly a supporter of neo-Malthusianism who tailored her speech according to her audience: hence, while she developed an 'extremely problematic alliance... with the eugenics movement', Sanger initially sought eugenist support 'in an effort to gather mainstream support for birth control.'24 Greenland recalled that Stopes, Goldman and Sanger knew each other, but that Goldman and Stopes were 'neither close nor comfortable'; Goldman, he argues, was an ardent Anarchist more concerned about promoting social freedoms such as "free love" and "effective birth control" as basic human rights', while Sanger and Stopes (despite the eventual development of a mutual dislike) were committed to reproductive choice as a means not just of improving married sexual relationships but of improving the white race. ²⁵ Similarly, the London-dwelling Australian doctor Norman Haire's ideas often challenged those of others involved with the British Society for the Study of Sex Psychology (BSSSP) founded in 1913 but all were

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²³ Prominent male eugenics supporters provided valuable assistance to these movements. Havelock Ellis for example communicated and met with Sanger, Stopes and Norman Haire: part of his introduction to Sanger's *Woman and the New Race* heads this chapter. See Margaret Sanger, *Woman and the New Race*, with a Preface by Havelock Ellis, New York, 1920. http://www.gutenberg.org/dirs/etext05/8wmnr10.txt

²⁴ Esther Katz, 'The Editor as Public Authority: Interpreting Margaret Sanger', *The Public Historian*, vol. 17, no. 1, 1995, pp.46-47

²⁵ Greenland, 'Dangerous women--dangerous ideas.(Sieccan Newsletter)', pp.179-186. Goldman did not restrict her commitment to female emancipation to overcoming political oppression; her ideas on woman's right to make diverse choices mirror those of many women's rights and sex education supporters. See her chapters on 'Woman Suffrage', 'The Tragedy of Woman's Emancipation' and 'Marriage and Love' in Emma Goldman, *Anarchism and Other Essays*, 1910. http://www.gutenberg.org/dirs/etext00/nrcsm10.txt For more on Goldman, see Candace Falk (ed.), *Emma Goldman: A Documentary History Of The American Years, Volume 2 - Making Speech Free, 1902-1909*, Berkeley, 2004

devoted to birth control; the BSSSP and Stokes also treated each other cautiously but shared ideas.²⁶

Stopes's eugenic beliefs presented no challenge to the established ideas of white Australia, but her views on female sexuality were not so easy for dignified middleclass women with prim upbringings to absorb. In 1923, the editors of the Mother's Union journal noted resistance to new ideas about female sexuality: 'many good women' they acknowledged, 'would much prefer that the whole subject were ignored and wrapped in silence' because it was 'repellent and irritating'; it was 'indelicate, if not indecent' to openly discuss sex.²⁷ Such women grew to adulthood when Besant's 'sensitive modesty and pride' signified a decent woman and sexual thoughts or practices were repressed from an early age; it was difficult for them to accept Stopes' belief that female sexuality was particularly strong from adolescence, a time when 'dreams and bodily changes' brought 'to the youth and maiden the strange and powerful impulses of sex'; and that although sexual fulfillment had to be learned, these feelings were good and natural. ²⁸ The notion that women were sexual in this way caused discomfort to many WCTU, YWCA and Mother's Union members in Australia; as Warne notes, most acknowledged that sexual desire existed, but could not accept that it might be such an overwhelming feeling in women that it placed them on the same level as animals subject to oestrus. ²⁹ Warne refers to an Australian Stopes supporter and author of a 'sex training' book, Marion Piddington, whose belief that human females experienced innate cycles of sexual desire was too much even for mainstream supporters of sex education.³⁰

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²⁶ See Ivan Crozier, "All the World's a Stage": Dora Russell, Norman Haire, and the 1929 London World League for Sexual Reform Congress', pp. 16-40. The ability to publicise one's ideas and attract comment was obviously important and Haire did this well. He is a central character in Bashford and Strange's 'Public pedagogy: sex education and mass communication in the mid-twentieth century'; they note the later success of his columns in women's magazines and his radio shows.

²⁷ Mothers in Australia, 1923, p.4, in Warne, 'Sex Education Debates and the Modest Mother in Australia, 1890s to the 1930s', p.320

²⁸ Excerpts from Stopes, *Married Love, or Love in Marriage*, http://www.mum.org
²⁹ Warne, 'Sex Education Debates and the Modest Mother in Australia, 1890s to the 1930s', pp. 318-319
³⁰ Ibid Diddington and the Modest Mother in Australia, 1890s to the 1930s', pp. 318-319

³⁶ *Ibid.* Piddington published *Tell Them! Or the Second Stage of Mothering: a handbook of suggestions for the sex training of the child* in 1925.

While many church activists supported the idea that a good woman could think of her sexuality as natural, they also believed that she could and should control sexual feelings. Activists of this persuasion did not envisage sex education primarily as a vehicle to teach young or mature women ways to exercise powerful passions but to understand how conception occurred. With this knowledge base, women could understand and restrain their sexuality as well as become informed about the social, economic and physical consequences involved in failing to do so. Julian Carter notes of sex education activism in the U.S.A that 'The chief message of almost all twentiethcentury sex education amounts to "Just Say No", and it can be said also of Australia that the majority of sex education supporters wanted young women to abstain completely until they had the opportunity to practice sex within the safe confines of a monogamous marriage.³¹ Monogamy was essential to avoidance of the 'contamination' or 'contagion' of venereal disease that Margaret Sanger referred to in a pamphlet as having been acquired by a husband when he was 'out with the boys'; in Sanger's story, this left the sweet and innocent young wife sterile.³² The message to both males and females was one of needless harm, with the blushing and ingenuous girl or woman in possession of the higher moral position against the thoughtless male. Whether in America, England or Australia, activists directed their didactic efforts mostly at women. They worried about middle-class sexuality because of its importance to the perpetuation of a better class of future citizen, and working class sexuality because it needed management for the same reason: in responsible sexual conduct and the avoidance of sexually transmitted disease lay racial betterment.

Concern for racial integrity was as important as the late nineteenth and early twentieth century feminist unease about the subjugation of women: most proponents of sexual awareness and reproductive choice whether they realised it or not (and many did) consequently supported female autonomy in the public as well as intimate aspects of her life, and most espoused eugenic principles in one form or another. Yet despite widespread publicity about the benefits of racial purity, activists faced a societal and religious fight because of the persistence of ideas about proper, godly or womanly conduct shown above and the dominance of concerns about population growth. This

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³¹ Julian B. Carter, 'Birds, Bees and Venereal Disease: Toward an Intellectual History of Sex Education', p.214

³² *Ibid.*, p. 223; cites Margaret Sanger, *What Every Girl Should Know*, New York, 1920, p.60

abrasive conflict between old and new cultural ideas, and fertility control versus population increase, created a conundrum: it potentially made new women responsible for their fertility at the same time as it exposed them to criticism for doing just that. Nancy Folbre notes that Western culture 'seldom condemned men's efforts to postpone or avoid fatherhood, whether through abstinence, delayed marriages, prostitution, or use of condoms'; at the same time, it judged female contraceptive activities as 'selfish violations of female responsibility for others.' Perhaps rather than place the burden of racial security and population growth on Australia's males, it was easier to place responsibility for fertility on its New Woman, and her supposed new sexual openness.

The extent of that openness is debatable in North Queensland. While NQOHP accounts reveal clear concepts of 'good' and 'bad' girls, goodness or badness was not necessarily deliberate; rather, as Elsie realised, supposedly 'bad' women simply might not know that they were engaging in illicit behaviour until there were consequences simply because no-one had ever told them. Uninformed and thus open to abuse or seduction, such girls were 'innocent, not ignorant – they didn't know any better.' ³⁴ All of the women who offered information in this regard claimed to have had minimal or (more usually) no understanding at all of their sexuality prior to marriage. For example, Allie's mother offered neither information nor warning about the physical side of marriage, let alone advice on how to manage her fertility: she 'never told me anything.'35 Similarly, Barbara recalled the way that her doctor had not only to tell her that she was pregnant but how it had happened and what would ensue. Both she and her husband, she argued, had no idea of the outcome when they consulted the doctor about her nausea because 'our parents those days never talked to us... I didn't know. And I was twenty-two!' ³⁶ Florrie 'knew nothing about sex' before she became pregnant at fifteen: when the doctor told her she was going to have a baby, she asked

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³³ Folbre, 'Sleeping beauty awakes: self-interest, feminism, and fertility in the early twentieth century', p.344. Folbre adds that 'J. A. and Olive Banks argue that feminists played little role in promoting birth control in the Anglo-American world (Banks and Banks, 1964). Angus McLaren persuasively argues just the opposite (McLaren, 1978).' Folbre is 'less concerned ... with the mechanics of demographic cause and effect than with the emergence of historical changes in gendered concepts of self-interest.'

³⁴ NOOHP, ID53, 122-6. 'Ignorant' in this case meant stupid, rude or heedless.

³⁵ *Ibid.*, ID28, 67-1

³⁶ *Ibid.*, ID3, 6-6

where it would come from.³⁷ Such innocents worked out the mechanics but failed to comprehend the chemistry; they did not link their physical intimacy to conception.

With such a background, it is no surprise that no NQOHP women mentioned female same-sex relationships or any alternative to heterosexuality. Even if they had, their comments would have to be treated with caution, for sexuality in others was open to interpretation. There are issues in this regard concerning both the cultural movement of terminology and assumptions about female sexuality, which could mask truth through denying it, through seeing it through an alternate lens or not recognising that there was anything to see anyway. The matter of female-to-female sexuality provides an opportunity to demonstrate the complexities of discussing any form of sexual conduct in a society where knowledge was unevenly spread. There were probably some lesbian women in North Queensland, just as there were probably other women who did not fit themselves into convenient (for us) sexual categories. Female conduct perceived as overly masculine raised 1920s suspicions, and heterosexual promiscuity was a significant fear of sex-education supporters, but not the only fear – other (assumed or real) sexual conduct appeared to defy prevailing norms and also worried commentators at the time. A woman who acted or dressed in a seemingly unwomanly way might signify 'female inversion', 'third sex' sexuality or lesbianism to one person and just a mannish woman to another. For example, Claudia Breger's examination of 'female inversion' as shown in early twentieth century literature and discussions reveals 'complex, "messy" scenarios of socio-symbolic labeling'; she notes that it is critical in any discussion about apparently abnormal sexuality to remember that the 'third sex was used not only as a way of theorizing sexual preference and/or as crossgender identification'; women who were "masculinised" by their entry into previously male realms of research and professional life' might be similarly labeled.³⁸

Such a prospect arises from the findings of Megan Elias's research into Flora Rose and Martha Van Rensselaer, prominent American exponents of domestic science who worked and lived affectionately together. While friends, students and colleagues

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³⁷ *Ibid.*, ID13, 36-2

³⁸ Breger, 'Feminine Masculinities: Scientific and Literary Representations of "Female Inversion" at the Turn of the Twentieth Century', pp.76-106. See also Cocks, "Sporty" girls and "artistic" boys: friendship, illicit sex, and the British "companionship" advertisement, 1913-1928', pp. 457-484

openly referred to the women's closeness, they did so without applying labels; hence, Elias can raise the possibility if not probability that their relationship was sexual but cannot discount the cultural acceptance of affectionate female friendship at the time. ³⁹ It was 'not unusual for educated middle class women to live in domestic partnerships' at this time; she adds; doing so allowed them to enjoy the economic and social benefits of sharing a home. ⁴⁰ American psychologist and sociologist Jessie Taft emphasised this practice in 1915; she accepted a family situation between cohabiting professional women that was a 'substitute for marriage', but did not propose that such relationships might be sexual. Taft spoke of:

the tendency of the unmarried woman to turn to other women, to build up with them a real home, finding in them the sympathy and understanding, the bond of similar standards and values, as well as the same aesthetic and intellectual interests, that are often difficult of realization in a husband, especially here in America, where business so frequently crowds out culture. One has only to know professional women, teachers, social workers, doctors, nurses, and librarians to realize how common and how satisfactory is this substitute for marriage. They have worked out a partial solution to their problem in that they have contrived to combine a real home based on love and community of interests with work in the world, but they have solved it at the expense of men and children.⁴¹

It all sounds asexual but for Taft's source for some of her arguments: she cites Edward Carpenter's *The Intermediate Sex. A Study of Some Transitional Types of Men and Women*. ⁴² Carpenter was openly homosexual. Taft herself spent her adult life living with another woman; together they adopted two children. ⁴³ Even a prudish American society however seemed not to question their friendship. Similarly, Queensland

³⁹ M. Elias, "'Model Mamas": The Domestic Partnership of Home Economics Pioneers Flora Rose and Martha Van Rensselaer ', *Journal of the History of Sexuality*, vol.15, no. 1, January 2006, pp.65-88

⁴⁰ *Ibid.*, p.70

⁴¹ Taft, 'The Woman Movement and the Larger Social Situation', pp.330-1

Edward Carpenter, *The Intermediate Sex. A Study of Some Transitional Types of Men and Women*, 1908, in Taft, 'The Woman Movement and the Larger Social Situation', pp. 330-1. For some unsympathetic remarks about Carpenter's work and attitudes to sexuality, see Mary Gilliland Husband, 'Review of Edward Carpenter, Love's Coming of Age: A Series of Papers of the Relations of the Sexes', International Journal of Ethics, vol. 7, no. 3, Apr., 1897, pp. 387-388; also, J. Arthur Thompson, 'Review of *The Intermediate Sex. A Study of Some Transitional Types of Men and Women*', International Journal of Ethics, vol. 21, no. 4, Jul., 1911, pp. 502-503. Biographical details on Carpenter are at New York University, The Tamiment Library, 'Guide to the Edward Carpenter Letters and Postcards 1880-1923', <//d>

//dlib.nyu.edu/eadapp/transform?source=tamwag/carpenter.xml&style=tamwag/tamwag.xsl>

43 See Harvard Square Library, Notable American Unitarians, 'Jessie Taft: Psychologist, Sociologist, Social Work Educator, 1882-1960.

http://www.harvardsquarelibrary.org/unitarians/taft.html

women of the 1920s might accept women we would consider lesbians as different but normal, because it might not occur to them that a relationship between two women could be sexual.⁴⁴ It seems that in 1920s North Queensland, despite the debates and the work of Stopes and others, human sexuality remained a grey area into which NQOHP participant Allie cast rare light.

Born in 1894, Allie married in 1923. Theoretically, she said, there were no contraceptives for women: the ideal was that there was no sex before marriage. This did not mean that all young women complied: there were 'girls who were lucky and girls who were unlucky', and the outcome of being unlucky was a baby. Allie had no such problem: 'at least I was OK. I wasn't interested in sex planning....' Contraception for males consisted of 'French letters', while women had the option of douches supposedly for vaginal hygiene to induce abortion. Knowledge of contraception at any rate was wasted without knowledge about sex: when asked if she knew much before she married, Allie replied that she 'never thought about it. I was too feather-brained.' Regardless, her married sexuality seemed to develop satisfactorily: 'Oh, he was beautiful', she said as she recalled her wedding night.

Parental reticence to inform daughters may have extended to menstruation. Asked whether her mother told her about 'periods', Allie replied that she:

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⁴⁴ It is also likely that some 1920s women lost fiancés during the Great War and remained single afterward. See Katherine Holden, 'Imaginary Widows: Spinsters, Marriage, and the "Lost Generation" in Britain after the Great War', *Journal of Family History*, vol. 30, no. 4, 2005, pp.388-409. The spinster could play a valuable societal role: see Katie Holmes, "Spinsters Indispensable": Feminists, single women and the critique of marriage, 1890-1920, *Australian Historical Studies*, no. 110, 1998, pp.68-90

⁴⁵ NQOHP, ID28, 67-1

⁴⁶ Ibid.

⁴⁷ Around the early 1930s (if not before) Mr and Mrs Gordon of Brisbane sold a Douche kit that consisted of a 'Hot Water Bottle, Vaginal Douche [presumably one of three pictured nozzles], Fountain Syringe and Enema'. A fancier douche was the 'Marvel Whirling Spray Syringe' that consisted of a squeezable bulb filled with mild antiseptic or warm water: connected to a bag that could hold '2 ½ quarts', it whirled as it dispensed its contents and (like many other Gordon products with a strong resemblance to the modern vibrator) may have provided a sensuous experience. Additionally, there were enamel or rubber douche cans, and 'special hygienic tablets' for douching. See Mr and Mrs L Gordon, *Birth Control and Hygienic Counsel. Being Practical Advice, Straightforward as well as Trustworthy Information for the Married and Those about to Marry*, Brisbane, n.d, pp. 23, 26, 27, 38-9.

⁴⁹ *Ibid.*, 66-4

Knew about that... [from] – girlfriends... You learned more from your girlfriends... they didn't come out and talk about things like they do now... Women were kept down.⁵⁰

It seems odd that a mother might not supply or be unaware of her daughter's laundered sanitary napkins: perhaps the orators meant that their mothers did not explain the reproductive implications of menstruation. Susan, born 1892 and married at about the same time as Barbara, remarked that she too learned some details of her physiological functions from other children, but Barbara challenged the idea that friends might supply information about anything related to reproduction or reproductive capability: 'Oh, no, you didn't talk about nothing!'⁵¹ Partially informed, Susan nonetheless knew nothing of contraception at the time of her marriage, she had 'never heard' of it then, but later knew of 'a couple of women' in Townsville who could 'help in that way'. 52 Whether they needed such help because they were 'unlucky' or uninformed, single women risked their social status when they engaged in sexual activity.

The Oral History accounts used imply strongly that women who emphasised their physical attractiveness invited any consequences. Allie suggested that young women would deliberately and knowingly 'paint themselves up'; they had done so 'since time immemorial.'53 This did not necessarily mean that they were dissolute: she added that people in the present were quick to make judgements and to call young women promiscuous:

they say, "she's terrible"; I said, wait a minute, wait a minute.... The girls my days weren't any better. They knew what it was all about. Don't blame the kids of today. If someone was going to have a baby, they were going to have a baby. I mean, they didn't get it from under a cabbage patch... ⁵

Considering that Allie contended that her mother told her nothing about sex, the remark that 'they knew what it was all about' raises the possibility that girls and women could access information when or if they wanted to do so.⁵⁵ As sex education activists contended, knowledge supplemented by discretion could help a young

⁵⁰ Ibid.

⁵¹ *Ibid.*, ID3, 6-6 ⁵² *Ibid.*, ID8, 23-2

⁵³ *Ibid.*, ID28, 67-1

⁵⁵ Equally, it raises the possibility that Allie was following the conventions of her youth in her denial of sexual awareness. This prospect is balanced by her frankness.

woman avoid the dishonour of an unwanted pregnancy but as Elsie realised, it might also exclude the equally undesirable state of forced spinsterhood. She argued that a young woman needed to learn about sex because once it was commonly known that a girl had been sexually active, she 'had no chance of getting a husband. No-one wanted damaged goods. Men can put it over women – a woman is very soft-hearted.⁵⁶ 'In the olden days', she continued, if a girl became pregnant, 'it was dreadful.' 57

Her family disowned her, nobody would help her – and the ones that should help are family. It was a gossip topic. My mother once told a woman to go home and scrub her own doorstep first because she gossiped – she [the other woman] had had to get married herself. 58

Parental concerns about unsupervised unmarried women were realised for one woman and probably more. Elsie knew 'a girl in her late 30s' who had a miscarriage when living in a Cairns hostel; this occurred in the early 1920s, and bothered Elsie: she believed the miscarriage was due to 'not being clean.' Elsie had five children, but no miscarriages; this she attributed to habits of rigorous personal hygiene.

I kept myself clean. In those days girls used to douche themselves – they had a douche can. [They would get] warm water with a little bit of Lysol – I mean, Dettol, and rinse themselves... it cleaned their inners out. 60

Some advice about this type of practice probably came from doctors: based on their accounts, it is difficult to imagine any of these NOOHP women asking their mother for advice on douching. Elsie further believed that innocence based upon parental silence caused some extra-marital pregnancies: adults did not refer to pregnancy near children when she was young, and if a pregnant woman visited, parents sent the children sent downstairs to play. Because of that reluctance to inform young women, some girls ended up 'in the family way to men they were working for as housemaids; working as generals for wealthy men and families.' 61 Since domestic staff generally

⁵⁸ Ibid.

⁵⁶ *Ibid.*, ID53, 122-6

⁵⁷ Ibid.

⁵⁹ Ibid.

⁶⁰ *Ibid.* Dettol was a commercially available antiseptic. Lysol was a cresol preparation marketed for douches from late in the nineteenth century: described as being able to destroy 'germs', which could be a reference to sperm, and 'restore regularity', its advertisers undoubtedly also intended it as an abortifacient. Used also for disinfecting toilet pans, it was probably carcinogenic. See Rachel Lynn Palmer and Sarah K. Greenberg, Facts and Frauds in Woman's Hygiene, New York, 1936, pp. 142-143, at H. Finlay, (ed.), 'Douching with Lysol and Zonite', Museum of Menstruation, http://www.mum.org/facfraud2.htm ⁶¹ NOOHP, ID53, 122-6. A general was a domestic servant who did not specialise as (for

example) a laundry maid, cook or nanny did; rather, she undertook all forms of home work.

lived in, 'men would get to them.' Elsie retained the conviction that 'Ninety per cent of men are animals'; virtue was no defence against testosterone and power. 63

In the event of unwanted pregnancy, a single woman's choices were limited to abortion, infanticide, adoption or marriage. In the case of abortion, Allie claimed that girls from Townsville could go to Charters Towers. She cited a witness in a rape case who said he could 'name half a dozen girls that went up to Charters Towers and got rid of their babies.' ⁶⁴ This was apparently a cheaper option than going to a doctor, where the procedure cost 'about £50.... That was a lot of money... in the 1920s and 30s. They'd say, go to Mrs So and so. She'll fix you up. '⁶⁵ Married women also might have chosen to abort unwanted pregnancies: when Allie was expecting another of her five children, she saw Nurse MacArthur, a respected Townsville midwife, who asked 'Why did you want to have another baby? You should have come and tell me. '⁶⁶ Allie was offended: she was anti-abortion. She was 'not religious', she said, but believed that a child's life was sacrosanct and that God played a part: abortion was murder. ⁶⁷ 'Life was there, otherwise it wouldn't grow,' she added; she felt so strongly about the matter that she wrote a poem about it. ⁶⁸

Susan spoke of women who helped with contraception and named one of these who had mixed up a 'concoction' because her grandchild was getting married: it was 'two strengths of quinine, used strong strength, and cocoa butter', inserted. ⁶⁹ But this matron may have done more than help her immediate family. Susan relayed a friend's story of a discussion overheard between the woman and a Townsville GP, Dr Chapman. Susan's friend, Olive, told Susan that:

Mrs ---- ... spoke to him about birth control, told him she knew what to do; he said she should 'never interfere or touch that sort of thing, you don't know what you're handling'. She said, 'oh, I know what I'm handling – there's no life in it straight away'. He said, 'Mrs ----, have you ever heard of a dead thing coming to life? It's there from the minute of conception.'⁷⁰

63 Ibid.

⁶² Ibid.

⁶⁴ *Ibid.*, ID28, 67-1. Allie did not say when she acquired this information or give its source.

⁶⁵ *Ibid.* The 2001 equivalent of A£50 in 1920 was A\$2319; it was A\$2745 in 1930.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ *Ibid.*, ID8, 23-3 Name withheld.

⁷⁰ *Ibid*.

Since it seems that abortion and abortionists were commonly discussed by sexually active or married women in Townsville and Charters Towers, it is likely that women in these substantial population centres accessed them without great difficulty; the same may not have applied for women in smaller communities.

There was also the option of placing a baby for adoption and more than 65,000 unmarried Australian women chose this course between 1913 and 1922. The 1924 Commonwealth Year Book was pleased to report that 'the number of 'ex-nuptial' births was declining'; after a 'maximum 7,438, in 1913',

the numbers recorded in the last five years have been considerably less than those of the pre-war years. In 1922 there were 6,176 such births, as against 6,582 in 1918... with regard to the number of ex-nuptial births per 1,000 unmarried women (aged from 15 to 43 years) Australia compares more than favorably [sic] with most of the other countries of the world.⁷¹

This might have meant that more unmarried women had discovered means of preventing pregnancy. In the meantime, a significant number of Australian children were considered illegitimate at birth and probably never met their birth parents.

Some of these were born in Queensland. From 1905, Queensland had specific laws in place to protect unwanted children; previously, *The Orphanages Act* 1879 dealt with the regulation of orphanages and individuals who cared for orphans and 'deserted or neglected children under the age of twelve years.' ⁷² Children could be privately placed with families under licence: legally, they retained their name and could not inherit from their carers, but may not have known of their real ancestry. In this time, such children could also be apprenticed; this raised the possibility that they could be exploited as a labour source, and the maximum adoption age changed to five years in 1885. *The Infant Life Protection Act* 1905 was designed to protect illegitimate children further but since adoptions could still be privately arranged, and the parties were not compelled to advise the government, the safeguards were inadequate. The situation supposedly changed when a 1918 edict required adoptive parents to notify the State

⁷¹ Townsville Daily Bulletin, January 10 1924, p.10

Queensland Government, *The Orphanages Act* of 1879; *The Infant Life Protection Act* of 1905. The government carried some of the latter legislation into *The Adoption of Children Act*, 1935. There was also a *State Children's Act* in 1911. See Child Safety Queensland, http://www.childsafety.qld.gov.au/adoption/resources/history/1935_adoptchildren.html. Accessed November 4 2006

Children's Department of an adoption agreement; nonetheless, parties could still make (or claim to have made) their own arrangements. The Act was amended in 1921 so that prospective adoptive parents were assessed, with consent obtained from the relinquishing parent or parents.⁷³

At that point, the Act and amendments officially ended 'private' adoptions where these took place without government sanction, but parents may still have operated independently in seeking adopters. A January 1924 advertisement in the *Townsville Daily Bulletin* 'Wanted' column sought a 'kind person to take care baby girl, six months', while in April another advertiser sought a 'kind person... to adopt baby girl, under 3 months'. With a well-known orphanage in Townsville, neither advertiser was necessarily unmarried nor single but for some reason sought to circumvent the services offered by the state: legislation can attempt but not always succeed in meeting sometimes complex individual needs.

Unmarried pregnant women often also had the option of marriage. This was important where the female was underage: in 1924, police charged Henry Fennel with Unlawful Carnal Knowledge of a Girl under the Age of Seventeen. The 'Girl' in the meantime had become his wife and refused to testify against him; as she was the only witness, the case was discharged, and Fennel escaped punishment. As unpleasant as the public attention may have been, at least Mrs Fennel had her relationship legitimised; a Miss Buglar was less fortunate after finding herself 'in a certain condition' and alone after a liaison with a married man who was unwilling to take responsibility for his actions. (Milford Carvolth abandoned his wife and three children, but returned when the wife had an arrest warrant issued for desertion.) The twenty-year-old Charters Towers woman had her baby and claimed child support but the 'contemptible cur' who was her former partner chose not to pay it; her brother Arthur found him visiting family in Townsville and shot him in the arm, for which he was arrested but

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⁷³ *Ibid*.

⁷⁴ Townsville Daily Bulletin, January 5 1924, p.2; April 14 1924, p.2

⁷⁵ Carnal knowledge was defined under the *Criminal Code Act 1899*. See

http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/C/CriminCode.pdf *Townsville Daily Bulletin*, January 23 1924, p.4; January 25 1924, p.4

⁷⁷ *Ibid.*. January 12 1924, p.4

found not guilty.⁷⁸ Although a wedding was not possible in that case, reluctance to accept responsibility dissipated swiftly when another man found himself confronted by bush justice. Allie cited the case of a Townsville woman who 'got herself in the family way'. The other party to the relationship 'wanted to dump her'; this did not impress the young woman who eventually became a respected Townsville matriarch; she 'got a shotgun and went to him: he married her....'⁷⁹ The marriage endured; Allie saw it as a responsible solution to a problem that arose from carelessness.

Perhaps the woman concerned made an informed decision to engage in sexual activity and risk pregnancy; nonetheless, artlessness and gullibility were undoubtedly factors in some single pregnancies. Despite social activism, the choice of informing a daughter seemed to remain an individual one that was predominantly unchanged during the first decades of the twentieth century. For example, Daisy S became pregnant almost immediately after her marriage in 1908. Daisy was twenty-three years of age, but her mother 'wouldn't let me look at a medical book even after I was married.' Consequently, she had 'no idea what to expect with the baby. I wasn't even allowed to look in the Doctor's book.' As an adult, there were three things she wanted: 'a Bible, a pronouncing dictionary, and a medical book.' Daisy 'found out something by mistake' before she was married: she overheard someone mention 'the whole nine months' about a woman having a baby; that, she said, 'was the first time I knew it was nine months.'

As Elsie's accounts show, some women were more aware by the 1920s, but this does not mean that all were or that anything had changed for the majority of single women. Elsie's wisdom was retrospective. One cannot ask one's mother for advice on sexual matters without their first having been defined, and it is clear from the accounts here that even marriage and thus adult status provided no guarantee that a woman could

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⁷⁸ *Ibid.*, also March 1 1924, p.4. The Judge doubted that 'any man with a heart could have the greatest sympathy for this young man in the dock, or ... anything but the utmost contempt for the man who received the injury, because, on his own account, he was an absolute contemptible cur.'

⁷⁹ NQOHP, ID28, 67-1

⁸⁰ *Ibid.*, ID4, 7-5

⁸¹ Ibid.

⁸² *Ibid*.

⁸³ Ibid.

turn to her mother for guidance. The average young woman in the North might be more innocent than ignorant because she was uninformed. Unless, of course, she was that nightmare of critics of the New Woman and supposed exemplar of the way in which a race could decline: the prostitute.

In the same way that a woman might be categorised because she struck observers as being mannish, the label 'prostitute' could be loosely applied and might often describe women who appeared to be sexually active outside of marriage but did not do so directly for economic benefit, or who appeared to meet popular mythologies of conduct or practices that signified them as socially suspect. The older generation had clear ideas about the way in which a nice woman dressed or wore jewellery, and new ideas were sometimes just too different. For example, rurally raised Daisy K recalled that when an aunt went to a big town to work, the woman's mother 'couldn't grasp that you could go away and get a job and make money.⁸⁴ In those days, Daisy added, 'if you walked out and got a job without your mother's permission, you weren't her daughter anymore: you were a bad girl.'85 To add insult to injury, Auntie Kate

always came home with the most flamboyant clothes you ever saw, hung with diamonds on her fingers, and gold chains enough to choke an elephant – and gran, she hated that daughter of hers because she was like that. 86

Consequently, on one of Kate's visits, the 'old lady' met her at the door and spluttered that 'we don't like molls!'⁸⁷ The aunt's morality was in doubt because 'you weren't considered a good person if you had an extra long row of beads'; for that reason, the grandmother interrogated her daughter: 'where did you get them from, and how much did you pay for them, and are you sure you did, or did somebody else pay for them?⁸⁸

Perhaps Daisy's grandmother was suspicious that Kate might be an 'amateur'; but this did not make her any more socially acceptable than the traditional prostitute. Although as Cilento later acknowledged, 'the professional prostitute plays a very minor role in the transmission of disease', the 'lay belief' about prostitutes held that they posed

86 Ibid.

⁸⁴ *Ibid.*, ID111, 311-2

⁸⁵ *Ibid*.

⁸⁷ *Ibid.* Molls: prostitutes.

⁸⁸ NOOHP: ID111, CD 311-2

threats to racial integrity, national or state growth, public health and overall morality. Regardless, female sex workers were modern women too. Economically, they were also businesswomen working co-operatively or alone in a service industry: as James Mills notes of Philippa Levine's informative study of attitudes and laws concerning sex work, somewhere behind the ideas, legislation and social discourses attached to prostitution and its control were 'traders and consumers'. The interest here is in the traders because (in contrast to the anxiety or disgust that prostitutes inspired in health and church authorities) NQOHP women's references to prostitutes are generally nonjudgmental and even defensive of women who exchanged sexual services for money. Prostitution was an occupation that aroused curiousity; it sometimes produced stories that sound suspiciously like urban myths, but NQOHP orators nonetheless spoke of it as a valid and even socially significant form of work.

Prostitutes usually did not leave a record of themselves as individuals, and generally appear in 1920s government reports only as anonymous and depersonalised contributors to statistics. Perhaps some were as vibrant characters as the flamboyant Japanese woman, Lulu, of Charters Towers, but slipped more easily from public memory; others may have been far quieter in public, but many were evident and identifiable to local men and women. Elsie knew of 'street women' in Ogden Street in Townsville: they 'kept to themselves' she said. Her mother-in-law operated a boarding house in Cairns; Elsie and her husband lived there for a while. 'Street women' was more a term than description; the boarding house was adjacent to a

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⁸⁹ QPP, Report of the Director-General of Health and Medical Services, 1937, p.16
⁹⁰ James H. Mills, 'Philippa Levine. Prostitution, Race and Politics: Policing Venereal Disease in the British Empire, (Book Review)', Journal of British Studies, vol. 44, no. 3, 2005, pp. 596-599. Raelene Francis considers social and economic reasons why some women became 'traders' with such remarks as that 'Women with dependents found it almost impossible to subsist and support their children or other relatives on factory wages, while the logistics of balancing childcare and paid work outside the home were daunting'; and 'No doubt there were also women drawn to the prostitute's lifestyle for its own sake, as offering a more enjoyable and freer way of earning a living than other kinds of feminine work.' A prostitute could earn in one day what another might earn in a week's work at a factory. See Raelene Francis, 'The History of Female Prostitution in Australia', in R. Perkins; G. Prestage; R. Sharp; F. Lovejoy, (eds), Sex Work and Sex Workers in Australia, Sydney, 1994, pp.27-52

⁹¹ Lulu was mentioned by both males and females: see for example NQOHP, ID34, 80-5; ID3, 5-1; ID63, 137-1; ID67, 138-1, 143-5; ID51, 118-3

⁹² *Ibid.*, ID67, 138-2. Tom knew her well because she banked with him: she regularly sent large quantities of money overseas. He maintained that despite her cheekiness, 'nobody looked down on Lulu' because she was always well-dressed, clean, and wore Australian clothes.

⁹³ *Ibid.*, ID 53, 122-5

brothel, and Elsie developed a civil acquaintanceship with the women who came and went there. Early on, she would see them elsewhere in town and greet them politely but was puzzled when the women pretended not to know her: they would turn their heads away. Eventually they asked her not to recognise them in the street in case someone asked Elsie who they were. They were, she said, 'lovely girls'; some were educated, some had children in convents, generally they came from 'the south', although there was a story that one Cairns woman had two daughters working as prostitutes. ⁹⁴ Surely, some were locals, but this is difficult to prove: the real world of prostitution was hidden to most women. One woman spoke of a Townsville identity's daughter who she argued was a well-known prostitute but reduced her story's credibility when she followed it with another that sounded like an urban myth: 'One man went there one night and he was getting his girl, and you know who the girl was? His own daughter....'⁹⁵

Elsie supported her husband's argument that prostitutes met a social need and made other women's lives safer. 'This is life', he told her, as he reinforced the concept of the street or even amateur prostitute:

They have no wives, and a man's a man. He's got to go somewhere. Better to go to them women who have to go to the hospital every month and be examined, to see they have no disease... whereas these ones running around the streets, that's where these people pick the veneral [sic] disease off. ⁹⁶

Elsie added that if there were no brothels, 'girls wouldn't be safe in the streets; men would be raping them everywhere.' ⁹⁷ Like Elsie (and the Charters Towers Magistrate who persuaded a deputation of local women to suffer the arrival of three new prostitutes because their daughters would not be safe if men had no sexual outlets) Alice L believed that prostitution decreased sexual crime. ⁹⁸ 'They should never have deregistered those people,' she said; prostitutes were not bad, rather,

They were fine people. They'd talk to you.... Quite a lot were married, you know, afterwards. Men would come in from the stations, and they'd take the girls back onto the stations. They never meddled with anyone. They had to go

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⁹⁴ Ibid

⁹⁵ Many women spoke of the father, whose descendants are still in Townsville, but no other mentioned the woman in question even when speaking of prostitution.

⁹⁶ NQOHP, ID 53, 122-5

⁹⁷ Ibid.

⁹⁸ *Ibid.*, ID 28, 67-6 and ID67, 138-2. Re the latter, the protestors evidently did not share Tom's view that the new arrivals were 'the nicest girls in the country'.

in for the inspections.... Townsville, Brisbane, Sydney: everywhere you go... it's rotten with venereal disease.... Well, when they had these prostitutes, they had to go, and they were attended to, and if they showed any sign of these complaints, they were attended to.... There's always been rape, and incest, and that sort of thing, always been that from the beginning of time....⁹⁹

Alice spoke of the way that registered prostitutes 'had to go up [to Townsville hospital] every so often to see if they were clean'; a rumour went that 'the ones that had bad venereal disease never came out. Other Oral History participants expressed similar tales of mysterious disappearances, with Lulu's banker and friend Tom going so far as to argue that the police killed her when she became diseased one time too many. 101 Prostitutes did have compulsory and regular medical checks, and those with positive sexually transmitted disease diagnoses were obliged to prove attendance for treatment until such time as they were free from disease; they risked incarceration if they consistently missed doing so. 102 It is entirely possible that women with confirmed infections who did not present for regular treatment seemed to disappear when confined in a lock hospital or asylum for management: a more

⁹⁹ Ibid., ID 28, 67-6. Daisy (ID111, 312-1) sent her daughter to board at a convent because in the 'back country' where they lived 'men are men: it doesn't matter where you go'; she knew of children as young as five 'being interfered with'. There simply were not enough details in the Histories, newspapers or Government Reports to pursue accounts of paedophilic or incestuous events in a way that would produce reliable indicators of their prevalence and thus as an aspect of some female sexual experiences. At a time when sexual knowledge was limited even for married women it was possibly more under-reported than today through sheer ignorance; additionally, there may well have been a consensus of silence for those who observed or dealt with it.

¹⁰⁰ NQOHP, ID 28, 66-6 ¹⁰¹ *Ibid.*, ID 63, 138-1

¹⁰² Medical practitioners received a fee for notification of cases of gazetted notifiable diseases including venereal disease, with 2/6 per notification privately or 1/- as a medical officer to a public institution. Extensive rules and regulations regarding management of infected prostitutes were in place by the early 1920s, but at least the infected received their Neosalvarsan free. See OSA, A/31738. Home Secretary's Office, 1916-1929. Perhaps this was to encourage reporting: Elizabeth Fee notes of Baltimore (U.S.A) at this time that because of the social connections between immorality and disease there was 'a social conspiracy of silence' about venereal disease infection that resulted in under-reporting despite a significant problem there. See Elizabeth Fee, 'Sin vs. Science: Venereal Disease in Baltimore in the Twentieth Century', Journal of the History of Medicine and Allied Sciences, vol. 43, no. 2, 1988, pp.141-164. Neosalvarsan (neoarsphenamine, available from 1912) was an arsenic compound with fewer side effects than Salvarsan ('606') which Sahachiro Hata developed in Ehrich's laboratory in 1910; it did not always achieve a permanent cure. Effective treatment had to wait until the development of antibiotics in the 1940s. See J. E. Ross and Tomkins, S. M., 'The British Reception of Salvarsan', Journal of the History of Medicine and Allied Sciences, 1997, vol. 52, pp. 398-423; also, Susan E. Lederer and John Parascandola, 'Screening Syphilis: Dr. Ehrlich's Magic Bullet Meets the Public Health Service', Journal of the History of Medicine and Allied Sciences, 1998, vol. 53, pp. 345-370

credible story has Lulu dying of syphilis in hospital. ¹⁰³ Undoubtedly, prostitution and sexually transmitted disease were real if uneasy partners that aroused curiousity. Allie volunteered at the hospital after her marriage: one day she was walking past the 'VD' ward, and saw its patient register unguarded, so stopped to glance at it. She was shocked when the first name she saw was that of a local businessman. ¹⁰⁴

Removal and enforced treatment at institutions such as the Venereal Isolation Hospital (behind Boggo Road Gaol in Brisbane) reflects the ongoing regulation of prostitutes. 105 An enormous rise in sexually transmitted diseases during and after the Great War had proved a considerable embarrassment to authorities in Australia and elsewhere; although Australian and other governments had recognised the need to treat and prevent infections in males (as in the 1924 'Agreement respecting Facilities to be Given to Merchant Seamen for the Treatment of Venereal Disease') female prostitutes were constantly subject to health controls. 106 The Queensland government attempted to present an image of strict regulation, and annual reports go into considerable detail about the numbers of infections and voluntary and compulsory treatment. It was not just that prostitution challenged the exclusiveness of the family unit and presented a health and social risk for authorities, or that the prostitute was the complete reverse of everything that the good woman stood for, and reinforced fears about women who took sensuality outside marriage. ¹⁰⁷ By their sheer existence, prostitutes exemplified the way in which racial deterioration could occur; none of the NQOHP women raised the latter issue, but it was a very real one to eugenists.

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¹⁰³ Pers. comm., Diane Menghetti, November 2006

¹⁰⁴ NOOHP, ID 28, 66-6

¹⁰⁵ Referred to by other writers as the Female Venereal Diseases Isolation Hospital; the Commissioner for Public Health refers to it in his 1925 report as shown above. Women could be detained and sent to a lock hospital such as this under the *Suppression of Contagious Diseases Acts* of 1860. See *QPP*, Report of the Commissioner for Public Health, 1925. For more on prostitution, see Kay Daniels, (ed.), *So Much Hard Work: Women and Prostitution in Australian History*, Sydney, 1984. For a Foucault-based discussion about prostitution's place among social discourses on sexuality, see Barbara Sullivan, *The Politics of Sex: Prostitution and Pornography in Australia Since 1945*, Melbourne, 1997

Australia entered into a treaty with Argentina, Belgium, Cuba, Denmark, Finland, France, the United Kingdom and 'the British Dominions beyond the Seas', Greece, Italy, Monaco, Peru, Roumania and Sweden to give seamen 'proper facilities for the treatment of venereal disease.' See Australian Treaty Series 1928 No 4, Department of Foreign Affairs and Trade, Canberra: 'Agreement respecting Facilities to be Given to Merchant Seamen for the Treatment of Venereal Disease', http://www.austlii.edu.au/au/other/dfat/treaties/1928/4.html No government reports or any of the histories heard mention male prostitution.

Even for eugenists who supported pre-marital sexuality or open marriage, prostitution was considered a practice most likely to be adopted by the racially feeble: on the eugenic assumption that genetic weakness fashioned the activities of any habitual criminal, prostitutes were born, not made. For example, prostitution was just one supposedly inherited vice demonstrated by descendants of the Jukes, a family 'largely invented' by American Richard L. Dugdale and used in 1913 by his countryman, economist and devoted eugenist Irving Fisher, to exemplify the way in which random breeding could create 'the menace of race deterioration'. As Cot points out, Fisher saw 'biological features' rather than 'social deviations'; hence, fifty of a supposed family of some 1,200 were prostitutes and close to half of the remainder were no better. ¹⁰⁹ Real or not, as citizens genetically predestined to be socially undesirable the Jukes' fitted the eugenic idea that aberrant conduct signified bad biology.

Fisher was not alone in considering prostitution as a threat to racial integrity; it was a key concern in proposed demands formulated by Magnus Hirschfield and edited by Norman Haire for the 1928 World League for Sexual Reform conference in Britain. Although apparently not presented, the list of demands demonstrates the intricate connections between sexuality and human rights and the way in which prostitution control had become embedded in eugenist interests. Hence, Hirschfield intended to proclaim the WLSR's commitment to:

- 1. Marriage reform. Wedlock must be raised to the position of a living comradeship between two people. This necessitates a reform in the marriage contract, conjugal rights, and divorce.
- 2. The position of women as members of society. Women have not by any means everywhere as yet won the equal rights that are their due in political, economic, social, and sexual spheres.
- 3. Birth control, i.e., a greater sense of responsibility in the begetting of children. We believe in making harmless contraceptives known, and combating on the other hand both abortion and the penalizing of abortion.
- 4. Eugenics in the sense of Nietzsche's words: "You shall not merely continue the race, but move it upward!"
- 5. A fair judgment of those who are unsuited to marriage, above all the intermediate sexual types.

international respect for those efforts. Cot, "Breed out the unfit and breed in the fit", p.804 ¹⁰⁹ *Ibid.*, p.801. They stood alongside '310... professional paupers... 7 murderers, 60 habitual thieves, and 130 common criminals'. Cot notes that Fisher eventually saw eugenics as 'the ultimate reference for all social sciences'.

untimate reference for all social sciences.

An economist with a deep concern for national prosperity if left in the hands of the unfit, Fisher served on a vast number of eugenic committees and organisations and gained

- 6. Tolerance of free sexual relations, especially protection of the unmarried mother and the child born out of wedlock.
- 7. The prevention of prostitution and venereal disease.
- 8. The conception of aberrations of sexual desire not as criminal, sinful, or vicious but as a more or less pathological phenomenon.
- 9. The setting up of a code of sexual law, which does not interfere with the mutual sexual will of grown-up persons.
- 10. The question of sexual education and enlightenment. 110

Kenny argues that racial concerns in Britain at this time were based primarily upon fears that racial deterioration might jeopardise its ability to 'compete on a global-imperial scale'. Secondary concern or not, Britain worried about how to deal with a 'social problem group' that Kenny describes as 'a semiendogamous subrace that demanded close attention, supervision, and even extirpation through negative eugenics. Prostitutes of course were members of that group.

Considering the intensity of population anxiety nationally and particularly across the north, the sexual conduct and ideas of northern white women should have been a primary concern to Raphael Cilento. Yet, despite its constant theme of the suitability of Queensland's climate for white settlement and the prospect of the ongoing growth of such settlement through natural increase because the climate had no adverse effect on fertility, *White Man in the Tropics* does not engage with the sexual behaviours involved in increasing tropical white birth rates. For the sake of the race, *White Man in the Tropics* considers prophylactic measures from diet to human waste disposal to malaria prevention; it shows how to avoid neurasthenia, alcohol abuse and tiredness, together with the best ways to dress for the tropics, but makes no reference to the best way to have sex.

The reasons for such an omission are evident: *White Man in the Tropics* was produced primarily to place 'at the ready disposal of Australians a comprehensive survey of the

Michael Kenny, 'Racial science in social context: John R. Baker on eugenics, race, and the public role of the scientist'. *Isis.* vol. 95, no. 3, 2004, p.396

¹¹⁰ Magnus Hirschfeld, ca.1928, in Ralf Dose and Pamela Eve Selwyn, (trans.), 'The World League for Sexual Reform: Some Possible Approaches', *Journal of the History of Sexuality*, vol. 12, no. 1, 2003, p.7

public role of the scientist', *Isis*, vol. 95, no. 3, 2004, p.396 ¹¹² *Ibid.*, p.403. These were 'habitual criminals, prostitutes, lunatics, drunkards, welfare dependents, and the feeble-minded'.

facts and figures' affecting white tropical residence. 113 Individual ideas about sexuality and sexual conduct were too diverse and personal for Cilento to take any didactic or moral stance, and even facts and figures might have antagonised some readers. Cilento also refrains from comment on the critical concept of controlled white breeding: of course, humans will couple and babies will emerge without instruction, but eugenic ideas proposed that some of these might be genetically inferior. However, any suggestion that existing white residents in Queensland or the tropics might convey undesirable genetic characteristics to their offspring would be as antithetical as setting sexual conduct guidelines for the potential parents. Cilento does sound a note of caution about 'excess in venery', which is more likely to produce 'exhaustion and neurasthenia' in the tropics, but restricts remarks on low fertility and immorality to comments on 'the female natives of New Britain...' 114 Perhaps it was better to show just positive outcomes of white tropical reproduction and restrict discussion of inferior trait production to other racial 'types'. To that end, White Man in the Tropics shows racial degeneration not to be an issue in the oft-cited third generation of white Queenslanders. Fertility however needed to be proved: since Cilento argued that 'in both male and female there is greater generative vigour in the tropics', it is unsurprising that the Survey enquired about aspects of white female fertility. 115

Gorman's questions about fertility were invasive but not comprehensive. For the adult females interviewed, she established average menstrual onset and cessation, together with number of children, but birth intervals were not apparently enquired about or reported. Similarly, she recorded the year of menstrual onset in schoolgirls but it seems that there was little or no attempt to establish whether any of the girls experienced menstrual problems that might affect later fertility. For girls and boys, Gorman obtained details of their parental and grandparental places of birth to show generational status and prove Cilento's contention that white people had lived and reproduced happily in the tropics for over seventy years; alongside her detailed measurements of child heights and weights, this information allowed Cilento to argue that prolonged tropical residence had no detrimental effect on overall fertility or child health. In 1902, Edward Ross had contended that height and weight were important

¹¹³ Cilento, White Man in the Tropics, p.5

¹¹⁴ *Ibid.*, p.33

¹¹⁵ *Ibid*.

indicators of racial strength.¹¹⁶ By the 1920s, the taking of measurements of this type seemed to be an accepted mode of determining racial wellbeing that extended to acceptance of the presence of a set of scales on the sideline at a children's game: in his 1925 report, the Chairman of Trustees of Townsville Grammar School spoke of its recent successes in interschool sports with the comment that,

In connection with the controversy regarding the "White Race in the North," the Head Master took the weights, ages, and years spent by their parents in the North of both teams in the Thornburgh match. 117

While the usefulness of such findings seems dubious considering the probable physiological diversity of the groups measured, this undertaking is interesting in that it suggests that the northern students and parents concerned condoned an investigation designed to produce details on racial wellbeing. One of Cilento's measurements was missing: he offered no intelligence estimates of mothers or children to provide further important proof of random white tropical supremacy, and scornfully dismissed any notion that white tropical residents were handpicked. Yet, most eugenists of the 1920s considered that white racial wellbeing hinged upon selected breeding in the belief that regulated reproduction increased white maternal and child health and decreased the fecundity of other races.

Ross, 'The causes of race superiority', pp.70-71. The then popular practice of phrenology also depended upon measurement, but western societies have maintained an interest in physiological measurement as a gauge of strength.

¹¹⁷ The average age of the two teams was '16 years 11½ months; the average weight of each player was 9 st. 11lb....' *QPP*, J N Parkes, Townsville Grammar School, Appendix I, Reports from Trustees of Grammar Schools (State Endowed), Report of the Secretary for Public Instruction, 1925, p.160.

¹¹⁸ Cilento, White Man in the Tropics, p.74. This refers to Ellsworth Huntington's Civilization and Climate (1915, rev. ed. 1924). Huntington, (1876 – 1947), was a Yale economist whom Boyce describes as an environmental determinist and Ring as a 'cultural geographer'; he believed that climate and human progress were deeply connected. See for example Huntington's ideas in Huntington, 'The Relation of Health to Racial Capacity: The Example of Mexico', pp. 243-264. Cilento supported several of his ideas but challenged his claim that positive mortality and other demographic figures from Queensland were 'invalidated by the fact that Queensland was inhabited by a "picked" population.' Huntington's work and ideas have been well researched. For a 1925 criticism of Huntington's ideas and findings (mostly because he failed to comprehend the importance of sociological factors in determining human success), see Robert Redfield, 'Review of The Character of Races, as Influenced by Physical Environment, Natural Selection and Historical Development by Ellsworth Huntington', AJS, vol. 30, no. 4, 1925, pp.483-485. For recent writings, see Ramsden, 'Social demography and eugenics in the interwar United States', pp.547-598; Boyce, 'Geographers and the Tennessee Valley Authority', pp.23-43; also Cot, "Breed out the unfit and breed in the fit", pp.793-827, but particularly Natalie J. Ring, 'Inventing the tropical South: race, region, and the colonial model, The Mississippi Quarterly, vol. 56, no. 4, 2003, pp.619-632

The supposition of white racial vitality is constant in *White Man in the Tropics*, and at least ten of its pages are devoted solely to argument about the durability and strength of white genes, with much of the evidence of white superiority and other race inferiority drawn from overseas examples. In the first instance, Cilento cites 'actual experiments from various lands' to demonstrate the 'persistence of a healthy white race in a hot climate.' These include children of the 'poor whites' in Grenada and Jamaica who were descendants of 'people of good family who were sent out in Cromwell's time and later became political slaves to the plantations': despite their families' 300 years of poverty and exposure to 'every effect of the climate', 'good blood' and 'an ancestry at one time of a high degree' shone through the potentially degenerative effects of infestation with hookworm and malaria. For evidence of racial inferiority, Cilento refers particularly to 'Pearl, the prominent American statistician', who he says published a 'vital index' to estimate 'a population's racial vitality' in 1921; he probably meant population researcher and eugenist Raymond Pearl. 121

According to Cilento, Pearl's index was based upon the 'ratio of births to deaths within a given time', meaning that if the ratio of the number of births, multiplied by 100 and divided by the number of deaths, was less than 100, then the population was

¹¹⁹ Cilento, *White Man in the Tropics*, p.42. Cilento never specifically mentions any influence of Jean-Baptiste Lamarck's theories that environmental influences caused genetic changes during an individual's lifetime and were then transmitted to their offspring, but he certainly endorsed the notion of widespread swift adaptation. Charles Darwin supported Lamarck, and temperance advocates used Lamarckian evolutionary theories to authenticate their anti-alcohol arguments in Australia: see Rodwell, "Persons of Lax Morality": Temperance, Eugenics and Education in Australia, 1900-30', pp. 62-75

¹²⁰ Cilento, *White Man in the Tropics*, pp. 42-46. He also cites work by Hintze on Saba, van Blom on Curacao, Rodenwaldt and Elkington on Kisar, Balfour and Guiteras on Cuba, Wallace and Huntington on various tropical settlements; apart from Huntington and Balfour (the latter by that time Director of the London School of Hygiene and Tropical Medicine) these writers are either not referenced or publication details are scant.

¹²¹ *Ibid.*, p.60. Pearl was Professor of Biometry and Vital Statistics and head of the Department of Statistics at John Hopkins School of Hygiene and Public Health, Baltimore, Maryland, between 1918 and 1925. Pearl published prolifically but it is not clear from which particular book or article Cilento drew; nothing specific is listed for 1921. In 1928, Pearl became first president of the IUSPP: the International Union for the Study of Population Problems. For biographical details and a publication list, see American Philosophical Society, Genetics Collections, 'Raymond Pearl papers',

http://www.amphilsoc.org/library/guides/glass/pearl.htm Accessed November 1 2006. In later years, Pearl criticised some of the 'flawed scientific theses' behind eugenic ideas and was one of a group who sought to legitimise eugenics as a science devoid of subjective judgement. See Ramsden, 'Social demography and eugenics in the interwar United States', pp.547-598

'biologically unhealthy.' Pearl's comments in this regard as shown in *White Man in the Tropics* were based on perceptions of African-Americans, but reveal core eugenic ideas about supposed white racial supremacy and the inevitable demise of other races. Cilento introduced Pearl's remarks with the claim that the statistician found that 'the vital index of the negro practically never rises to a value of even as much as 100'; thus, Cilento added, 'such a population is bound in the fullness of time to disappear completely'. ¹²³ In Pearl's words, his indices showed that:

The negro is biologically a less-fitted animal in the American environment *physically, socially and generally* than the white. Under conditions as they are, nature, by the slow dreadfully sure process of biological evolution, is apparently solving the negro problem in the United States in a manner which, when finished, will be like all of nature's solutions, final, complete, and absolutely definite... ¹²⁴

The latter eugenic beliefs would resonate in future years as the world recoiled from Nazism. ¹²⁵ In the meantime, Queensland authorities saw an urgent need to ensure the safety of their own favoured race, and one way to do that was to ensure that it retained its own vitality through the ongoing reproduction of new white northerners.

The Queensland government would eventually recognise that the agents of that process were not meeting the desired rate of natural increase and consider that new ideas about sexuality and marriage might play a part. In his 1934-35 Annual Report for the department of Infant Welfare, Dr Alfred Jefferis Turner looked back at the continuing decline in Australia's birth rate since 1911 and the '100% increase' in the number of childless marriages: between 1920 and 1930, for example, the 'percentage of barren marriages' had increased from over twelve to almost twenty-two per cent. ¹²⁶ Jefferis Turner attributed the increase to everything from female vanity, fear of childbirth and materialism. What worried him most was that it had become commonplace for women to control their fertility; hence, 'during her first week of marriage', he suggested, a young woman might seek 'medical advice regarding

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¹²² Cilento, White Man in the Tropics, p.60

¹²³ *Ibid.*, p.61

Pearl, unknown publication, in Cilento, *White Man in the Tropics*, p.61. Italics as shown.

¹²⁵ For a discussion about the historiography of population control, see Matthew Connelly, 'Population control is History: new perspectives on the international campaign to limit population growth', *Comparative Studies in Society and History*, vol. 45, no.1, 2003, pp.122-

¹²⁶ *OPP*: Report of the Director of Infant Welfare, 1936, p.63

contraception' or buy 'means to that end from the chemist'. 127 Just as worrisome was the 'married woman with several children who resorts to self-induced abortion or hires the help of an abortionist.' 128 He was uncertain whether current abortion laws could be improved, but confident that the government could address the problem of access to information on contraceptive methods; he would prefer a complete prohibition on the 'open advertising' of information and materials for contraception, and more, as he noted that

Some well-meaning persons are forming associations for the instruction of women in contraceptual methods. These pestilent little societies should be suppressed.129

Jefferis Turner was not against contraception for medical reasons, but saw fertility control for any other purpose in Australia as 'a menace to our continued existence as a nation; it means the negation of such ideals as 'White Australia', or 'A continent for a nation.'130 By his own admission committed to 'the emancipation of women', Jefferis Turner as a notable representative of the Queensland government dreamed of a return to the time when 'the mother of a large family was a proud woman' rather than one to be pitied. In Queensland in 1934, he noted (as he invoked the 'Anzac spirit' of courage) that '48 women died of childbirth and 125 persons were killed by motor accidents. Yet very few women are afraid of motor drives.'131 In reference to contraception and responsible white mothering, Jefferis Turner could have chosen a better analogy: as the motoring pages of many an issue of the *Townsville Daily* Bulletin showed, 1920s women could at least discover how the motor worked before they chose to be a passenger. 132

The Australian and Queensland governments' desire for population increase was offset by eugenist fears that the 'right' people should be breeding and by activism from feminists and non-political sex reformers who advocated reproductive choice. Twentieth century sex education debates were often indicators of fears about racial integrity, and in many ways, sex reformers had fertile ground to work on in North

¹²⁷ *Ibid*.

¹²⁸ *Ibid*.

¹²⁹ *Ibid*.

¹³⁰ *Ibid*.

¹³² As for example, in notes for the woman driver telling how to stop or change gears. Townsville Daily Bulletin, February 23 1924, p.10

Queensland. By their accounts, most Oral History women and certainly young single women were not privy to information about their sexuality or sex education. Most began their marriages without any idea of what to do or how to do it, let alone the processes of pregnancy and childbirth or the physical costs of repeated pregnancy. With these basics considered too delicate to discuss, it is easy to imagine that knowledge of means to restrict the size of their eventual family or the racial importance of doing so was also not offered to couples about to wed. While some acquired this type of knowledge accidentally or medically as marriage and maturity progressed, and while there were exceptions to the practice of sexual restraint before marriage, on the whole either most young women and young men were conformist by choice, or, more usually, as the WCTU had bemoaned for some thirty years, because of their lack of knowledge about human physiological processes. Consequently, in the broader population, promiscuous behaviour was probably more evident in the pages of magazines and newspapers than it was in the daily lives of white Northern women.

With or without the assistance of the many marriage manuals available, the 1920s woman might enjoy her sexuality. Nonetheless, sexual knowledge and sexual activity belonged inside marriage, and in or out of marriage and certainly out of the bedroom, it remained important for a respectable woman to convey an image of demureness. Although aspects of the New Woman's behaviour signalled a frightening sexual ingenuousness to those who adhered to older mores, it seems that in North Queensland the New Woman might endorse and adopt many other new ideas, but remained conservative in her public sexual conduct. To all extents and purposes, the race was safe in her hands: it remained only for the infant welfare movement to develop so that the infant in her arms enjoyed the same security.

'A Long Sad Task': The Work of Improving Maternal and Infant Health in Twentieth Century Queensland before 1930

It is only in very recent times and in highly artificial societies that we have begun to describe the dense, even the imbecile, man as an "old woman." Here we have a notable evidence indeed of the disastrous atrophy of the intellectual heritage of woman, of the pitiful paralysis of that racial motherhood out of which she naturally speaks!

Lady Welby, 1904

Bad social conditions are the modern Herod who is slaughtering the innocents on an enormous scale.

George Howard, 1911

There must be an intelligent mothering of the little ones.

Commonwealth Committee, 1917

In 1923, the Public Health Association of Australasia (PHAA) held its third annual task conference in Brisbane. Its theme was child welfare in Australia, a matter of particular interest to the Home Secretary, James Stopford, who opened proceedings with a speech in which he reiterated the central theme of 1920s public health: that 'the prosperity and the welfare of a nation could not advance if the physique of the people were not of a standard sufficient to compare with that of other nations.' The Conference 'would benefit Queensland' he said. Stopford believed that the PHAA had 'a greater opportunity of getting a proper response from the community' in its 'disinterested' attempts to educate it about public health than had state or Commonwealth officials because officials might administer Acts 'in a harsh method' that elicited a 'defiant mood from those who were called upon to alter their particular mode of existence.'

¹ 'Public Health. Specialists in Conference', *Daily Mail*, 5 September 1923, in *The Queensland Industrial Gazette*, September 1923, p.542. As Member for Mt Morgan, then Maryborough, Stopford was a staunch Union supporter who served as Home Secretary from September 1923 to May 1929.

² Ibid.

³ *Ibid*.

Following Stopford, the PHAA President, Mr Henderson, emphasised the gravity of the situation by referring to Herod's Biblical 'slaughter of the innocents'; he calculated that 'no more than forty' (babies) would have died in Bethlehem, but while Australian Governments 'were waking up a little' with the introduction of the baby bonus and baby clinics, they actually did 'very little indeed to stop the slaughter of babies, 'not in tens, but thousands, through neglect and ignorance.' ⁴ Henderson clearly believed that alteration was as important as ever to the future of the white race, but felt the State (meaning the government in general) was doing its part to help. 'Health', he said, 'was clearly a State activity'; at that time, 'all the organs were correctly performing their natural functions', but the PHAA:

had no special section of the association dealing with eugenics – it would come in as a branch of child welfare work. And it would be a long, sad task, requiring endless courage and endeavour, and much more knowledge of biology than they at present possessed to breed up the fit from the unfit; to start with the unfit, the failures of today, and evolve from them the strong, healthy, sound citizens of future generations.⁵

Henderson added that while Australia had 'a comparatively small proportion of the "unfit" children', its overall health was substandard. If Australia wanted healthy adults, it must have healthy children, in who 'lay the hope of the future'. 6 Hence, 'Education of mothers was essential for the prevention of much of the death rate and the baby clinics were undoubtedly a start in the right direction.' White Australian women had just to attend and learn.

Despite Henderson's assumption, eugenics never became a distinct branch of government child welfare work, and while the theories and practices applied to intelligent white mothering depended upon eugenic ideas, NQOHP women do not mention racial betterment as a component of their individual perspectives of pregnancy and childbirth. This does not mean it was absent, rather that their primary concern was to strengthen a child's health prospects in times when the vagaries of disease or nature made survival potentially uncertain. Nonetheless, white nationalism and variations of eugenic ideas such as those of domestic science provide a backdrop for this chapter in the same way as they did in those that precede it: white babies and

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

their mothers were critical to nation and empire, and scientists believed that their discoveries provided the means to enhance infant and maternal survival prospects. Eugenists maintained that selective breeding played just as important a role racially: had they the benefit of a longitudinal perspective of child mortality occurrences in Queensland families, they would have had support for their arguments. However, mortality rates were published annually, and while eugenists recommended family tracking, governments did not do so. With or without such a picture, Infant and child mortality rates were too high in Queensland and Australia and inspired early twentieth century anxiety about the future of white Australia.

The state and nation were not alone in their concern: countries such as France, Sweden and England were just as uneasy about their Infant Mortality Rates, with good reason. Millward and Bell cite early nineteenth century European deaths of '200 to 300 per 1 000 births': the figure fell to about 150 per thousand by the 1840s, but rose again with increasing urbanisation. Statistics from expanding English towns show urbanisation pressure: between 1907 and 1910, for example, Stoke lost an average 162.9 babies per thousand births; Oxford's average of 86.6 in that time seems momentarily good by comparison. Those figures represent the beginnings of a significant and constant decline in Infant Mortality Rates; for this reason, Millward and Bell continue, the early twentieth century is now accepted as a marker of such change. As that century began, Queensland lost ten percent of its babies in their first year.

More than fourteen thousand babies were born in Queensland in 1900; within the year, 1,456 of them would die. Across all ages, 5,747 Queenslanders died that year: consequently, infant deaths (those of children under one year) accounted for more than 25 per cent of the total deaths in Queensland. Of the children, 512, or 33 per cent had not survived their first month; 111 (7.62 per cent) died under two months, 364 (25 per

⁸ Robert Millward and Frances Bell, 'Infant Mortality in Victorian Britain: an economic and social analysis', *University of Manchester – Working Papers in Economic and Social History*, no. 41, 1999, p.1

⁹ *Ibid.*, pp.13-14. This was just higher than Queensland's 1907 rate of 76; see *QPP*, Report of the Government Statistician, Vital Statistics of Queensland, 1906, xx

¹¹ There were 14 801 births. QPP, Registrar-General's Report, 1901, xxi.

¹² Ibid.

cent) under three months and 347 (23.82 percent) by their sixth month. 13 The overall rate decreased by two per cent in the following few years, but it remained dangerous to be a child. 14 The situation seemed critical: if it continued, Queensland's population would cease to grow. In the year up to the 1906 Report, at least seventy of every thousand of Queensland's new babies died before the age of twelve months, but the deaths did not stop there. 15 Almost twelve of every thousand children would die before they were two; six before they were three; three before four, and another three before the age of five. ¹⁶ While the toddler years were most precarious, the reality was that a high mortality rate applied to children in their first five years. Charlotte Perkins Gilman pointed out in 1909 that 'our children die most numerously during the early years of infancy, when they are most wholly at home'; but it was not just babies and small children who died tragically.¹⁷

Irvine Loudon argues that there are minimal connections 'between maternal mortality and all components of infant mortality, including neonatal mortality' but that there are difficulties in estimating true historical maternal death rates because of factors such as under-reporting and a lack of definition that complicated classification systems. 18 English statistics from the nineteenth century for example only include direct obstetric deaths; at the risk of oversimplification of Loudon's findings, doctors may have had legal and other reasons to attribute some deaths to other causes or did so innocently in the belief that the primary cause of death was unrelated to childbirth. ¹⁹ Birth and death links may seem apparent in cross-matched Queensland records of young women with the same family name as one Oral History participant. For example, Ellen married, gave birth and died in 1866; Elizabeth married in 1888, then gave birth and died in

¹³ *Ibid*.

¹⁴ *OPP*, Report of the Government Statistician, 1906, xiv

¹⁵ *Ibid*. The figure was 76.17/1000

¹⁶ QPP, Report of the Government Statistician, 1906,xx. These figures were 11.67, 5.74, 3.19 and 2.99 per thousand respectively.

¹⁷ Charlotte Perkins Gilman, 'How Home Conditions React Upon the Family', AJS, vol. 14, no.

^{5, 1909,} p.603 ¹⁸ Irvine Loudon, 'On Maternal and Infant Mortality 1900–1960', pp.29-73. See also Irvine Loudon, Death in childbirth: An international study of maternal care and maternal mortality,

^{1800-1950,} Oxford, 1992

19 Families may have pressured medical practitioners to record deaths in ways not directly related to childbirth.

1889, while Charlotte had her fourth child in 1910 and died soon afterward, but there is no guarantee that these deaths were related officially to the act of giving birth. ²⁰

'Accidents of childbirth' included the category of 'Puerperal conditions', but could be listed separately as 'Hæmorrhage, Septicæmia, Albuminuria, Eclampsia, Phlegmasia Alba Dolens &c.'²¹ The latter, a form of deep vein thrombosis, was known medically and popularly as the 'white leg of pregnancy'.²² Kippen's study of nineteenth century maternal mortality in Tasmania revealed similar complexities; her findings suggest that the number of maternity related deaths was 'always underestimated and never exaggerated'.²³ Whether or not this is also true of Queensland (and it probably was, given that it used the Farr-Ogle system of classification until at least 1906), the fact remains that the act of giving birth was also risky, and although figures for maternal mortality were comparatively much lower than the infant rate, they surely carried as great an emotional cost.²⁴ Deaths in these categories occurred at a rate of .84 per 1000 in 1906; perceived as being a slight improvement, the figures mean that in real terms, thirty-six Queensland women who could have benefited from careful observation and management during the antenatal and postnatal periods died at or near the time of

²⁰ See Queensland Birth, Deaths and Marriages Historical Index:

<//www.bdm.qld.gov.au/IndexSearch.htm>

²¹ *QPP*, Report of the Government Statistician, 1906, xx; 1919, Table XXVIII, p.36H.

²² R. W. Johnstone, A Text-Book of Midwifery for Students and Practitioners, London, 1926 p.415

²³ Rebecca Kippen notes that 'underreporting of maternal deaths is still a problem, even in countries with well-established and comprehensive systems of registration.' Kippen, 'Counting nineteenth-century maternal deaths: the case of Tasmania.(Perfecting Data)', p.15

²⁴ Australia used a modified version of the British Farr system of disease classification: the Farr-Ogle system. As Kippen found, decisions over entries and categories were still subjective despite the wide range of choices. The Government Statistician noted in 1901 that the Farr system was 'in some points' outmoded against 'modern medical knowledge', but since all Australia used it, Queensland retained it too. In 1903, Australia began the three-year process of replacing the Farr-Ogle system with the International Classification of Diseases (ICD) for causes of death; although statistical series since 1907 provide a unified picture, state-to-state comparisons are complicated by the different methods used during the transition. Kippen's focus was on nineteenth century statistics; research for this work was mostly in the new ICD period and (while nowhere near as comprehensive as Kippen's) still found the statistic sets complex and outmoded; this was inevitable not because of direct ICD failures but because statisticians had to keep pace with shifting nosological understandings in those times. For more on the history of Australian statistical records and systems, see Australian Institute of Health and Welfare: 'The Classification of Death Data in Australia',

http://www.gov.au/mortality/history.cfm >Accessed February 19 2007

giving birth. 25 Ten of those were having their first babies; of these, the youngest was aged nineteen and the oldest thirty-nine, while twelve women were 'already the mothers of five or more children.'26

The figures for premature births were just as grim. Of the total births in Queensland in 1906, about fourteen per thousand were premature: four per cent of the deaths in Queensland in 1906 came from premature births; in other words, about 200 premature babies died that year.²⁷ Even worse, the numbers had increased markedly, from 175 in 1904 and 149 in 1905. 28 This the statistician blamed on the mothers, linking maternal commitment and premature birth with the comment that 'it seems doubtful if expectant mothers are as careful as their condition demands', a remark that effectively absolved birth attendants. 29 Indisputably, Queensland's rate of maternal mortality was too high, and did not significantly improve in the years up to and after the Survey.

Infant mortality however fell in 1907, when possibly eight babies per hundred did not survive their first year. Diseases for which we now immunise occurred regularly: for example, although the figures above detail no related deaths, there were 'epidemics of measles and whooping cough' in 1907. 30 The statistician put the figures in perspective with the remark that:

It affords food for grave reflection that, whilst the total deaths, including the young, whose heavy mortality we deprecate, and the very old, to whom death is a natural sequence, numbered less last year than ten out of each 1,000 of the population; yet, with the very young, whose natural order of evolution should surely be to live, the death rate was as high as 76 per 1,000 or seven and a-half times that of the total population, and nearly as great as that of the old population between the ages of 70 and 79 (80.81 per 1000).³¹

Given such a high death rate, it is unsurprising that the number of births was also a concern; the statistician added that 'The birth rate of Queensland compares somewhat unfavourably with the rest of Australasia'; with a crude rate of 26.31 per cent, it was

³⁰ *QPP*, Report of the Secretary for Public Instruction, 1908, p.15

²⁵ There were .91/1000 in 1903; 1.47/1000 in 1904 and .8/1000 in 1905. The improvement to the figure of .84 meant that thirteen fewer women died. QPP, Report of the Government Statistician, 1906, p.36H

²⁶ *Ibid.* Later Reports do not provide such detail on maternal mortality statistics.

²⁷ *Ibid.*, xx 28 *Ibid.*

²⁹ Ibid.

³¹ OPP. Report of the Government Statistician, 1906, xx

in fact not the worst – Victoria and South Australia had lower figures. ³² The problem as perceived in 1907 was that Queensland's rate was on the decline: for 'there were more births registered in 1897 than in 1906.³³ These births included a rise in registrations of illegitimate births, but although the 'rate of bastardry in each of the Australian states' was lower than that of Queensland, such births still only formed 7.68 per cent of the total, and at any rate did not necessarily indicate a burst of unmarried fertility. As the statistician noted, The Infant Life Protection Act of 1905 had come into effect; this, he said, 'has no doubt helped to contribute to this result, by preventing the false registration of some illegitimate children as if they were legitimate.' ³⁴ In fact, Queensland had a lower rate of illegitimate births in comparison to the other states and New Zealand; only New South Wales had similar figures.

Legitimate or not, Queensland wanted more babies and the statistician felt that birth rate figures supported his claim that 'Queensland suffers considerably by the comparison' to the other states. 35 Families suffered too: birth and death remained potentially close partners for both mother and baby over the next few years. In 1911, there were 98 'deaths from diseases and complications of pregnancy, from childbirth and related to puerperium' in Queensland and 615 nationally; this equated to 5.8 maternal deaths per thousand live births in Queensland and 5.0 nationally. ³⁶ For infants in the years between 1910 and 1914, about six children in every hundred did not live past twelve months of age.³⁷ In view of the ongoing desire for growth in Australia's white population, such rates inspired concern and eventually action.

Fears of this type were not restricted to Australia or to Queensland: hygienists, eugenists and the concerned public in other countries struggling to maintain or achieve white middle class racial stability shared a belief that the answer to many infant health problems lay as much in prevention as they did in response. In the late nineteenth century, interested groups in other states and overseas had begun to lobby for what Fildes, Marks and Marland describe as 'imperialist' reform activities to provoke

³² *Ibid*, xiv ³³ *Ibid*., xiii

³⁴ *Ibid.*, xv

³⁵ Ibid.

³⁶ 'Maternal mortality, Queensland and Australia, 1911–1984', GSO and ABS data, in ABS, Queensland Year Book 1973, 1983.

Australian Parliamentary Papers, General, Session 1917-18-19, vol. 5, pp. 1029-1030

government action on infant and maternal mortality rates. A number of countries developed educational programs, with varying levels of achievement; what such programs shared was the principal that mothers had to learn to either reject or modify traditional methods of childcare. Hygiene was a keyword for reform, as scientists, politicians and social reformers identified hygiene, or rather, a lack of it, as forming a significant part of the health risk. While the basic aspiration was to save lives, the emphasis was firstly on creating the type of sanitary environment that gave mothers and children the best health opportunities. To this end, as Mein Smith shows, most Australian states were offering some form of educational service in child-rearing by 1910.³⁸ From these beginnings government sanctioned or operated baby clinics emerged; in the meantime, women made best possible use of the services available.

The NQOHP women's experiences of childbirth and mothering at that time reflect the uncertainty that children would survive birth and infancy. Events associated with childbirth varied, but just as shifting delivery practices are evident as the twentieth century progressed, so are the risks of maternity or birth in its first decades. In the earlier years, most women had the care of a midwife and most delivered at home. If problems arose, a doctor attended. A doctor might also have seen the mother-to-be at the time that the pregnancy was confirmed and perhaps once more before delivery, but not necessarily. As time went on, some women preferred to go to a nursing home, still attended by a midwife, although doctors might become involved. Oral History husbands were excluded from the process; the closest a husband might get, or want to get, to the delivery was a room nearby. Dependant upon preference, midwives attended births throughout; a doctor might attend when labour was well developed. Only one of the Oral History women complained about the level of care received. Despite their best attempts to care for their infants and small children, some women had traumatic labours and deliveries and some experienced loss.

In 1909, Daisy S' first delivery was difficult and doctors had to attend; she was 24 and at home for what turned out to be 'a bad birth'. An 'old Scotch lady' tended her at

³⁸ Philippa Mein Smith, 'That welfare warfare': sectarianism in infant welfare in Australia, 1918-1939', in Fildes, Marks, Marland, (eds), *Women and Children First. International maternal and infant welfare 1870 – 1945*, pp. 230-256

³⁹ *Ibid.*, ID 28, 67-4. Ethel C was unhappy with the care received at a nursing home.

first, but eventually called in two doctors for an instrument delivery in which, Daisy added, the baby's head was 'crushed'. When the boy was eight months old, the doctor was surprised to find him able to recognise faces: he then told Daisy he had thought her son would be 'an imbecile'. Daisy was shocked, and when she said, 'Doctor, you never told me', he responded that it 'wouldn't have done you any good!' The child survived healthily, but his mother struggled with a deformity in her spine that made pregnancy and delivery particularly uncomfortable processes. She habitually wore corsets to combat back pain, but continued to have babies nonetheless: eleven in all. Two 'little girls' did not survive. While she added that one lived to be seven months, Daisy offered no further details of the other.

Amy's first baby arrived late in 1911 when his mother was 23. ⁴⁴ Married at 21, she eventually bore four sons, all delivered by a doctor in her home. The second child caught typhoid as a toddler and was in hospital for three months but survived – no records were available for this or another birth, but the boy concerned was present at and sang songs with his mother after her Oral History interview. ⁴⁵ In 1925, another baby was born, but died at thirteen days; like Daisy, Amy spoke of her loss matter-of-factly. Responses such as these should be interpreted as reticence, not indifference. Ethel C's pain at losing a newborn baby was tangible almost sixty years after the event: she told the story of that birth briefly, but with controlled speech punctuated by indrawn breaths and pauses. ⁴⁶ A skilled recorder/interviewer may offer an unobtrusive yet empathetic audience, but it can be difficult to share grief with strangers.

Elizabeth was also quiet about an infant loss. Her first baby, a daughter, was born at home in 1912: Nurse Bradshaw came to the house for that birth, but later 'took patients in' and so Elizabeth went to her home for the other babies. ⁴⁷ Her husband

⁴⁰ NQOHP, ID 4, 7-5

⁴¹ *Ibid*.

⁴² *Ibid*.

⁴³ *Ibid.* The couple also raised two foster children to adulthood. No Queensland death records were found for the two dead infants. Queensland Births, Deaths and Marriages show births in 1909, 1911, 1913, 1916, 1918, 1919 and 1925.

⁴⁴ NQOHP, ID15, 40-1; 41-5; 42-1:2

⁴⁵ *Ibid.*, 42-3

⁴⁶ *Ibid.*, ID 119, 322-4.

⁴⁷ *Ibid.*, ID16, 43-6

was 'on the Lodge' – they had Lodge doctors to assist. Elizabeth said little about her children: she outlived three of them but mentioned the deaths only of two who survived to adulthood but died in maturity. Her second child was a son born in 1914; another daughter arrived in 1918 after a gap of three and a half years. There was another son: described as an infant in his death notice, he died in January 1920. The solution of the said little about her children is solved.

Fifteen year old Florrie fell pregnant in 1912, and soon married the baby's father; she did not want to do so, but complied with her mother, who worried about the disgrace. The baby boy was born at a nursing home early in 1913; Nurse Beaton delivered him in what was a 'good confinement' for the sixteen years and four months old mother. Eleven months later, another son arrived, and in July 1915, nineteen months after that birth, there was a third. Six months later, all three caught measles, the baby badly. At nineteen years of age and with three children under three years, Florrie was alone and struggling – her marriage had not survived, and she delayed a visit to the doctor because of the cost of a consultation. When the youngest became gravely ill, Florrie 'sent out' for the doctor, but by the time help arrived, it was too late. The baby, she said, was dehydrated, but she had not realised. Florrie found her lack of knowledge frustrating, but her anger at being unable to afford medical help never abated, and she still grieved. A free service such as that provided later by the Baby Clinics might have made the difference to her son's life.

Susan had her first of five children in 1914 before her husband went to serve in the Great War.⁵⁴ The child, a girl, was born at a private nursing home, probably in Brisbane; she was six years old when her father returned. The marriage was weak, and

⁴⁸ The AAMS (Australian Academy of Medicine and Surgery) notes on the emergence between Federation and the 1930s of private hospitals that most 'were run for the exclusive benefit of members from trade unions, fraternities, churches or regions'. See AAMS, 'History of Medicine', http://www.aams.org.au Retrieved January 12 2006

⁴⁹ Both died in their fifties, the daughter of a heart attack; the son's cause of death was unstated. NQOHP, ID16, 44-1; Queensland Births Deaths & Marriages.

⁵⁰ The Townsville Daily Bulletin, January 28 1920, p.6

⁵¹ NQOHP, ID13, 35-4:5; CD36-2

Another NQOHP participant recalled that a doctor's visit cost 'half a pound' before the 1920s. When telephones became available, a person could call the doctor. The centre of Townsville has many hills: before then, one sent a messenger or got on a bike and 'rode up', and the doctor drove out in a buggy. See ID53, 124-2.

⁵³ *Ibid.*, ID 13, 35-5

⁵⁴ *Ibid.*, ID8, 24-2, 4

Susan eventually left her husband and moved to Townsville to be near her mother. Her husband followed and they had another four children together. Of these, a daughter and two sons were born in Townsville; she 'went to the nurse' when ready. 55 Another son was born and died at Rockhampton. Finances dictated Susan's choices: she would apparently have preferred doctor-deliveries, as indicated in her tale of the third delivery. A nurse's fee then was £8, and a doctor's fee was £6.56 For her third baby, she said, she had saved for a doctor – she 'kept the money aside' because her husband 'drank'. 57 Unfortunately, he knew she had the funds and asked her for £6 to pay a debt at the hotel. Despite Susan's protests, he insisted on having the money, because he said she had never had a doctor before; she told him that she had not because she could not afford one. Women in remote areas had even fewer choices. Susan had grown up in an isolated mining area; she mentioned a distant neighbour, Mrs Chapman, who had an Aboriginal midwife: 'just a handywoman' came to her, she said, 'as they always did' and delivered twins. ⁵⁸ A few days later, the midwife arrived at Susan's home to say that Mrs Chapman had 'tumbled-down' (died of 'a cold') within thirty-six hours of the birth; Susan's mother walked to the isolated camp, and confirmed the death.⁵⁹ Queensland Births, Deaths and Marriage between 1860 and 1914 do not show any Chapman multiple births followed by a maternal death, but the births may never have been registered if the babies were very premature and died.

Investigations into the above event revealed an interesting picture of child deaths, for when Queensland births for that name were sorted into families, and matched against deaths, mortality clusters emerged. Yet this should not have been unexpected: patterns will not show in mortality rates based upon annual returns. An initial assessment of about 400 cross-matched births and deaths found that more than forty per cent of deaths in children five years and under occurred in over six per cent of families. Figures from another two Oral History names revealed a similar rate of occurrence,

⁵⁵ *Ibid*.

⁵⁶ *Ibid.* The nursing fee included ten days of postnatal care; the cost of the doctor was comparatively high.

⁵⁷ *Ibid*.

⁵⁸ *Ibid.*, 23-1. 'As they always did' suggest that European women in isolated areas routinely resourced Indigenous midwifery skills. The term 'handywoman' or 'handywomen' was commonly used in the British Isles to describe a midwife. See Margaret Edwards, 'The nurses' aide: past and future necessity', *Journal of Advanced Nursing*, 1997, vol. 26, pp.237–245 ⁵⁹ *Ibid*.

and the patterns changed little with the addition of two randomly chosen, common English names. Ultimately, the sample group consisted of 791 families with 2295 births, and 238 deaths in the first five years. ⁶⁰ The term 'family' here includes apparently single parents: 141 births are shown without fathers, and because some maternal names recur, it may be that about a quarter of the partnerless mothers produced several children. ⁶¹ Further research may show this to be the case, and reduce the numbers of families involved. ⁶² In the meantime, fifty-three of the 791 sampled families recorded two or more deaths of children five years and under, a total of 125, so that seven percent of the group experienced fifty-three percent of child deaths between 1829 and 1914. ⁶³ There was no relationship between family size and deaths: many women produced a new baby every two years and apparently raised families of four to twelve children without early loss. ⁶⁴

A larger longitudinal study may replicate these findings, with death causes possibly providing enlightenment on genetic, environmental or other causes for the losses experienced by a small number of families. Further research on the group was outside of this project's ambitions, but examinations of this nature appealed to eugenic researchers. Francis Galton urged the compilation of genetic histories to highlight families with multiple deaths on the suspicion that they were unfit to be parents. Commonwealth statistician Sir George Knibbs advocated longitudinal tracking for Australian families for eugenic as well as statistical purposes. In his 1920 address to the Royal Statistical Society in London, he argued that:

the people, in a census of population, or of industry, or of wealth, or in the registration of birth, death, or marriage, may very properly be asked to supply

⁶⁰ A number of deaths were not included because the records showed no birth registered in Queensland – the children may have been born overseas or interstate.

⁶¹ For example, C.M. produced nine children between 1891 and 1913. No father is listed for births in 1891, 1893, 1897, 1903, 1905, 1906, 1908, 1910 and 1913; all were alive in 1914. ⁶² Barry Reay traced several English families in the same period: comparisons between single-parent births and census records often showed a long-term lodger who might be named as a father on other records. See Barry Reay, *Microhistories: Demography, Society and Culture in Rural England, 1800-1930*, Cambridge, 1996. The same may apply here in some situations. For example, children were born to E.F. in 1871, 1873 (died 1873), 1874, 1876 (died 1876), 1877 (died 1878), 1879 and 1886; no father is listed. The first-born, H., married in 1891, and had nine children including twins between 1893 and 1908. A boy died a year after birth in 1900, and a girl died at two years of age in 1910. The latter death record gives H. a different maiden name; the records match in every other respect.

⁶³ The number increases again when deaths of children under fourteen are included.

⁶⁴ A sample of these findings appears as Appendices 2 and 3

data – the value of which may not always be obvious to them – necessary for the purposes of a national review of population or industry, or requisite for social guidance in economics, in hygiene, in eugenics, &c., 65

Eugenists believed that data of this nature would reveal a community or society's strengths or weaknesses, and help the development of strategies to reduce mortality rates. As Richard Bolt, then Medical Director of the American Child Health Association, said in 1921,

Infant mortality must now be looked upon as a socio-economic complex whose finer ramifications can be traced to hereditary, congenital, neonatal and environmental roots. It reveals not only the sanitary status of a community, but its social, economic and moral aspects as well.⁶⁶

Whether the causes were 'hereditary' or environmental, it is interesting that other offspring from some of the aforementioned sample group with two or more deaths died between the ages of six and legal adulthood: in fact, families that experienced two deaths were more likely than single death families to experience others.⁶⁷ Such deaths might have occurred in any of a number of ways.

For investigated Queensland deaths covering all ages, Lori Harloe found that 'mutual support at individual, family and community level' was a 'significant characteristic' of inquest records.⁶⁸ There were links between suicide and alcohol abuse, isolation, social alienation and depression, with suicides facilitated by easy access to poisons and dangerous drugs. Accidents from snake bite to drug overdose through ingestion of substances such as sedatives for their remedial qualities affected adults as well as children, and deaths from commonly used narcotics such as laudanum and opium were all the more tragic when administered by a parent trying to make a child well.⁶⁹ Parental neglect played a part in some deaths, through ignorance complicated by a lack of access to medical services; as Florrie showed, parents might not realise that a child had become dehydrated while unwell. Harloe adds that with foster parents or sensible advice difficult to obtain in isolated places, some babies died of malnutrition. Babies and children also received burns, fell down mine shafts, came into contact with

⁶⁵ Knibbs, 'The Organisation of Imperial Statistics', pp. 205-6

⁶⁶ Richard Arthur Bolt, 'Fundamental Factors in Infant Mortality', Annals of the American Academy of Political and Social Science, vol. 98, Child Welfare, 1921, p.12

⁶⁷ For example, family 540 had twelve children. Two deaths occurred in infancy, while another death matched no birth records. Two other children died at seven and eleven years respectively. ⁶⁸ Harloe, "Claims on Common Humanity", p.162

⁶⁹ *Ibid.*, p.192

toxic chemicals and explosives and sometimes drowned. 70 Some child deaths may have occurred deliberately. Others might be avoided through more informed postnatal care.

Whether or not they chose to be pregnant, and regardless of whether their knowledge or commitment affected the way in which they treated their babies and children, women continued to give birth, and mortality rates were mildly affected by whether they did so at home or away. Because of mortality concerns, regulation of birth attendants and health workers became increasingly important during the early twentieth century. 'Nursing' (maternity, or 'lying in') homes had been an alternative to home delivery for some time, and were regulated from about 1910; nurses operating such homes had to be registered from this time also. 71 In the Health Act Amendment Bill (1910), the Home Secretary (then the Hon. H.J. Appel) had defined the meanings of private hospitals and registered nurses, and then proposed under sections 67, 68 and 69 that the applicant for registration of a private hospital must be a registered medical practitioner or registered nurse. ⁷² Additionally, under section 76, 'every private hospital and records thereof must be open to inspection by the Medical Officer.' ⁷³ In sections 80 and 81, the Amendment also provided for the registration of nurses.⁷⁴

In 1915, at about the same time as Queensland's Under-secretary of the Home Secretary's Office (William Gall) requested the Chief Secretary's Office to obtain information about baby clinic operation from the government of New South Wales, Queensland's baby clinic activists were becoming vocal in their demands that the government address the problems of infant and maternal mortality. Gall asked for 'full particulars with regard to the establishment of, method of working of, and results obtained in conjunction with, State Baby Clinics'. This led to the forwarding of

⁷⁰ *Ibid.*, pp.192-202. My great-grandmother's small cousin drowned in a cesspit.

⁷¹ OSA, A/31738, Home Secretary's Office, 1916-1929. The 1910 Health Act Amendment Bill regulations were further amended in 1916 in regard to 'lying-in hospitals', so that the establishment itself was also registered. See The Private Hospitals Regulations (1916) of the Health Acts 1900 to 1911.

⁷² Queensland Parliamentary Debates - Volume CV111. 1911-12, Sections 65-69, 76, 80-81, pp.519-520

⁷⁴ *Ibid.* Nurses from that time should 'be registered by the Queensland Medical Board' and the board had to maintain a register.

⁷⁵ OSA, A/31671, Baby Clinics, letter, Gall to Under-secretary, Chief Secretary's Office, 22 October 1915

information on state public health policy and advice as to the way that the Hon. Fred Flowers, Minister of Public Health in New South Wales devised a 'scheme for the protection of expectant motherhood and the welfare of early infant life.'76 It notes that baby clinics had been open in

England, France, and Germany for some time. In Sydney also good work in a small way has been done by the benevolent society of New South Wales and the Alice Rawson School for Mothers. 77

Pamphlets from New South Wales were attached to Gall's letter, titled 'Before the baby is born', 'Baby's first twelve months'; 'Baby's second year', and 'How to feed sick babies'. Queensland Baby Clinic pamphlets would eventually closely follow these. Still, no substantial movement seemed to develop locally, and activists continued to apply pressure. An earlier-mentioned November 1915 letter from Mrs M Le Fanu of the Mother's Union of Queensland was one of several of the same nature.⁷⁸ The Federal government commissioned an investigation that year into 'causes of death and invalidity in the commonwealth'; it was to investigate 'maternal mortality in childbirth', and 'infantile mortality.' 79 Two of the committee members had a particular interest in tropical medicine, which on this occasion was probably secondary to their commitment to overall public health: these were distinguished pathologist Sir Harry Brookes Allen and J.H.L. Cumpston. Another member was Arthur Jeffreys Wood, a paediatrician, while Melbourne Labor politician James Mathews was Chairman.80

The Committee made its report in 1917. Urging the national introduction of 'maternity' (ante-natal) and baby clinics, it noted that 'in 1915, there were 9027 deaths of infants under one year; of these deaths, '3,227 occurred in the first week', mostly due to syphilis, with prematurity as the next greatest common cause. 81 After the first dangerous week, the hazards were not as great for breastfed babies: of these,

⁷⁶*Ibid.*, see also attachments to letter.

⁷⁸ Letter, Mrs M Le Fanu, Bowen Bridge, for Mother's Union of Queensland to

Undersecretary, Home Secretary's office, November 12 1915; see p.85

⁷⁹ Australian Parliamentary Papers, vol. 5, pp. 997-1014; Report, p.16

⁸⁰ A former editor of the Australian Medical Journal, Allen (1854-1926) was involved with the establishment of the Institute of Tropical Medicine. See A Jeffreys Wood, '1959. A paediatric profile', Medical Journal of Australia, Jan. 31 1959 81 Australian Parliamentary Papers, vol. 5, pp. 1029-1030

even an immature child, even a tainted child, often survives; but when breast feeding is impossible, dependence must be placed mainly on clean cow's milk.... nevertheless, the prevalence of diarrhoeal and other diseases in infants depends largely on insanitary environment. Institution of water-carriage disposal of sewerage has often greatly reduced the death rate. The housing question, the proper removal of refuse, the cleansing of yards and lanes, and all such matters of domestic hygiene, have a most important influence on the vitality of the babies....Thorough reform must include both antenatal and environmental conditions. There must be an intelligent mothering of the little ones. There must be efficient work by Local Health Authorities, by Medical officers of Health, by Health Inspectors, and by Health Visitors. 82

Whether or not they were 'tainted', infant survival and wellbeing depended on good food and hygiene standards, and for these to develop and grow, levels of service and surveillance also needed to increase.

While the committee had been doing its work, activists had continued theirs. The *Brisbane Courier* reported in March 1916 that the Queensland government now deemed baby clinics a good idea, but could not afford them as yet. The Hon. John Huxham (Assistant Home Secretary) 'mentioned' to the paper that he

had been giving careful consideration to the subject of establishing baby clinics, and Dr A.J. Turner, who had been consulted on the subject, had recommended that a clinic be established in Brisbane and another in south Brisbane. [The Bill] for the establishment of baby clinics may be introduced next year but as it will incur considerable expenditure it may be necessary to defer it, with some other projects, until the financial position is more satisfactory.⁸³

This attempt to assure the public of the government's interest however was unsuccessful.

A 'widely representative deputation of women' and several men who visited Huxham in January 1917 considered the 'financial position' a poor excuse. 84 Introduced by Michael Kirwan, MLA, they asked that the Queensland government introduce 'baby consultation depots', to operate in the same way as baby clinics in New South

⁸² Ibid.

⁸³ QSA, A/31671, Cutting, *Brisbane Courier*, March 1916. Member for Brisbane South and Buranda, Huxham became Home Secretary on March 23 1916 and worked in that role until September 1919, when he became Secretary for Public Instruction.

⁸⁴ *Ibid.*, cutting, unknown source, January 15 1917. Some of 'those bodies immediately represented' were the National Council of Women, Creche and Kindergarten Association, among others who also appear as letter-writers below.

Wales. ⁸⁵ Although there were a number of women present, it was a man who began the group's presentation. According to the newspaper report of the meeting, 'Mr Carey Carter' of the Charity Organization Society cited figures for 1915; that '7,540 [infant] deaths occurred in Queensland, and of that number, 1,290 died before they reached the age of one year.' Huxham expressed his 'complete sympathy' and said that if he could 'get the money' there would be 'no delay'; to this, Mrs A. Exley of the National Council of Women responded that 'Previously we were turned down, and I do not think the reason given then was lack of funds. Some thousands of pounds have been spent on State hotels....' Her protest left Huxham unmoved. In answer to requests for at least one 'depot', he insisted that there was no use in proceeding until the government could establish 'three or four'; interestingly, he maintained that 'Queensland was doing things in these direction that other states had not attempted' but did not expand upon the remark. ⁸⁸

The frustration of apparent government inaction may have led Mrs Exley to reportedly terminate her part of the discussion with the comment that 'I knew it was absolutely useless coming to you,' but that did not mean that the activists were ready to give up. ⁸⁹ Rather, it seems they adopted a new strategy. In June 1917, Gall recorded a number of 'representations in favour of the establishment of baby clinics.' ⁹⁰ Many of the groups concerned had sent delegates to the above meeting. Between April and June, twentynine organisations ranging from the Creche and Kindergarten Association to the Queensland Evangelization Society sent variations of a letter requesting the

⁸⁵ *Ibid.* Kirwan was the Member for Brisbane.

⁸⁶ *Ibid.* This activism challenges Ross's argument that charitable trusts 'were principally always a mechanism for resisting disturbance of the status quo rather than activating it.' The Charity Organisation Society, for example, he says, sought to 'vigorously oppose the statutory inroads into social welfare that occurred in the late nineteenth and early twentieth century.' See S. Ross, 'The Rise of Charities and their Legal Protections', Queensland Nurses Union, http://www.qnu.org.au/about_qnu/archives/charities_and_their_legal_protections Accessed January 4 2006

 ⁸⁷ *Ibid.* This may be Elizabeth Exley, co-founder of the Bardon Women's Club. See
 http://www.womenaustralia.info/biogs/AWE1003b.htm. Accessed January 4 2006
 ⁸⁸ *Ibid.*, unknown source, January 15 1917
 ⁸⁹ *Ibid.*

⁹⁰ Ibid., memo, 'Establishment of baby clinics', 05572, Gall to Home Secretary, June 15 1917

establishment of Clinics. 91 Once again, the responsibility for infant death was placed upon parents, as in the following example:

We, the members of St. Francis' Women's Guild, Nundah, wish respectfully to call your attention to the necessity of establishing baby clinics in the Brisbane district. Infant life is a National asset, and unfortunately we need not point out to you that infantile mortality is shockingly excessive in Queensland. This is due largely to the ignorance of the children's natural guardians. 92

The National Political Council of Queensland argued similarly that it is unnecessary to point out to you that Infant Life is a National asset, that infantile mortality is shockingly excessive in Queensland, due largely to the ignorance of the children's natural guardians.9

All letters follow such a format; that from the South Brisbane Patriotic Committee adds that they 'are in sympathy with the National Council of Women in Queensland in regard to the establishment of baby clinics....⁹⁴

The extent to which such pressure affected the Queensland government is unclear: it already had established plans to open Baby Clinics at that time, but whether this was in response to the many civil-minded women who had lobbied for infant health services or to effects of the Great War is debatable. Perhaps it was a combination of both factors. Mein Smith argues that the efforts of female infant welfare reformers had less impact on 'public men' than the deaths from the Great War. 95 Although the war loss impetus is not as obvious in files relevant to the establishment of Queensland baby clinics, it was certainly an influence on eugenists and population concerns in Western societies generally, as well as upon the introduction of domestic science instruction. Based upon remarks and reports in the press, Mein Smith contends that the 'war wastage' produced 'eugenic anxieties about the future'; relationships were established between the human depletion caused by war casualties overseas and infant deaths at home. 96 White women in Queensland had had their maternal responsibility to the state emphasised since the turn of the century: the Great War saw that duty

⁹¹ *Ibid.* These included the National Council of Women, Charity Organizations Society, Children's Hospital Committee, Women's Mutual Service Club, Society for the Prevention of Cruelty, YWCA, Queensland Women's Electoral League, a number of religious groups, the District Nursing Association and others.

⁹²*Ibid.*, letter, St Francis' Women's Guild to Gall, n/d.

⁹³ *Ibid.*, letter, National Political Council of Queensland to Home Secretary, April 10 1917

⁹⁴ *Ibid.*, letter, William Wilson to Home Secretary, March 21 1917

⁹⁵ Mein Smith, 'Blood, Birth, Babies, Bodies', p.312

⁹⁶ Ibid., p.313; Mein Smith, Mothers and King Baby, pp.77-86

extended to the nation at war and in its peaceful aftermath as well. When lobbyists referred to babies as a 'national asset' and described Queensland's infant mortality rate as 'shockingly excessive' because of the ignorance of the 'natural guardians' involved, the implication was that Queensland was letting down the nation in a time of sensitivity to human and economic loss.

Barbara began her family at this time: ignorant she may have been but she was pleased with her conduct during her three home deliveries, and the assistance she received from midwives including one Granny Sherlaw. Although it is quite possible that older midwives had not undergone formal training, Granny may have been quite competent. The level of birth attendance by unregistered midwives bothered Gorman when she discovered it during the Survey, but did not necessarily mean that a maternity patient experienced a poor standard of care. Until the late 1930s it was safer to have a midwife delivery in the United Kingdom, developed European countries, the U.S.A and Australia. As the number of nursing home or hospital deliveries rose in the early twentieth century, so did the maternal mortality rate: Loudon shows that maternity hospitals soon adopted antiseptic practices, but there tended to be more medical interference in births away from the home. ⁹⁷ While increased regulation and formal training of nurses, together with better antenatal care, may have contributed to a slight improvement in maternal mortality, it still was not good enough.

Huxham had been correct in 1917: Queensland was already taking steps to establish baby clinics at the time that Mrs Exley found him so frustrating. ⁹⁸ In 1918, Sister Florence Chatfield became Supervisor and Organiser of Queensland Baby Clinics; and Sister Elizabeth Barron became senior nurse at Queensland's first Baby Clinic in

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⁹⁷ Loudon, 'Maternal mortality in the past and its relevance to developing countries today', *The American Journal of Clinical Nutrition*, pp. 241s-246s

⁹⁸ So were other countries, or at least enabling them: similar legislation supported international activities and concerns at this time. Newton Crane (incidentally, a eugenist) commented in 1919 that 'An inquiry into the extent and character of the legislation in several countries, and particularly in the British Dominions and the United States of America, having for its object the protection of infant life, shows that in countries so widely separated as the Australian States and the Western States of America the same principles have actuated the legislators'; Robert Newton Crane, 'Infant Welfare Legislation', *Journal of Comparative Legislation and International Law*, 3rd Ser., vol. 1, no. 1, 1919, p. 58. For Newton Crane, see Donald MacKenzie, 'Eugenics in Britain', *Social Studies of Science*, vol. 6, no. 3/4, 1976, p. 525

Fortitude Valley, a Brisbane suburb, when it opened in March that year. ⁹⁹ O'Shea notes that Chatfield travelled to New Zealand in 1918 to meet Dr Truby King, who was instrumental in the establishment of baby clinics and mothercraft facilities in New Zealand. ¹⁰⁰ The name 'Queensland Baby Clinics' appears on two pamphlets printed in October 1918: 'Diet for children suffering from worms' and 'Care of the baby during the hot weather'. ¹⁰¹ Legally, however, the clinics were finally established under the *Maternity Act* of 1922. ¹⁰² As the 1920s began, Baby Clinics were thus almost but not quite a reality. For the time being, prenatal and postnatal care remained in the hands of private carers and midwives, with a gradual shift towards midwives at public hospitals or the increasingly regulated maternity homes.

In New Zealand, Truby King's ideas had developed into the Plunket system, named after its New Zealand patron and Lady Governess, Lady Plunket. ¹⁰³ They had a considerable influence on approaches to infant health in Queensland: in 1922, for example, Barron also travelled to Dunedin to 'undergo a course of training in infant welfare work', and like Chatfield, met Truby King at Karitane-Harris Hospital. ¹⁰⁴ Mein Smith shows a resistance, if not resentment, towards Truby King's influence in other states. She notes that he 'stirred up trouble' because 'he and his devotees strove to make New Zealand a [infant health] model for Australia after the Great War'; she cites reservations about Plunket nurses expressed by Adelaide infant welfare activist Dr Helen Mayo:

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⁹⁹ P O'Shea, 'The Noble Florence Chatfield OBE',

http://www.health.qld.gov.au/pahospital/docs/pa_society/chatfield.pdf, undated. Accessed January 19 2006. Three more clinics opened in Brisbane in the following years.

100 Ibid.

¹⁰¹ QSA, A/31671, memo attachment, Home Secretary's office, October 29 1918. ¹⁰² *Ibid.*, memo, December 13 1922, 10072.

¹⁰³ Consequently, when the Australian Mothercraft Society or Karitane Society in Australia adopted the Plunket system in 1922, they adopted Truby King's philosophy. For Karitane history, see New South Wales Archives, 'Papers relating to the history and recognition of the Australian Mothercraft Society (Karitane)', 5 Oct 1925-26 Feb 1959, CGS 4871. For more on the emergence of the Plunket Society (known before 1980 as The Royal New Zealand Society for the Health of Women and Children), see Linda Bryder, 'Two Models of Infant Welfare in the First Half of the Twentieth Century: New Zealand and the U.S.A', *Women's History Review*, vol. 12, no. 4, 2003, pp. 547-58

¹⁰⁴ Ibid., letter, Barron to Under Secretary, May 17 1923, 04185

The chief drawback to the Plunket system is the fanaticism of the nurses, it becomes practically a religious cult with them. Our system is less rigid, and is probably more adaptable to Australian conditions. ¹⁰⁵

Whether or not that was so in Queensland or North Queensland at the time that Clinics began is unknown; certainly, a Toowoomba woman found Clinic nurses formidable in the 1940s. 'Ooh, they were mean, those nurses', she recalled of criticism of her breastfeeding routine: 'they'd never even had a baby, and they'd [say] you were doing it all wrong! I only went once.' It is possible that their official status and extensive knowledge made earlier clinic nurses seem intimidating as well.

The first northern clinic opened at Rockhampton in October 1923: 94 mothers attended then, and 173 in November, when nurses also visited fifty-two newborn babies. ¹⁰⁷ Townsville's clinic opened in December 1924, and the Cairns Clinic opened early in January. The advertised function of the latter was to be 'purely consultative and advisory'; whether or not its staff were fanatics, it was popular from its inception. ¹⁰⁸ The Public Health Department also established its baby clinic Training School in October 1924, with an initial seven trainees under the 'very able tuition of Miss Barron'. ¹⁰⁹ Successful students received a certificate in infant welfare.

With varied strategies in place, the Commissioner of Public Health showed some optimism in his 1924 Report. Concerns about Australia's birth rate endured, but now Queensland had 'the second-lowest birth rate and the third lowest infantile mortality rate of any country in the Empire'; however, the birth rate was still in a decline and thus unsatisfactory. ¹¹⁰ In 1907, a figure of 26.31 had created real concerns, alleviated temporarily in 1915 when it rose to 29.35; from there, it had continued to fall, being 24.89 in 1923, and a worrying 23.88 in 1924. ¹¹¹ Conversely, infant mortality had improved: between 1914 and 1924, the IMR had decreased by 13.03 per 1000 and there were now 51.3 deaths per thousand births, compared to the 1915 figure of

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¹⁰⁵ H. Mayo, Adelaide, May 14 1925, Royal Commission on Health, Australia, *Minutes of Evidence*, 1925-1926, in Mein Smith, 'Blood, Birth, Babies, Bodies', p.315; *Mothers and King Baby*, pp.107

¹⁰⁶ Pers. comm., Toowoomba, March 2006

¹⁰⁷ OSA, A/31671, memo, 'Baby clinics', August 8 1924, 07010.

¹⁰⁸ 'Baby Clinics', Townsville Daily Bulletin, January 12 1924, p. 4

¹⁰⁹ QPP, Report of the Director of the Infant Welfare Department, 1927, pp. 63, 66

¹¹⁰ *QPP*, Report of the Commissioner of Public Health, 1925, p.1

¹¹¹ *Ibid.*, and Report of the Government Statistician, Vital Statistics of Queensland, 1907, xiv

64.33.¹¹² In England and Wales, the rate stood at 69.0 in 1923; in Scotland, it was 79.0; in South Africa, 82.0, and in Canada, where the Women's Institutes (an inspiration for the QCWA) had fought to improve it for years, the rate stood at 87.0.¹¹³ By contrast, Queensland's rates seemed to be declining steadily and since it seemed that more Australian children than ever could be expected to survive infancy, the outlook was much brighter for Queensland.

A variety of government programs contributed to the mortality rate improvement, but there was room still for development. For instance, the Department continued its vigilance over rats (in case of plague), and acted swiftly to contain infectious diseases such as diphtheria, scarlet fever, tuberculosis and infantile paralysis. The Commissioner was also pleased at the Department's successes in the ongoing 'bacterial examination of milk' and the 'recently established baby clinics'. ¹¹⁴ Additionally, he noted,

There has been a great extension to the scheme of State-aided maternity hospitals, which has proved such a boon to the women in the isolated portion of the state, and which must also aid in reducing infantile mortality. 115

These were substantial activities. However, other, sometimes insidious, threats endured for adults as well as children. In the case of children, infectious disease might have obscure origins, as shown in the Department's extensive details of its efforts to restrict the spread of venereal disease. In 1924, there were seventeen (new) notifications of venereal disease in children from one to five years, and nine in children from five to ten years; deaths might be even higher. ¹¹⁶ For women, puerperal fever remained a concern. ¹¹⁷ Of thirty-five cases of puerperal fever reported in 1924, twelve were from the metropolitan area, but twenty-two came from 'outside areas', where the number had increased by thirteen. ¹¹⁸ There appears to be no specific data to

¹¹⁴ *Ibid.*, p.1

¹¹⁶ *Ibid.*, p.6. For example, in 1919, the deaths of 63 children at Brisbane Children's Hospital were attributed to syphilis; likewise for 41 children's deaths in Townsville, 31 in Cairns and 19 at Charters Towers. Levels of this type are consistent through the 1920s; see for example Report of the Government Statistician, 1921, Table XXVIII, p.36H

¹¹² *QPP*, Report of the Commissioner of Public Health, 1925, p.4. Based on a population of 834, 894.

¹¹³ *Ibid*.

¹¹⁵ Ibid.

Chapter Eight mentions this illness in more detail.

¹¹⁸ *QPP*, Report of the Commissioner of Public Health, 1925, p.6

prove that such an increase coincided with an increased rate of medical intervention, but this may have been the case: it was elsewhere. Despite the successes of many government health programs and the continuing provision of services to women and children, childbirth and childhood in the mid 1920s might still be perilous.

Considering these risks and concerns against the proclivity of the popular print media to amuse as well as inform at the same time as they sold advertising, it was predictable that by the 1920s the great white hope of endogenous white population increase, the bright and healthy baby, would acquire a fresh public presence. It was a prominence that coincided with the promotion of mass produced baby foods as well as baby clinics; with the one good for business, and the other, the nation, the ordinary reader could not fail to be aware of the importance of the white skinned, ruddy-cheeked and big-eyed tots glowing from the pages of newspapers and magazines. Baby fever even inspired an enduring popular activity: the Baby Competition. Townsville, for example, attempted to hold its first 'Baby Carnival' in 1924; organisers cancelled it because of rain, but the intended event emphasises the new prominence that 1920s societies attached to their babies as well as the way in which the print media and advertisers embraced white society's infant *cause célèbres*. 119 Nor could the reading public easily miss the connection between baby fever and race. Mein Smith notes a 'baby week' in New South Wales in 1920, with an advertisement that began 'Long Live King Baby', and continued to say that a fitter race hinged upon Australia's production of 'healthy living babies, fewer dead babies' and 'stronger children.' 120 'The healthy white child', she adds, acquired 'the status of a national resource, if not national treasure.' 121 The same applied in the U.S.A, where Bolt remarked in 1925 that 'the connotation of the phrase – child health – to-day reflects the robust meaning of Anglo-Saxon words which convey to us the idea of wholeness or fulness of child life.' 122

In Australia, the healthy Anglo-Saxon child also brought debatable financial reward. In 1912, the Federal government had introduced the *Maternity Allowance Act 1912*, which paid a non-means tested 'baby bonus' of £5 at the birth of each white child;

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¹¹⁹ Townsville Daily Bulletin, March 6 1924, p.4

¹²⁰ Mein Smith, 'Blood, Birth, Babies, Bodies', p.313

¹²¹ Ibid

¹²² In 1925, Bolt had become Assistant Professor of Child Hygiene at the University of California. Richard Arthur Bolt, 'Newer Aspects of Child Health', *Annals of the American Academy of Political and Social Science*, vol. 121, New Values in Child Welfare, 1925, p.38

indigenous and other women not considered Australian citizens did not qualify. The Baby Bonus inspired debates about its distribution in 1924, when the *Bulletin* reported that it cost 'the Federal Treasury nearly £700,000 a year': 'Many people', it added, 'contend that the money is inequitably distributed, and unwisely spent by the recipients.' Nonetheless, the families who had added to Queensland's white population probably welcomed the money, as did medical practitioners. H.J. Exley remarked in 1930 that:

The employment of medical practitioners at confinements has been encouraged by this allowance. In the period October 1910 to June 1915, 64 per cent. of mothers were attended by doctors. This proportion has increased rapidly, until during the year ended June 1931, doctors were employed in 88 per cent. of confinements. One is justified in assuming that the increased employment of doctors implies increased antenatal care of mothers, but it is significant that this has not been reflected in a decrease of the mortality rate for the first week of infancy. ¹²⁴

Nevertheless, by 1931 the chance of losing a newborn baby was considerably less than earlier in the century.

By 1929, Queensland's infant mortality rate (for babies under one year) of 46.1 per thousand was second lowest in Australia: only South Australia bettered it, with a rate of 40.9. The Proposition of 40.9. The Proposition

¹²³ Townsville Daily Bulletin, January 21 1924, p.3

¹²⁴ H. J. Exley, 'Infant Mortality in Australia, 1906-1930', *Journal of the Royal Statistical Society*, vol. 95, no. 4, 1932, p. 688

¹²⁵ QPP, Report of the Director of Infant Welfare, 1930, p.1

 $^{^{126}}$ Eibid.

¹²⁷ *Ibid*.

infections.¹²⁸ This was a big expectation that emphasises the importance attached to the moral responsibility of the mother and potentially placed a burden of guilt upon women whose children suffered such illnesses.

The fact was that Queensland's medical professionals also needed to focus their attentions more: 'antenatal' causes of death in the 1920s incorporated 'premature birth, congenital disease, birth injuries, malformations &c.' ¹²⁹ Of those, the risks of prematurity and injury at least could improve with better care of mother and child before and during delivery. Jefferis Turner had long recognised such a requirement, and the Department finally established its first Antenatal Clinics in Brisbane in 1929. A year later there had been 543 attendances and it expected this number to increase. ¹³⁰

Behind the scenes, the QCWA had promoted and facilitated the delivery of services to white women and children throughout the mid 1920s; it did so through raising and allocating funds, through utilising promotional opportunities in the Press and in liaison with various government bodies. For example, the Department introduced 'branch [baby] clinics' in 1929: two opened in Brisbane suburbs. Strongly supported by the QCWA, a new railway carriage started operation in February 1929: the Infant and Child Welfare Railway Car was a 'Baby Clinic on wheels' that initially worked from Brisbane to the south, west and as far north as Rockhampton. ¹³¹ Following 'repeated requests', another four branch clinics opened in 1930 'at the rest-rooms of the Country Women's Association at Edmonton, Babinda, Innisfail, and Atherton'. ¹³² In 1930, the railway carriage began to visit Townsville and Mt Isa, 'facilitated' by:

Mrs E. A.V. Sterne, of the Country Women's Association, who has taken immense trouble to notify members of this Association and others of the dates of the visits of the car, and to the Department of Public Instruction, who have notified the school teachers. ¹³³

¹²⁸ *Ibid.* Viruses were known at this time, but would not be fully understood for some years, and not viewed under a microscope until 1930.

¹²⁹ Ibid.

¹³⁰ *Ibid.*, p.4. These clinics were at Fortitude Valley and Woolloongabba.

¹³¹ *Ibid*.

¹³² *Ibid*., p.3

¹³³ *Ibid*. Sterne was wife of Townsville's station-master when Gorman began her work; she and her husband later transferred to a Brisbane posting.

By 1930, about one third of Queensland mothers were taking their newborns to a clinic. 134

As the QCWA maintained its dedication to women's health through the preceding activities and through delivery of lectures on 'Child Welfare' to its members, so had links between the Department of Public Instruction and health agencies continued: in the latter case, the targets remained young women. 135 Schoolteachers in various places took 'classes of senior girls' to view the Baby Clinic train and 'hear short health talks', while three Infant Health nurses delivered a 'series of lectures' to Girl Guides in various localities. 136 Newspapers also willingly promoted infant health and the work of the Infant Welfare Department, publishing informative pieces and advertising public lectures: Jefferis Turner noted that the Department's 'monthly articles on infant and child welfare have been printed by most of the country press.'137

Without such endorsement of educational activities and health services, the challenges that in 1923 the Home Secretary perceived in changing 'the mode of existence' of white mothers may well have elicited much more defiance. Reformation of social ideas and practices concerning maternity and infant care would remain a long, sad task for a while yet; nonetheless, there was measurable progress. Consider for instance that in 1923, Baby Clinics were still a new idea. In 1924, with the exception of a very small number of women who already attended baby clinics, a horrified Annie Gorman encountered a widespread lack of knowledge of scientific mothering and domestic science principles in her northern subjects. In 1926, a confused public may have watched and participated in baby knowledge wars: Jefferis Turner complained that the Clinics struggled against uncooperative and even antagonistic medical practitioners, maternity nurses and maternity homes. Since clinic nurses tended to first be maternity nurses, such wrangling cannot have impressed some cautious mothers: letters in *The* Australian Woman's Mirror in 1928 reveal mixed opinions about the new professional type of nurse in hospital or baby clinic. 138

 $^{^{134}}$ Ibid. In 1927-8, clinics saw 30% of newborns; 31% in 1928-9, and 33% in 1929-30. 135 Ibid., p.4

¹³⁶ *Ibid*.

As for example in *The Australian Woman's Mirror*, January 31 1928, p.37 and March 13 1928, p.37. These letters reappear in Chapter Nine.

It is true that two thirds of Queensland's newborns were still unknown to Baby Clinic nurses in 1930. Nonetheless, in just a few years, the mothers of the remaining third of newborn infants had demonstrated their willingness to potentially discard traditional practice and submit the 'hope of the future' to regimens set out by strangers rather than family advisors. This was a significant achievement for Queensland's mere sixty clinic nurses and for Infant Welfare, and one for which the media, the QCWA, the Health department and a score of dedicated activists could also take credit. From tentative beginnings, clinic attendance had increased to the extent that it became a normative part of parenting for thousands of white mothers.

'And on the tenth day, we got up.' Eugenically inspired Midwifery, Birthing and Maternal and Infant Health in North Queensland.

Should the child die, mechanical measures for emptying the breasts will be necessary....

Myer Sollis Cohen, 1911

*Take care of children's health – they are the northerners of tomorrow!*Footer, Progress Report 1923-1933, Northern Division, QCWA

At the time of the Survey, a 33 per cent rate of Clinic attendance must have seemed just a dream for Annie Gorman. Although the children she examined tended to be well, Gorman could not attribute this to scientific practice or knowledge. Rather, she found that just 5 percent of women were familiar with modern practice in several places; in other areas, mothers almost completely held to traditional ways. In the hands of nurses trained to new scientific and professional standards, baby clinics eventually would contribute to remedying that knowledge deficit and to the standardisation of infant care. Medical practitioners would also employ scientific credibility to justify their right to greater influence over the processes associated with childbirth, moving labouring women from the home into controllable environments where other nursing professionals (rather than folk-trained midwives – 'cunning' or 'handy' women) contributed to their care. Leavitt argues that in America the medical profession and trained nurses had fairly much achieved this by the 1920s: this chapter will show however that in North Queensland at least, 1920s women remained divided between the old and new.² Eugenic ideas affected and stimulated the early twentieth century changes, and were consequently important to the Survey's evaluation of white women's knowledge of maternal, infant and family health in North Queensland.

¹ It is clear that many trained nurses saw themselves as professionals from the late nineteenth century, although some of their untrained sisters as well as medical doctors seemed to have disagreed. One who did agree addressed the difficulties. See A. Worcester, 'Is Nursing Really a Profession?', *The American Journal of Nursing*, vol. 2, no. 11, 1902, pp. 908-917

² Leavitt, 'The Growth of Medical Authority: Technology and Morals in Turn-of-the-Century Obstetrics', pp. 230-255

For a government that was highly concerned about the long-term security of its white population, persistently high infant mortality rates were untenable. Although Queensland had practically halved its annual infant loss between 1901 and 1924, medical authorities were dissatisfied with the rate of progress, and anxious to improve it. Cilento focused on improvements in the rate, using them in White Man in the Tropics to argue that infants in tropical Queensland had a health advantage over those in the rest of the Commonwealth.³ With the support of a table comparing infant mortality rates in Queensland and the Commonwealth as a whole between 1906 and 1917, he contended that the 'striking' differences it showed were 'even more telling' when compared to 'the leading European and other countries.' Moreover, he argued, 'the infantile mortality in North Queensland was lower than in the southern districts.'5 (Actually, the difference between tropical and non-tropical areas was slight.⁶) For all the gloss, as a medical doctor and administrator Cilento knew it should be better, and showed throughout White Man in the Tropics that he believed that infant mortality rates and infant and maternal health could improve through the application of scientific practices. Gorman's assignment had been to establish the extent of maternal knowledge of contributors to infant health; determining the health of northern mothers at the same time provided a pointer towards the quality or application of such knowledge.

The Index Cards recorded Gorman's assessment of mothering skills in three lines. As instructed, Gorman noted whether a household included any children, including babies, and 'what drain on the mother's energies' they represented, whether the baby was breastfed, or if not, if its food was 'suitable'. It had also been part of her instructions that she was to offer advice on 'the principles of feeding, both adult and

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³ Cilento, White Man in the Tropics, pp.51-52

⁴ *Ibid.*, p.52

⁵ *Ibid.*, p.55

⁶ In 1932, H.J. Exley stated that 'A tabulation... of the infantile mortality for the tropical and non-tropical portions of Queensland' proved 'decisively that there is very little if any inherent disadvantage in the tropical conditions existing in Queensland. Over the whole twenty-five years the average rates were practically identical, that for tropical Queensland being 58.98 deaths per 1000 births and for non-tropical 58.60. Throughout the period, the annual rates for Queensland as a whole exceeded those for the Commonwealth once only, while those for the tropical portion of Queensland are greater than those for the Commonwealth on seven occasions only. South Australia is the only State which can approach these excellent results.' Exley, 'Infant Mortality in Australia, 1906-1930', pp. 692-3

⁷ NAA, SP1061/1, 350, memo, Cilento to Gorman, January 16 1924

infant', and on infant welfare – but this was after making her observations. In Townsville, she found that of the 300 women recorded, only about fifteen (5 per cent) had 'any scientific knowledge of infant welfare'; these, she said, were 'women of higher education or those mothers who have been keeping in touch with the Baby Clinics.' A finding that reinforced the gravity of that lack of knowledge was that most did not breastfeed because of the 'mistaken idea that suckling their offspring is detrimental to the mother in this tropical climate'. Furthermore, 'the majority', she noted.

adhere to the old methods, feeding the child whenever it cries, giving it two or three night feeds, allowing it to suck a comforter, and keeping it in hot uncomfortable clothes and binder. ¹¹

Such practices contravened Truby King's ideas. The promotion of breastfeeding and adherence to a strict routine of feeding and sleeping times were important Plunket principles; particular care was taken to avoid germs through sterilization of bottles and limited handling of the baby by others. Truby King also considered dummies unhealthy – unsterilised, and commonly dipped in honey or other sweet substances, undoubtedly they were for the newborn. Wide dissemination of Plunket ideas was difficult if Queensland's new Clinics had few clients: a solution lay in home visitation, which Townsville clinic nurses embraced as a means to spread their message. Gorman added that 'The nurses from this Institution pay a personal visit to practically every new born baby in the city and suburbs'; through this practice, they had achieved some success in correcting the 'false notion' that breastfeeding was injurious to mothers, and had been able to advise on 'all matters pertaining to infant life' as well.

It seems that enough women saw Clinic nurses in places where they could do so to give Gorman some hope of change. Nonetheless, scientific knowledge seemed scant. Cairns women, for example, fared no better than those of Townsville; Gorman judged

⁹ Report, p.3

⁸ Ibid.

¹⁰ *Ibid*.

¹¹ Ibid.

As seen for example in a Queensland Baby Clinic pamphlet that asks 'Please don't let everybody kiss and cuddle me: they give me colds and coughs and sore throats.' Queensland Baby Clinics, *Baby Asks For Fair Treatment*, u/d.

¹³ Queensland Baby Clinic pamphlets use the terms 'dummy' and 'comforter' interchangeably; for example, 'Do not treat him as if he were a bottle, and a dummy were the cork', in *Why Do Babies Cry* and the direct instruction 'DO NOT USE COMFORTERS' in *Care of the Baby*.

¹⁴ Report, p.3

them at 'about the same standard'. ¹⁵ Thanks to the work of the Baby Clinic staff, 'the mothers', she added, 'are gradually becoming initiated in a scientific knowledge of infant welfare and care of children. ¹⁶ Still, a positive finding of 5 per cent signified that only a few had absorbed their introduction to domestic science or infant health ideas, and only a 'small' (unspecified) percentage of future mothers were attending the domestic science classes available at the High School and Technical College where they would have obtained such knowledge. ¹⁷ The situation seemed even worse in Atherton, where no mothers received the survey's good rating; '9 per cent' – probably four women, were judged fair, and the remaining forty cited were found to have a nil knowledge; this was perhaps a reflection of the lack of services there. Those judged fair were not necessarily knowledgeable – overall,

the mothers have no scientific knowledge of Infant welfare, there being no baby clinic in the town, and the majority of the women interviewed, were attended during their confinements by uncertificated midwives whose knowledge of infant welfare is more or less unscientific and out of date. ¹⁸

Whether or not their less-than-scientific knowledge affected the health or wellbeing of their patients, Infant Mortality Rates left such nurses with no defence against updating.

Chillagoe women however had the option of superior services because of the State Maternity Hospital there. Gorman's figures for Infant Welfare include an error, but it may be that at least ten of thirty-seven women achieved a good rating while another ten were deemed fair, making Chillagoe the highest rated town in this regard. ¹⁹ Perhaps the remaining seventeen women had their babies before establishment of the hospital: Gorman deemed them to have 'nil' knowledge. ²⁰ She was pleased to learn that Chillagoe Hospital's Matron was 'an earnest advocate' of Truby King's methods, and made sure her patients were 'thoroughly instructed' before discharge. ²¹ The eighty interviewed women of Cloncurry were not as fortunate: only two had a good knowledge of Infant Welfare; nine were fair, but seventy (87 per cent) received a nil

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¹⁵ *Ibid.*, p.6

¹⁶ *Ibid.* There are no 'good', 'fair', 'nil' ratings provided for Cairns.

¹⁷ Ibid.

¹⁸ *Ibid.*, p.7

 $^{^{19}}$ *Ibid.*, p.9. The figures provided are Good – 27%; Fair – 27%, and Nil – 76%, making 130%. For another instance of such a mathematic or typographic error, see Julia Creek sanitation figures, where percentages of 8.4, 58.0 and 53.6 give a total of 120%. 20 *Ibid.*

²¹ Ibid.

rating.²² Matters were worse at Charters Towers, where Gorman ranked three of 132 interviewed women as good, only ten as fair, and 119 (90.5 per cent) as nil; Gorman noted that there was no Baby Clinic there, and the majority of mothers were thus 'entirely ignorant.'²³ Figures and circumstances were much the same at Julia Creek. With their links to the proximity of clinics or scientifically trained nurses, these numbers (not included in *White Man in the Tropics*) would have suggested to baby clinic activists that their concerns had foundation in the north, particularly so in some localities. There would probably have been some truth in such an assumption.

In the case of other Survey categories however, there is little scope for conjecture about local variations. Uncertainty about the veracity of such findings arises both from the lack of space on the Index Cards and the brief time that Gorman could allow for each interview. Consider maternal health, which warranted examination in the Survey: in 1907, there were 5.8 maternal deaths per 1,000 live births in Queensland and 5.0 nationally; by 1921, at 5.3, these measurements showed a reduction of deaths in Queensland, while the national rate declined to 4.7.²⁴ In human terms, 108 too many Queensland women died around the time of childbirth, and 643 died across Australia; really, the improvement was marginal.²⁵ The Survey provides little insights into maternity-related health, and these emerge only through assessments that depended upon observation or reporting by Gorman's subjects rather than blood tests, physical examination or thorough interrogation. There was no space allowed on the Index Cards for development of latent childbirth related health problems like 'anaemia' and 'uterine complications'; these might accompany diverse pre- and post-partum conditions that can still influence maternal and infant wellbeing. ²⁶ There was similarly no expansion upon the broad category of 'nerve trouble' (which included

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²² *Ibid.*, p.11

²³ *Ibid.*, p.13

²⁴ ABS, 'Maternal mortality, Queensland and Australia, 1911–1984', GSO and ABS data, in *Queensland Year Book 1973, 1983.* Queensland and national figures did not achieve parity until the 1980s; they are currently measured in deaths per 100,000 births. ²⁵ *Ibid.*

²⁶ Johnstone shows the possible complications of pregnancy in the 1920s, and their consequences. See Johnstone, *A Text-Book of Midwifery for Students and Practitioners*, pp.180-222; 234-393. John O'Loughlin summarises some of the enduring risks; see O'Loughlin, J., 'Safe motherhood: impossible dream or achievable reality?', *MJA*, 1997, vol.167, pp.622-625

'neurasthenia etc.') that might have indicated the presence of postnatal depression or other conditions.

This is not to say that any health problems were unrelated to the availability of services or local surroundings, rather that it is not possible to reach any convincing conclusions just from the information on the Index cards. For example, the women of Chillagoe reported no uterine complications or anaemia, testified to the second lowest levels of nerve trouble and in fact show the least health problems of all the towns surveyed. Perhaps the high standard of care available at their hospital played a part, yet despite their harsh and unsanitary physical environment and lack of health services, Julia Creek's women were almost as healthy. None described any uterine complications; they returned the next lowest level of nerve problems and generally enjoyed better health than their sisters in centres aside from Chillagoe.

The difficulty of relating health problems to specific localities continues in most other Index Card categories, with one exception: only six Cairns women reported malarial infections. Otherwise, and insofar as the Survey evaluated the overall general health of its 750 women, about thirty-nine women reported nerve problems, while at least thirty complained of rheumatism and six either admitted alcoholism or met Gorman's criteria for such a diagnosis. An alarming seventy-five women (10 per cent) had gastric concerns, with the modernity of sanitary facilities not seeming to be a factor: in the larger centres, where cesspits were largely obsolete, Cairns recorded the lowest incidence while Townsville (with complaints from over 16 per cent of the interviewed women) returned the highest.

Gorman noted goitre in five of the 750 women surveyed, but as with the preceding complaints, these findings are practically worthless without other observations or blood tests. Pregnancy can stimulate the onset of thyroid failure in susceptible women, increasing their chances of anaemia and post-partum haemorrhage, but the condition can be lost among other pregnancy changes. While these were early days for endocrinology, thyroid dysfunction is far more insidious and complex than can be

demonstrated by goitre, which is not developed in all cases.²⁷ The overall incidence of reported uterine complications (although found in less than 3 per cent of the surveyed women) retains some significance given the maternal mortality rates. In most other ways however, the Survey provides little enlightenment on the health of women of childbearing age in 1920s North Queensland.

The NQOHP stories resourced for this work do not generally offer any further illumination, either in regard to general health or to experiences of the processes of parturition; certainly, enough women told when and where they gave birth to enable conclusions about preferred practices, but with the exception of Daisy S, Isabella and Ethel C, these stories omit details such as length of labour or any gynaecological or obstetric complications. It is doubtful that all of the other women's labours went smoothly. Once again, some of the lack of information can be attributed to the nature of free-form interviews, the passing of time, or (to a lesser degree) interviewer interest, but it is as likely that social mores influenced what the participants disclosed or revealed. Labour and childbirth were intimate processes, and open discussion about them jeopardised personal dignity. Those who offered details provided valuable insights; for the rest, it is reasonable to assume some experiences of childbirth, and examine them according to the early twentieth century approach to parturition that preferred to preserve mother and child, but was occasionally limited to saving the mother. The latter was a consequence of contemporary knowledge and technology as much as practice; eugenically, the child's loss was tragic – but since the mother might survive to care for existing children, or produce more, her survival was paramount.

Birth practices had changed markedly during the latter part of the nineteenth century, with improved procedures, medications and technological aids that often required specialised operational knowledge. Some commentators see those developments as

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²⁷ A relationship between iodine, anaemia and goitre was recognised by the early nineteenth century and myxoedema was linked to a lack of thyroid secretions, but comprehension of broader thyroid functions took longer to develop; see Leonard G Wilson, 'Internal Secretions in Disease: The Historical Relations of Clinical Medicine and Scientific Physiology', *Journal of the History of Medicine and Allied Sciences*, 1984, vol. 39, pp.263-302. See also W.O. Bynum, whose discussion of thyroid understanding serves as a reminder that many discoveries about human biochemistry were still new or contested in the early twentieth century; W.O. Bynum, "C'est un malade": Animal Models and Concepts of Human Diseases', *Journal of the History of Medicine and Allied Sciences*, 1990, vol. 45, pp.397-413

contributing to the ongoing medicalisation of childbirth. They argue that as a natural process became increasingly prone to medical intervention, childbirth was pathologised: as childbirth came to be viewed as a hazardous state and thus one in which women were essentially unwell, they became subject and patient, overwhelmed by knowledge and power imbalances against which they were defenceless. In such interpretations, women were just players in a patriarchal game that they were bound to lose because of their lesser social and legal status. There is little question that childbirth and giving birth were perceived as abnormal and risky acts by the twentieth century but that does not mean that women unwillingly relinquished power. Rather, it seems that they invited assistance when it suited them to do so: this was medicalisation by demand.

In emergency situations, middle and upper class women had turned to men with supposed higher skills than midwives for hundreds of years. An example of such a situation appears in a case reported by a seventeenth century English doctor: on April 3 1695, Charles Preston was

called to a Woman aged about 28 Years, six Months and a half gone in her third Child, she was Feverish, and raved a little; on Examination, I found the *Orificium uteri Internum* dilated about the largeness of a Crown; she complained of Pains in those Parts: This, joined with that of a Fall from a Stair about eight days before, determined me to assist Nature, which seemed ready to Relieve herself of that Burden; I caused to be given her some Aliment, to prepare her for a Work in which she stood in need of force, and one Hour after I delivered her happily of a Male Child, that lived half an Hour....³⁰

In the case above, the child stood no chance of survival, but medical intervention may have saved the fevered mother's life; to have been 'delivered... happily' suggests that

²⁸ As argued in Cahill, 'Male appropriation and medicalization of childbirth: an historical analysis', *Journal of Advanced Nursing*, pp. 334-335

²⁹ See for example Jo Murphy-Lawless, *Reading Birth and Death: A History of Obstetric Thinking*, Bloomington, 1998, but this book and its feminist theories of male power added little to my previous understanding. More woman-centred is Judith Walzer Leavitt, *Brought to Bed: Childbearing in America* 1750 to 1950, New York, 1986, and Judith Walzer Leavitt, (ed.), *Women and Health in America: Historical Readings*, Madison, 1999

³⁰ Charles Preston, 'An Account of a Child Born Alive without a Brain, and the Observables in It on Dissection', *Philosophical Transactions* (1683-1775), vol. 19, 1695 - 1697, pp. 457-467. The article refers to findings of French 'accouchers' (such as that a descending infant could die from pressure on the umbilical cord), and questions whether external influences (frights, falls, etc. to the mother) affect foetal development. It also claims that dissection of this and other foetuses proved 'a continued circulation from the mother to the child, and from the child to the mother, so that a foetus seems not to respire but by the mother', pp.465-6

she welcomed the end of an ordeal. This fits Leavitt's argument that although passing control reduced their autonomy, women continued to make choices; they resisted scientific generalisation of birth experiences but not the opportunity to improve their chances of surviving or of a live birth. Mephistophelian as any power trade-off may seem, it is easy to overlook the strength of that desire, which may be one reason why no NQOHP stories heard or used here mentioned any feelings of powerlessness or subjectivity in connection with childbirth. In evolutionary terms, eugenists could condone a loss of power over such a critical part of reproduction if it enhanced the chance of fit parents passing their genes to another generation.

The survival of those generations was of critical importance in White Australia, and it is important to remember that eugenic concerns in Australia and other white-dominated societies strongly contributed to medicalisation. For pre-Great War eugenists, women and their racial duty to produce babies were at the core of those anxieties: if they were reluctant to reproduce because of fears that neither they nor their infants would survive, the 'lamp of the Anglo Saxons' might flicker. In a 1909 book that he described as 'an attempt to call or recall women to motherhood', Caleb Saleeby summed up the problem with his comment that 'The *racial* importance of physical motherhood cannot be exaggerated'. In another argument, Saleeby framed the problem in military terms to contend that

the history of nations is determined not on the battlefield but in the nursery, and the battalions which give lasting victory are the battalions of babies. The politics of the future will be domestic.³⁴

However, where those battalions were the desirable offspring of middle-class parents, Saleeby accepted that they needed help to ensure a safe arrival, for it seemed that in becoming fitter than other women, their mothers had lost some of their ability to suffer

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³¹ Leavitt, 'The Growth of Medical Authority: Technology and Morals in Turn-of-the-Century Obstetrics', p.238

³² J. W. Taylor, 'The diminishing birth-rate and what is involved in it', *BMJ*, 1904, no. 427 in Moscucci, 'Holistic obstetrics: the origins of "natural" childbirth in Britain', pp.168-174

³³ Saleeby, *Woman and Womanhood*, pp. 18-19. His italics. He also saw a role for single, childless or menopausal women, who for the sake of a eugenic future could dedicate themselves to nurturing in occupations like nursing or in mothering others: such a woman could 'realize herself, and serve others, on feminine lines, and without a pang of regret or a hint anywhere of failure, even though she forego physical motherhood.'

³⁴ Saleeby, *Parenthood and race culture: an outline of eugenics*, London, 1909, in Moscucci, 'Holistic obstetrics: the origins of "natural" childbirth in Britain', pp.168-174

pain and had become more emotionally sensitive.³⁵ The uncertainty of early twentieth century birthing is shown in Cohen's 1911 guide to maternity where (unaccompanied by emotional strategies) his instructions on feeding a baby also teach the mother how to empty her breasts in the event of its death.³⁶ As society likewise acknowledged the potential for infant loss, it had to deal with declining birth numbers that further threatened population growth; with the middle class considered important contributors to the white gene pool, it became racially important to appraise and reappraise birthing methods and environments. Eugenic ideas thus boosted the scientific movement towards professionalism in birth attendants: politicians and eugenists alike hoped that if there was a real promise of safer birth, more middle-class white couples would have babies and consequently halt the birth-rate decline.

Scientists were confident that they could make birth safer for mother and child. ³⁷ Safe did not necessarily mean shorter or more comfortable, and it increasingly involved tools. For example, some early twentieth century women would have had long or difficult labours relieved by episiotomies or forceps deliveries, although as shown earlier, Daisy's first baby's head was damaged by forceps. ³⁸ Where mothers or babies were identified as being at risk there might be a caesarean, preferably weeks before the due date or at least before the baby's head engaged. As a last resort when significant and life-threatening problems developed late in labour, doctors may have performed craniotomies that increased the chances of a mother's survival, but removed any options for the baby. ³⁹ Although some religious and moral quandaries arose from a choice to preserve the mother at any cost, perceived good outcomes (as Leavitt says) reinforced 'obstetrical authority' and the effectiveness of medical technology. ⁴⁰

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³⁵ Saleeby, Woman and Womanhood, p. 170

³⁶ Myer Solis Cohen, *Girl, Wife and Mother*, Philadelphia, 1911, p.168. This book was sold in Townsville.

³⁷ As shown in Mein Smith, 'Blood, Birth, Babies, Bodies', p.314

³⁸ NQOHP, ID 4, 7-5

³⁹ See Leavitt, 'The Growth of Medical Authority: Technology and Morals in Turn-of-the-Century Obstetrics', for a balanced discussion of these and other emergency operations such as symphysiotomy and pubiotomy. The Bennett Collection at Townsville Museum and Historical Society includes a collection of forceps as well as episiotomy tools used by Dr Bennett in deliveries during a career than spanned over sixty years from the late 1920s.

⁴⁰ *Ibid.*. p.230

This was not a new result of positive assistance, for authority combined with experimentation and technology had saved lives for centuries: barber-surgeons carried out episiotomies as early as the seventeenth century. Dundes contends that the procedure derived from lithotomy skills such as those of French royal favourite Frère Jacques, remembered in folk song more for his tardiness than for his skill in excising stones from bladders. Public demonstrations of lithotomy procedures coincided with the adoption of the so-called reclined lithotomic position for birthing. A woman has limited movement in such a position, making her more dependent upon others; as mentioned earlier, the seventeenth century also brought the idea that childbirth was a pathological and abnormal event that required educated management. Then again, so were bladder stones, or cancers and a host of other problems; people sought medical help because their own skills were inadequate and they wanted to survive. Perhaps even Frère Jacques needed a sleep-in sometimes after late-night callouts.

To avoid the risk of faecal contamination of the baby, labouring women received enemas when their birthing assistants arrived. Although (like twentieth century men and women for whom it was considered a hygienic practice at any time) Frère Jacques probably knew the feeling of an enema, he was unlikely to have endured the indignity of a pubo-perineal shave, a procedure that developed alongside the introduction of labour-specific surgical instruments and the need to mend incisions. Technology and methodology eventually also influenced the positions adopted in uncomplicated births. Supported by three women, Cleopatra squatted, and her sisters elsewhere and later may have done so as well, or preferred to use a birthing chair; these date from about 2000BCE. However, to use their instruments (and probably spare their backs) medically trained late nineteenth and early twentieth century accoucheurs encouraged higher and better access. Furniture became part of the process for many women,

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⁴¹ Ibid.

⁴² Dundes, 'The Evolution of Maternal Birthing Position', pp. 636-7

⁴³ If overdue, she might have first had '1½ - 2' ounces of castor oil before a 'hot, forceful enema' and a 'very hot bath.' Mary Laetitia Flieger, 'Midwifery in Great Britain', *The American Journal of Nursing*, vol. 28, no. 12, 1928, p.1196

⁴⁴ He would have known an enema as a clyster, as shown for example in Molière, *Le Malade Imaginaire*, Act I; trans. Charles Heron Walls, n.d.

http://www.gutenberg.org/dirs/etext05/8mald10.txt

⁴⁵ Dundes, 'The Evolution of Maternal Birthing Position', p.636

although preferences varied culturally. Dundes quotes the author of an 1884 obstetrics book who reported that:

women in the United States lie flat on their backs, French women lie back on an inclined plane, English women lie on their left side, and German women use the birthing chair.46

This was still the case forty-four years later: an English midwife reported in 1928 that in Great Britain,

The actual delivery is conducted in much the same way as in the United States, except that the patient lies on her left side and an assistant raises her leg, instead of resting on the back with the feet in stirrups. In the case of a woman with a pendulous abdomen, a breech delivery, or a forceps case, she is delivered on her back.47

Whichever position she or her attendant preferred, close to delivery the 1920s Australian mother was likely to end up on a sheet-draped bed. 48 Once on the bed, she may have used a 'puller' (a twisted sheet or rope tied to the foot of the bed) to help brace herself when bearing down.⁴⁹

Long before she got to that stage however, a woman may have been offered anaesthesia. Eugenics affected this development too: there was a eugenic argument that women who were situated higher on the evolutional ladder were more emotionally labile as well as being more susceptible to pain; consequently, they avoided giving birth because of their fear of the pain. 50 This idea promoted experimentation with (and debate about) obstetric analgesics. Some if not all women would have been offered and perhaps accepted ether or chloroform; these oral anaesthetics were available from the mid nineteenth century. 51 They also seem to have been dispensed as required here

⁴⁸ Cohen suggested that the patient choose whichever position was most comfortable, with a pillow between the knees if on her side. Cohen, Girl, Wife and Mother, p.168. In 1926, Johnstone recommended the left side; Johnstone, A Text-Book of Midwifery for Students and

Practitioners, pp.166-172

⁴⁶ Ibid., p.639. Cites S. Tarner, Cazeaux's Theory and Practice of Obstetrics, Philadelphia,

⁴⁷ Flieger, 'Midwifery in Great Britain', p.1196

⁴⁹ Cohen, Girl, Wife and Mother, p.167

⁵⁰ Crichton-Miller H., 'Preserving the race in post-war reconstruction', *BMJ*, 1942, 1:337; A.S. Williams, Women and childbirth in the twentieth century: a history of the National Childbirth Trust Fund 1928-93, Thrupp, 1997, in Moscucci, 'Holistic obstetrics: the origins of "natural" childbirth in Britain', pp.168-174

⁵¹ Amelie Kass shows ether in use in the U.S.A from 1846 and provides excerpts from medical notes on routine and more complex labours. See Amelie M. Kass, "Called to Her at Three O'Clock AM'': Obstetrical Practice in Physician Case Notes', Journal of the History of

by midwives. 'Grannie Vollemore', the attending midwife, offered Alice ether for her first delivery in 1914 but she refused it.⁵² Not all medical practitioners supported the use of ether or other anaesthetics: some saw it as part of a 'meddlesome midwifery' that increased maternal risks.⁵³ Thompson warned in 1926 that care was needed when anaesthetics were used. Chloroform could produce inertia in the mother, reduce contraction efficiency and contribute to post-partum haemorrhage, while indiscriminate use of his preferred drug (morphine) could 'lead to disaster, especially for the children'. 54 Nonetheless, he thought that anaesthesia was safe when wisely applied, even though he listed seven 'possible ill effects' of morphine, all of which were alarming and included 'a 30-40 per cent increase in the need for forceps delivery', 'a slightly increased tendency to haemorrhage' and the risk of cyanosis in a child 'born within three hours of the morphine injection.'55 These hazards were still current when Ethel C had her third baby around 1940; the infant, a girl, was full-term and born alive but died soon afterwards from a 'weak heart'. Ethel had been very sick with influenza and believed her illness affected the baby. Either the nurse who had been with her for most of the labour or the doctor called in time for the delivery administered chloroform, and she was unconscious at delivery; she consequently never saw her daughter alive.⁵⁶

Throughout the labour period, and as often as possible, doctors recommended that the good student, nurse or midwife took care to wash his or her hands regularly, use boiled linen and change it often, sterilise any instruments and apply antiseptic to whatever could not be boiled. Yet, in the 1920s, despite the passing of seventy years since Austrian physician Ignaz Semmelweis showed an association between puerperal

Medicine and Allied Sciences, 1995, vol. 50, pp.194-229, also Johnstone, A Text-Book of Midwifery, pp.166-172. See also J. Drife, 'The start of life: a history of obstetrics', Postgraduate Medical Journal, 78.919, May 2002, pp. 311-316.

⁵² NOOHP: ID 28; CD67-4

⁵³ This term appears in Leavitt and several other writers, for example, Heinz Siedentopf, 'Facts of Birth', TIME Magazine, Monday, Jan. 16, 1933,

http://www.time.com/time/magazine/article/0,9171,744919-1,00.html. Accessed March 21 2007; Judith Walzer Leavitt, "Science" Enters the Birthing Room: Obstetrics in America since the Eighteenth Century', *The Journal of American History*, vol. 70, no. 2, Sep., 1983, pp. 281-304
⁵⁴ Johnstone, *A Text-Book of Midwifery for Students and Practitioners*, pp.166-172

⁵⁵ *Ibid*. He noted that chloroform was preferred in Great Britain and ether in America, while some doctors used 'a mixture of both, such as C² E³'; he preferred the German concept of Twilight Sleep using a mixture of morphine and scopaline (hyoscine hydrobromide). ⁵⁶ NOOHP: ID 119; CD322-4

fever and handwashing, the disease remained a threat.⁵⁷ Semmelweis had demonstrated convincingly that it was caused by cross-infection, and urged that instruments be boiled, and doctors and midwives wash their hands carefully between patients; still, even in establishments with modern obstetric facilities there was no guarantee of maternal survival.⁵⁸ Johnstone argued otherwise in 1926; including improved midwife training as a factor, he maintained that hospitals were the safest places to give birth. There was, he said, a higher incidence of the disease in 'private practice'; he probably meant in nursing homes, but as Loudon has shown, Johnstone was wrong about the overall safety of hospital birth.⁵⁹

Like the use of anaesthetic, the idea of good antibacterial practice appealed to eugenists. According to Saleeby in 1907, antiseptic procedures had a long term beneficial effect as well because more women would survive to old age: for this, society could thank 'the work of Lord Lister, and the advances of obstetrics and gynecology, largely dependent thereon', because antisepsis was 'increasing the naturally large number of women at these later ages....⁶⁰ This, he argued, meant that eugenic society would have even more mature women who could raise their own fit children and then make themselves useful in political or philanthropic pursuits. First, though, they had to have fulfilled their primary eugenic duty of giving birth.

After delivery, the birthing woman was likely to have a dose of ergot to contract her uterus and help expel the placenta. 61 That third and final stage of labour achieved, she formally became unwell: she was now in confinement. If any woman had been uncertain about whether she was sick or just engaging in a biological event, being

⁵⁷ M. Best, D. Neuhauser, 'Ignaz Semmelweis and the birth of infection control, *Quality and* Safety in Health Care, 2004, vol.13, pp.233-234

⁵⁸ Johnstone credited the 'modern conception of the disease' to 'Charles White of Manchester in 1773' whose ideas of asepsis he said were adopted but displaced by miasma theories: puerperal fever was subsequently categorised as a zymotic disease; he argued that Semmelweis added nothing to White's original findings. See Johnstone, A Text-book of Midwifery for Students and Practitioners, pp. 394-395

Students and Practitioners, pp. 394-395

Loudon, 'Maternal mortality in the past and its relevance to developing countries today',

 $[\]begin{array}{c} \text{pp.}241\text{s-}246\text{s} \\ \text{60} \text{ The numbers were 'naturally large because women live longer than men.' Saleeby, } \textit{Woman} \end{array}$ and Womanhood, pp.21-22

⁶¹ An extract from a fungus of the rye cereal, given orally as a fluid in earlier times; see Kass, "'Called to Her at Three O'Clock AM"', pp.194-229. In 1928, Johnstone said that a 'half drachm' was fine orally, but an injection was better. Johnstone, A Text-Book of Midwifery for Students and Practitioners, p.178

confined to bed would surely have eased her doubt: it was like going into quarantine. First, she would be washed (with antiseptics such as bichloride of mercury, Lysol or carbolic acid, as well as soaps) and for comfort may have had binders wrapped around her breasts and abdomen. Earlier maternity binders were undoubtedly home-made, but were commercially available in the 1920s. Brisbane's Mrs Gordon offered the Minerva Maternity Belt for 45/6; an abdominal model, being 'specially adapted for maternity' and made of 'drab sateen and white satin', it had 'stud fasteners and elastic abdominal strap' but was also 'suitable for corpulency or general support', which may have made it a more durable purchase at that price. Soft cloth pads could be attached to the abdominal binder while there was a lochia discharge; by the 1920s, some women may have preferred commercially available (but expensive) sanitary napkins.

Depending upon the preferences of her attendant, the prospective mother may have eaten and had drinks during labour; if not, she might now be offered a meal.⁶⁴ Regardless, she stayed in bed. The postnatal period was intended to prevent stresses on the muscles and organ damage that might lead to a later prolapse or multiple problems of the bladder, uterus, vagina and bowel, and perhaps invite infection: bedrest was deemed the best way to avoid problems. This practice was followed whether the woman was at her own home, in a nursing home or at a public hospital. Barbara told of how in 1917.

We were not, in our day, let out of bed until the tenth day. We just laid and didn't get out of bed. And on the tenth day, we got up. 65

Flieger noted of Great Britain in 1928 that 'All normal cases' were 'allowed up from the seventh to the tenth day.' ⁶⁶ In 1914, Alice L had preferred the option of a nursing home for her first baby. 'You could go to their home or they could come to you', she said, and since Grannie Vollemore impressed her, Alice also had her next four babies

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⁶² Johnstone, *A Text-Book of Midwifery for Students and Practitioners*, p. 178. It was 'not necessary' but 'a great comfort to the patient' and provided support for 'strained and weary' pelvic joints and muscles.

pelvic joints and muscles.

63 Gordon, *Birth Control and Hygienic Counsel*, p.53. The *Australian Woman's Mirror* shows such a belt in 1928, available from Denyer Bros. of Sydney, who also made trusses and artificial limbs. See *Australian Woman's Mirror*, January 17, 1928, p.55.

 ⁶⁴ See Martha Sleutel and Susan Golden, 'Fasting in Labor: Relic or Requirement', *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, vol. 28, no. 5, pp.507-512
 ⁶⁵ NOOHP, ID3, 6-6

⁶⁶ Flieger, 'Midwifery in Great Britain', p.1197

at 'old Grannie's place', resting there until deemed recovered. ⁶⁷ Nurses like Grannie 'charged about £10 for everything'. ⁶⁸ Barbara's babies were born at home: in such cases, the nurse/midwife returned daily to bathe mother and child.

Bearing in mind the naïvety about sex-related physiological events at this time, it would be nice to think that such service included some explanation of what the labouring woman would experience: twenty year old Alice certainly had no idea beforehand. No woman knew what to expect with her first labour, she said; all her mother told her was to make no fuss. 69 Her father's advice was more practical: at his suggestion, she swam every day when she was pregnant; his theory was that if she continued to 'move' her body she would have no trouble when the baby came.⁷⁰ Pertinent advice perhaps: Alice described herself as 'slim' and 'a good athlete'; she was five foot, seven inches tall (1.7m) and the baby weighed a hefty fourteen pounds and two ounces (6.4 kilos). 71 She made no complaints or mentioned any problems about that birth event, or the ensuing two.

Barbara similarly had no complaints. Despite the rising credibility of nursing hospitals, she preferred to deliver at home; beginning from her first in about 1917, she 'watched every one born, without the aid of the doctor.' 72 She was very happy with the care received from three nurses:

Nurse Chalmers was my first, then I had another nurse... then I had old Granny Sherlaw; she lived down here, way down near the end of the street. And the second day, she couldn't come to me, with my second child, so my hubby stayed home, he had to stay here.... But they were lovely nurses, they were really nice. They stayed with you; they stayed with you all the time.⁷³

Other women preferred a personalised hospital environment. In 1919, Adelaide chose a nursing home for her first baby, maintaining that women at that time preferred nursing homes to home births with midwives. Her babies were all born in private hospitals in Townsville. The first two of five arrived at 'The Nestles' – a private home turned into a hospital under Matron Guest, with medical services from Dr Evans and

⁶⁷ NOOHP, ID28, 67-4

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ *Ibid*.

⁷² *Ibid.*, ID3, 6-6

⁷³ *Ibid*.

Dr Taylor. After that 'The Lister' opened in the Townsville suburb of West End and she had her other babies there. Adelaide's single visit to a doctor lacked enlightenment: all she knew was that labour would be 'one big pain', and it was. The personal space available in private care may have helped her to deal with the surprise and recovery: she could have attended Townsville General Hospital, she said, but chose not to because she wanted a private room.

These accounts show that births were still just as likely to take place out of the home as in it by the 1920s. Those NQOHP women who had labour complications tended to have had them in outside environments, but since not all the women used in this work gave details, no conclusions are really possible about the role of location or attendant. Isabella was 34 when she had her one child, a daughter, in 1925 in Cairns; she was in labour for three days, with a doctor supposedly on hand. ⁷⁷ Unfortunately, he 'took sick' and could not continue, and a midwife delivered the baby. Isabella always wanted another child, but some thing went awry with that delivery, and she could not. ⁷⁸ Ethel C delivered her first baby away from home early in the 1930s, and was unimpressed with the care she received: it was 'a terrible labour' and she should, she said, have had a caesarean; she subsequently chose home birth and midwives for her other four babies. ⁷⁹

Nurses were not the only people involved in a woman's experience of childbirth. Friends and family played a significant role in the postpartum period in the 1920s and perhaps until the mid 1940s. Ethel also noted that new mothers 'always got someone in to do housework and care for the kids' because with the mother unavailable 'someone had to be there for them.' Such helpers were mostly friends, she added, but were paid for their time; her last baby arrived in the 1940s: by then, she said, confinement lasted seven days, and the nurse came every morning for a week. ⁸¹

⁷⁴ *Ibid.*, ID35, 83- 3, 4. There were two private hospitals in Townsville in 1922, and three in 1923. 'Lister' seems a good choice of name for a place that should have few germs.

⁷⁵ *Ibid.* Perhaps one's midwife regularly checked urine, foetal health and general progress in the interim.

⁷⁶ *Ibid*.

⁷⁷ *Ibid.*, ID64, 139-3

⁷⁸ Ibid.

⁷⁹ *Ibid.*, ID 119, 322-4

⁸⁰ Ibid.

⁸¹ *Ibid*.

Qualified nurses brought into the house were unlikely to engage in domestic chores; the traditional (unregistered, untrained) maternity nurse probably did some and may even have laundered for mother and baby; she certainly managed the immediate food and hygiene needs of mother and child.⁸² Friends or family did the rest.

By the time that Alice H had her first child in 1939, the move from home birth or midwife only birth into maternity home or hospital was practically complete. Hospitalisation (with its easier access to theatres and specialised or bulky equipment) may have provided practical and emotional security for 36-year-old Alice or 42-year-old Grace, who had her only child three years later: older women had a higher risk of problems in and after the delivery, and their babies were considered more likely to have difficulties. This was the case with Grace, who had an unspecified operation to save herself and the baby. ⁸³ On the other hand, Ethel's fifth and last baby arrived safely in the 1940s without hospitalisation: still preferring home birth, she endured a long labour, with three days between when her membranes ruptured and the birth. Ethel's nurse missed her son's wedding because of the delay, but the baby was fine.

Generally, the nurses and midwives in these stories were trusted and welcome helpers during the event and afterward, trained or untrained. Nonetheless, the creation and maintenance of nursing standards had become increasingly important by the hygiene-conscious 1920s, and the untrained and unregistered midwife/maternity nurse's future as a respected, skilled and knowledgeable figure was uncertain. Clues to her gradual (and inevitable) displacement by the trained nurse appear in intonation changes in some NQOHP histories as women spoke of their preferences for hospital over home births. Nellie was more direct as she described untrained nurses (in this case, postnatal carers) as 'Sarie Gamps', who 'looked after women in their homes after childbirth, not at the hospital.' In 'hospital', it is unclear whether she meant the public or private variety; her point was that anyone but a trained nurse was unsuitable.

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⁸² Alice L said that 'midwives charged about £10 for everything', which included 'the weeking'. ID 28: 67.4

washing': ID 28; 67-4 83 *Ibid.*, ID48, 111-4

⁸⁴ *Ibid.*, ID20, 51-1

The idea of the untrained nurse as a rough and common Sarie or Sarah Gamp dates to Charles Dickens' Martin Chuzzlewit, where Mrs Gamp is a slovenly widow fond of a drink, who attended 'a lying-in or a laying-out with equal zest and relish'. 85 Wendy Madsen remarks upon 'the Nightingale legend' that depicted professional nursing as an occupation where formally trained nurses were 'angels of sanitation', quite distinct from the untrained 'Sarah Gamps', portrayed as 'drunken and unskilled women of low moral and social standing'. 86 That derogatory image endured and intensified at a time when authorities were as keen to promote the idea of a professional nurse as the nurses themselves. By the 1920s, the Queensland government's desire to promote its Baby Clinic nurses as professionals coincided with efforts of the Australian Trained Nurse's Association (the ATNA) to increase their professional status. 87 Nonetheless, the stories here show that some women remained comfortable with the services of a midwife as likely to draw upon folk-knowledge as experience, and private hospitals were still well utilised in the 1920s despite their higher costs. As Madsen points out, women would hardly be likely to pay more if they considered the service received substandard. 88 The public would eventually develop a preference for the trained maternity or infant health nurse; in the meantime, the work of persuading women to modify behaviours that arose from circumstance as much as tradition continued, particularly in isolated areas.

Born at Charters Towers in 1896 and employed in retail with her family there until beginning a nursing career around 1930, Sister Annie Steele recalled the way things

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⁸⁵ Dickens remarked that 'In all my writings, I hope I have taken every available opportunity of showing the want of sanitary improvements in the neglected dwellings of the poor. Mrs Sarah Gamp was, four-and-twenty years ago, a fair representation of the hired attendant on the poor in sickness.' Charles Dickens, *Martin Chuzzlewit*, London, 1844, preface. http://www.gutenberg.org/etext/968>

Wendy Madsen, 'The Age of Transition: Nursing and Caring in the Nineteenth Century', pp.40-45; W. Madsen, 'Early 20th century untrained nursing staff in the Rockhampton district: a necessary evil?', pp.307–313, and W. Madsen, 'Badlands at the Bedside: Fact or Fiction', *Transformations*, no. 13, 2006.

http://transformations.cqu.edu.au/journal/issue_13/article_08.shtml. Also, A. Summers, 'A different start: midwifery in South Australia 1836-1920', *International History of Nursing Journal*, vol 5., no. 3, 2000, pp.51-57

⁸⁷ As shown in Madsen, 'Early 20th century untrained nursing staff in the Rockhampton district: a necessary evil?', p. 310 ⁸⁸ *Ibid.*, p.311

were before milk formulas and commercial baby foods became available. 89 Dried milk, she said, appeared about the second decade of the century and was soon followed by evaporated milk – condensed milk was all that was available earlier. Condensed milk had to be stored carefully: if it got hot, it would caramelise, and once opened, it had to be used. Powdered milk kept longer. Before formularised powdered milks such as Lactose and Lactogen became available for babies, cow's milk could be used, but in infants could cause diarrhoea. In such cases, other women might help. Steele had a cousin who could not breastfeed; the doctor was worried about the baby, and said 'the only thing now is to try and get a foster mother'; fortunately, a nursing mother nearby was able to help. 90 The two babies had one meal of cow's milk, then one of breast; this, Steele said, saved the baby's life. 'In the old stories,' she noted, 'you hear quite a lot about foster-mothers'; then, it generally meant a woman who would feed a baby, not bring it up as her own. ⁹¹ The term lost its meaning: once manufacturers could make powdered milk, they could make baby milk. Steele did not use the words 'wet nurse'; at any rate, the act she described was one of altruism. 92 It was not spoken of as an economic transaction.

There was also no pre-prepared baby food before the 1920s; mothers made their own, although 'lots of babies were fed on Groats rather early.' Groats was a strained porridge that was dried and then tinned. Tinned biscuits were also used as a baby food,

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⁸⁹ NQOHP, ID25, 58-3; 60-3. Steele trained as a nurse in Brisbane; she also worked for 'two terms' on the travelling Baby Clinic train, which she said 'in those days did the whole of Queensland'. From 1938 to 1947 the train was stationed in the north-west; after that, Steele mostly worked in clinics at Townsville, Mackay and Ayr.

⁹⁰ *Ibid*.91 *Ibid*.

⁹² On the decline of the wet nurse in America, see Janet Golden, A Social History of Wet Nursing in America: From Breast to Bottle, Columbus, 2001. In her review of Golden, Vostral found it 'difficult to imagine that sanitized bottles, rubber nipples, access to refrigeration, better delivery systems for milk, and the creation of infant formula did not play a substantial role' in the decline of breastfeeding. Sharra Vostral, 'Reproduction, Regulation and Body Politics', Journal of Women's History, 2003, vol. 15, no. 2, p.197. These ideas are supported in Jacqueline Wolf's finding that some members of the medical profession looked down upon the working-class wet-nurse and were quick to criticise her sanitary habits; they also worried that her milk might be of a lower quality. See Jacqueline H. Wolf, '"Mercenary Hirelings" or "A Great Blessing"?: Doctors' and Mothers' Conflicted Perceptions of Wet Nurses and the Ramifications for Infant Feeding in Chicago, 1871-1961', Journal of Social History , vol. 33, no. 1, 1999, pp. 97-120

and 'all the babies had a go at biscuits'. ⁹⁴ Florrie endorsed these tales and also fed her babies on condensed milk obtained from a Chinese vendor in Townsville. Her financial situation was always fragile, and her story of how she obtained the milk raises images of a petite woman walking across town with a child on one hip and a bag of roosters on the other; she traded the roosters for the milk, which she put on milk arrowroot biscuits for her babies, as she 'had trouble feeding'. ⁹⁵ In those preformula days, Florrie and other mothers demonstrated that in the face of problematic economic and environmental circumstances they were resourceful and determined. Thus, they drew upon other women, traded services and explored ways to nurture their children when options were limited. It was likely however that they also followed misplaced but well-meaning advice on occasions, and that while some of that advice may have come from other women or untrained midwives, some may have come from medical practitioners.

Soon after he began his work as Director of the Department of Infant Welfare in 1926, Jefferis Turner realised how many members of the medical profession had reservations about the notion of a trained nurse whose knowledge and practices might challenge their own. His work began with a tour of Queensland's rural and metropolitan baby clinics; at the same time, he visited general practitioners to promote the clinics and their staff. In so doing, he found that a number displayed a worrisome lack of interest in the new ideas of maternal and infant health and failed to cooperate with clinic nurses. Jefferis Turner had begun his trip with visits to Townsville and Cairns, after which he visited Mackay, Rockhampton, Bundaberg, Maryborough and Gympie. Once back in the South-East, he progressively visited the four city clinics and the rural clinics of Toowoomba, Ipswich and Wynnum. 'Generally speaking', he said,

I found the relations of the clinics with the medical profession were not satisfactory... for the most part the profession was holding rigidly aloof... its members had very little knowledge of the real aims and work of the clinics. On this want of knowledge had grown a crop of misunderstanding, suspicion, distrust, and, in a few instances, hostility.⁹⁶

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⁹⁴ *Ibid*.

⁹⁵ *Ibid.*, ID13, 35-4, 5; 36-2

⁹⁶ OPP: Report of the Director of the Infant Welfare Department, 1927, pp.63, 66

Even worse were 'relations between the clinics and maternity nurses and maternity homes.' 97 With some few exceptions, 'the situation appeared to be one of complete estrangement or even antagonism.' 98 Clearly, an education program was necessary. Although 'relations with the public were steadily improving', the clinic's 'real aims and the nature of their work were imperfectly understood by a great many.' 99 Jefferis Turner felt that clinic work 'might be assisted by judicious publicity', and as Cilento had wished of Gorman, delivered public lectures 'at each centre visited.' 100 As with the Survey, attendances were poor, but Jefferis Turner felt that the publicity generated by local newspaper reports made his efforts worthwhile. 101 In South West Queensland, the QCWA assisted the cause by inviting him to lecture to members of their Toogoolawah, Esk and Toowoomba branches: the latter visit coincided with a conference, from which members passed resolutions to request 'broadcast wireless lectures and [provide] local courses of lectures.' 102

In 1927, Jefferis Turner visited New Zealand, firstly as the Queensland representative at the Congress of the British Medical Association, and secondly at the behest of the government, investigating 'infant welfare work throughout New Zealand.' He received 'every facility from Sir Truby King' and expressed his admiration for the work in New Zealand and for Truby King's ideas. Here he may have realised that it was not enough just to provide clinics – they had to be seen as helpful and necessary adjuncts to better services before, during and after delivery, and for this, the public, nurses and medical practitioners of Queensland had to be persuaded or taught to adopt the basics of the Plunket system. As a result of his discussions with the Nurses'

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⁹⁷ *Ibid*.

⁹⁸ *Ibid.* In Maryborough and Gympie, 'sympathetic co-operation had been achieved.'
⁹⁹ *Ibid.*

¹⁰⁰ *Ibid*.

¹⁰¹ *Ibid.* Jefferis Turner thought also of his potential clients in his promotional activities. Future clinics, he said, should be easily accessible by public transport, and close to shopping centres. Some clinics were poorly located and a walk of just 'one or two blocks' was a challenge to 'a mother carrying a baby and perhaps accompanied by one or two children, more especially so if the walk is uphill.' This comment suggests that women did not commonly take prams out at this time: pram advertisements are few in mid-twenties newspapers; perhaps they were stay-athome objects for those who owned them. Attendances at the Wynnum clinic improved considerably when it moved to a more convenient location.

¹⁰² *Ibid*.

¹⁰³ *Ibid.*, p.63

¹⁰⁴ *Ibid*.

Registration Board and the Brisbane and South Coast Hospitals Board, Jefferis Turner developed a schedule of lectures in infant welfare for trainee nurses in general.

This was a long-term solution: in the meantime, there was an immediate need to reeducate current practitioners and new mothers. The former received a circular suggesting that they read 'inexpensive booklets by Dr. Margaret Harper, of Sydney, and Sir Truby King... supplemented by some practical demonstrations at our clinics by our nurses....' For new mothers, he suggested that they be given a card with feeding hints; it recommended also that they attend a baby clinic. For the future, he envisaged a 'scheme of ante-natal clinics' with the intention of reducing maternal and infant mortality. He could not know then that a 1926 decline in maternal mortality figures in Australia would be transitory: it continued to rise until about 1930, then fluctuated and did not decline significantly until the late 1930s. Nonetheless, with the implementation of all his ideas, Queensland nurses would finally complete the transition from the home and hospital attendants of previous times to highly skilled professionals.

A shift towards the idea of the specially trained or professional midwife is suggested in a 1928 exchange about what constituted a good or bad nurse: the concept of a good or bad patient however seemed constant when a correspondent in the *Australian Woman's Mirror* complained that 'Out of nine nurses attending me at the births of my three children only one had any knowledge of modern babylore'. ¹⁰⁷ The only informed nurse attending her had trained at 'Guy's Hospital, London, where it is compulsory for nurses to go through a thorough training in baby management in connection with the usual midwifery course. ¹⁰⁸ She had wondered why one baby 'was either in a sleep or heavy stupor the whole time I was in hospital. The explanation – brandy. ¹⁰⁹ This

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¹⁰⁵ Margaret Hilda Harper (1879-1964) worked at the Royal Alexandra Hospital for Children, Sydney. From 1914 she oversaw the operation of Sydney's first Baby Health Centre; she was also 'Medical Director of the Mothercraft Homes and Training Schools 1919-49 and wrote *The Parents' Book*, 1926.' Bright Sparcs:

http://www.asap.unimelb.edu.au/bsparcs/biogs/P001120b.htm Accessed January 24 2006 As shown in Loudon, 'Maternal mortality in the past and its relevance to developing countries today', p.244s

 $^{^{107}}$ Australian Woman's Mirror, January 31 1928, p.37; response on March 13 1928, p.37. 108 Ibid.

¹⁰⁹ *Ibid*.

criticism elicited a fiery response from another column's editor, who remarked that Australian training was at a level where

the study of baby management has become a fine art. I agree that ninety per cent. of baby troubles are due to errors in feeding, but if Agathea would spend a day at a baby health centre and hear some of the "brilliant" things told to Nurse by Mother she would know where to fix the blame. 110

It is a pity that mothers could still carry blame for any lack of knowledge: but the sentiment that uninformed mothers were ignorant had been clear in the early days of clinic activism. It is interesting however that both correspondents saw the role of a midwife as one that involved specific training.

Queensland's activism concerning the health of mothers and babies was at once distinct and part of shared ideas in Australia and New Zealand. Jefferis Turner demonstrated the shared concern in 1935 with his remark that 'if her women fail her, Australia will die'. 111 The comment followed his argument that Australia's population would be stationary by 1955 unless it produced more children; this depended upon the nation addressing the 'intimately and inextricably' linked problems of child and maternal welfare through practical measures and by providing a better education for its mothers. 112 But the problem was a local one too; between 1921 and 1933. Queensland's birth rate fell more than the national rate. 113 It was better than the national version only in the period between 1925 and 1929. 114 Improvements in the Infant Mortality Rate might have cheered observers: by 1929, Queensland's infant mortality rate (for babies under one year) was second lowest in Australia: only South Australia bettered it. 115 For Queensland, this was still about one baby per hundred less than New Zealand, but it showed improvement. 116 Concealed in the statistics is the reality that by the end of the 1930s, the everyday woman might have fewer children, but those she did have were more likely than ever to survive.

¹¹⁰ *Ibid*.

¹¹¹ QPP, Report of the Director of Infant Welfare, 1935, p.60. (This comment is also cited in Mein Smith, 'Blood, Birth, Babies, Bodies', p.313)

¹¹² *Ibid.*, p.59

¹¹³ *Ibid*.

¹¹⁴ *Ibid*. The rates were 3.85 and 2.61 respectively; the situation almost reversed over the next four years, with the Queensland figure being 2.46 and the Australia-wide total being 3.47. ¹¹⁵ *QPP*, Report of the Director of Infant Welfare, 1930, p.1. Queensland's rate was 46.1/1000; South Australia's was 40.9.

¹¹⁶ *Ibid*. New Zealand's 1929 rate was 34.1/1000.

By 1936, Jefferis Turner had spent over twenty years working towards the production of healthier white Queensland mothers and babies, and could see results from his efforts: a good outcome for any eugenist. Jefferis Turner's eugenic ideas were not overt in his Infant Welfare reports: there are no racial distinctions in his mentions of 'women' or 'mothers', but there was no need for him to distinguish his clients that way. Indigenous women were absent because the Home Secretary's Department dealt with their lives and health separately. Thus, the 'Aboriginals Department' [sic] was one of a group of 'Certain Sub-Departments' such as the Dunwich Benevolent Asylum, the Inebriate Institution, Brisbane Hospital, the Diamantina Hospital for Chronic Diseases (another responsibility of Jefferis Turner) and Prisons. 117 Within the Aboriginals Department, women and girls were mostly subsumed under the collective category of 'natives' as the Department endeavoured to manage their lives. 118 Any 'European half-caste mothers', although eligible for the Maternity Bonus introduced later, remained under the control of 'The Female Protector', who had the right to remove specific women to state-controlled settlements or church operated mission stations to 'protect them from exploitation and afford them proper attention and training'. 119 Simply, someone else worried about non-white women and babies, and Jefferis Turner was free to direct his energies towards those whose health and wellbeing he and others perceived as being more critical to the state and nation.

Science and eugenics between them had held the potential to make white and other women subjects in such activities, reinforcing the power and omnipotence of the state in activities promoted as being of social benefit. The Survey hinted at this potential basically by its coming into being and later through its insertion into everyday lives. Women elsewhere also may have experienced official interest in their homes and lives: this might happen through the activities and powers of organisations such as the various societies 'for the Prevention of Cruelty' and take place as a consequence of concerns or complaints about the way in which they mothered; their racial affiliations however were less important than their socio-economic situation, personal habits and

¹¹⁷ *OPP*, Report of the Chief Protector of Aboriginals, 1920, p.1. He was Visiting Medical

¹¹⁸ *Ibid.*, pp. 1, 4, 5.
119 *Ibid.*, p.5

possible risks to their children's wellbeing. ¹²⁰ Eugenic concerns affected those activities in the same way as they inspired most areas of enquiry in the Survey, but in that case, the Queensland government subjected northern white women to interview and assessment in their homes because of their racial identity. It seems that Cilento genuinely worried about the quality of white northern women's scientific knowledge, and that he intended to use the Survey findings as support for activities to remedy any deficiencies. He did not hesitate to reveal an absence of scientific knowledge in the white women interviewed during the Survey – but those findings emphasised the need for provision of continued resources. Similarly, while Gorman's questions about maternal health and knowledge primarily sought to establish the extent to which scientific ideas had permeated the lives of northern white mothers, they reflected an interest in their physical, financial and emotional wellbeing.

As shown in the efforts of experts such as Jefferis Turner to monitor, enhance and maintain the health of their babies and children, eugenic ideas brought late nineteenth and early twentieth century attention to the events that made white women into white mothers. Because of the ongoing expansion of government and social services, white mothers could access a variety of health services for themselves and their children by the end of the 1920s; subjects of intervention or not, they and their children ultimately benefitted from medical and social curiosity about their lives. Florrie's reminiscences of her attempts to provide for her children are a stark reminder of the past: with clinic sisters trained to provide free advice on breast-feeding or balanced alternatives, or refer their clients to other social services, perhaps later women need not have contemplated parting with a rooster or two in exchange for baby food.

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¹²⁰ In the late nineteenth and early twentieth century, Societies for the Prevention of Cruelty to Children arose in the U.S.A, England and Australia. In Queensland these activities began as an interest of the Society for the Prevention of Cruelty to Animals; they amended their constitution to include protection for children and became the Queensland Society for the Prevention of Cruelty, operating eventually under the Passage of Protection of Children Act 1896. The North Queensland branch formed in 1896 and dealt with children's wellbeing until the founding of the Department of Children's Services took over that work. For a study of the operations of the Victorian branch of the SPCC, see Shurlee Swain, 'I am Directed to Remind You of Your Duty to Your Family': public surveillance of mothering in Victoria, Australia, 1920 1940', *Women's History Review*, vol. 8, no.2, 1999, pp. 247-259

A 'Relatively Infinitesimal Degree' of 'Racial Poison' – the Survey findings on "Household Sanitation" and their relationship to eugenics in Queensland.

The social survey provides a unique opportunity both for investigation and for social construction, both for the analysis of mental attitudes and for the study of the control of forces in securing improvement.

Ernest Burgess, 1916

In 1909, Caleb Saleeby linked politics, eugenics and chemistry as he expressed his support for female emancipation. Because 'the vote' would 'reform the conditions of marriage and divorce in the eugenic sense', it would:

serve the cause of what I have elsewhere called "preventive eugenics," which strives to protect healthy stocks from the "racial poisons", such as venereal disease, alcohol, and, in a relatively infinitesimal degree, lead. ¹

Venereal infection and alcohol abuse implied some agency in the adult consumer. By contrast, lead could poison child or adult indiscriminately and insidiously, and did so, which made its effects far from infinitesimal; it was recognised as being responsible for many deaths. Saleeby's comments inadequately reflected that acknowledgment, but highlighted the importance that eugenists attached to the reduction of what they perceived as racially detrimental influences. In 1921, Fisher showed that Saleeby's concerns endured among the eugenic community:

Now if what is poison to the individual is in general poison to the race, if what helps or hurts the individual in his own life leaves, to some extent, a beneficial or harmful impress on posterity, then the importance of eugenics is greatly extended and it becomes a task of eugenic research to study the extent to which the indiscretions and bad environment, on the one hand, or the good habits and good environment, on the other, affect our descendants. And it becomes a mission of the eugenics movement to discover and set itself against race poisons. These may include not only alcohol, habit-forming drugs and infections but, if Gy is right, tobacco and, if Kellogg is right, even tea and coffee... I would emphasize this partly because, so far as I have any right at

¹ Saleeby, Woman and Womanhood, p.24

all to speak as a eugenist, it is on account of studies in the neighboring field of hygiene.²

Promoted by health experts and authorities, and mandated by legislation, the concepts of hygiene and sanitation rose from eugenic ideas and developed their own identities. By the 1920s, they were bywords whose eugenic affiliations gradually paled amid society's emphasis on the improvement of community health. Nevertheless, racial concern remained at the foundation of activities for the public good.

In the city and town (as public health law in state or municipal application), in the workplace (as workplace sanitation, industrial agreement or safety standards) and in the home (as domestic science and maternal and infant health practices), politics, eugenics and science combined to protect racial stocks. As a *Queensland Industrial Gazette* writer noted in 1923, the attitude was that 'until the clean can be protected from the unclean and the careful from the careless there can be no hygienic security.' Eugenic health motivations fitted easily with public health activities overall, for eugenic ideas were anything but atomistic: they addressed the whole white person. Behind its hygiene and sanitation based investigation, the Survey demonstrated such a breadth through its interest in many facets of its subjects' lives, but it is important to remember that any 1920s consideration of adult conduct, particularly white female adult conduct, connected with the needs of the children for whom they cared. Concern for child health underlay any reference to 'community' or 'public' health.

Queensland's first Commissioner of Public Health, B. Burnett Ham, foresaw the move to a holistic approach to health. In 1906, he recalled that when appointed in 1901, he developed

several schemes for "popularising" the science of sanitation. An essential factor to success in the administration of a new and somewhat arbitrary Health Statute is that the community should be in a position to understand and appreciate what is being done for its benefit, as a whole and individually.... The Hygienic Court at the recent National Show was but a practical demonstration, on a small scale, of what may be done to illustrate the growing subject of hygiene and its bearing upon the practical wellbeing of the community, the individual and the home.⁴

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² Irving Fisher, 'Impending Problems of Eugenics', *The Scientific Monthly*, vol. 13, no. 3, 1921, pp. 214-231

³ Queensland Industrial Gazette, anon., 'Sanitation and Safety', July 1923, p.410

⁴ QPP, B. Burnett Ham, Report of the Commissioner for Public Health, 1906, p.10

Those schemes included popular lectures and health displays for direct delivery of health and hygiene information; indirectly, however, Burnett Ham undoubtedly helped to build positive public relationships through empathetic departmental practices. Visiting health inspectors or nurses (such as those monitoring infectious disease occurrences) made courtesy visits after the infectious period had passed and tried to inform but not lecture those they visited.⁵

Considering the way in which they dominated early eugenic texts and arguments, explicit connections between eugenic and public health reforms increasingly appear diluted through the course of the 1920s. Nonetheless, they are there, and careful of the needs of the child, as shown for example in the 1920s writings of Americans Ellen Potter and Franklin Bobbitt, with references to racial wellbeing shielded by a larger emphasis on aspects of, and developments in, community health. As Director of the Pennsylvania Children's Bureau, Potter identified a shift in society's approach to child health, where the older emphasis on treatment and correction of health defects had been replaced by a desire to prevent such problems in the first place; this change, she said was inspired by 'the catastrophy of the World War', which:

furnished the spur to this rapid progress. The conservation of the race and civilized society demanded that the child be safeguarded, and society, once more in response to selfish interest, moved forward.⁶

The war spurred conservation activities in Geneva too, where the Red Cross received assistance from the eugenics-based American Social Hygiene Association in disseminating health information programs. Belgian doctor René Sand, later Secretary-General of the League of Red Cross Societies, continued and expanded that work after the war. Sand placed children's health at the core of the Red Cross's international hygiene incentives in 1921, providing educational support for successful industrial health and safety campaigns in the U.S.A, Canada, Poland and

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⁶ Potter, 'Community Measures to Conserve Child Life', p.17

⁵ *Ibid.*, pp. 8, 10, 12; on visiting phthisis patients for example, Sister Perry noted that her patients were 'grateful for the interest displayed in their welfare.'

⁷ The American Journal of Nursing has Sand as Secretary General of the League of Red Cross Societies in 1926, while an article reproduced in the Queensland Industrial Gazette in 1923 has him as Secretary General of the Belgian Red Cross. An early review of a Sand work on sanitation criticised it for not saying 'more' on sterilization of the unfit. See J. Dollard, 'Review of Health and Human Progress by Rene Sand', The Psychoanalytic Quarterly, vol. 6, 1937, pp. 369-370

Czechoslovakia. Bescribing himself as dedicated to 'the material, intellectual, and social advancement of the working classes', Sand saw health education as a sensible way to achieve better working class conditions. He worked tirelessly to attract support from societies at home and abroad, and spread his sanitation message; in this latter work, he was spectacularly successful. Sands called his work social medicine: but it had eugenic associations.

With the help of corporate and private philanthropy, the Red Cross's version of social medicine (under Sand's direction) inspired 'the health week' in a number of countries, 'National Baby Week' in Czechoslovakia and 'Children's Year' in the U.S.A alongside dedicated workplace activities. ¹⁰ In 1922, the General Council of the League of Red Cross Societies voted to facilitate 'active cooperation' between 'national Red Cross societies and employers' associations and labour organisations'; it did so in recognition of 'the importance of popular health education.' The Red Cross invited delegates from those organisations to join its National Health Council; in exchange, it provided them with articles and material on health as well as lecturers. The list of compliant organisations reads like a 'who's who' of eugenics. It included:

the National Child Welfare Society, the Anti-Tuberculosis League, the National League for the Prevention of Venereal Disease, the Federation of Temperance Societies, the National League for Mental Hygiene, and the Belgian Eugenics Society. 12

These incentives were so successful that delegates of the Fourth International Labour Conference in 1922 voted to emulate them in their own countries. The interests of Sands and the supportive societies concerned circulated around the healthy worker, who could only be so with enough wages to buy good food and essentials, and a good knowledge of hygiene and sanitation; learning the latter should begin from an early

⁸ Sand, 'Health and the Workers', p.410

⁹ Born in 1877, Sand was a prominent member of the International Conference of Social Work: he proposed the establishment of such an organisation in 1923 at a Washington meeting of the 50th National Conference of Social Workers, where his ideas impressed Eleanor Roosevelt. A popular speaker internationally, he remained engaged in humanitarian work with the UN and WHO until his 1953 death. For more see International Federation of Social Workers, http://www.ifsw.org/en/p38000055.html; also, George Washington University: The Eleanor Presents Papers Project, Eleanor Roosevelt, 'My Day', October 11 1952,
; also Anon., 'Some High Lights of the American" Health Congress', The American Journal of Nursing, vol. 26, no. 7, July 1926, pp.565-573

¹¹ See Bulletin of the League of Red Cross Societies, vol. 2, no. 13-14, 1921, pp.495-502

¹² Sand, 'Health and the Workers', p.413

age. Early in the article cited here, Sands included an excerpt from American poet Vachel Lindsay's work, *The Leaden Eyed*:

Let not young souls be smothered out before They do quaint deeds and fully flaunt their pride. It is the world's one crime its babes grow dull, Its poor are ox-like, limp and leaden-eyed. Not that they starve, but starve so dreamlessly, Not that they sow, but that they seldom reap, Not that they serve, but have no gods to serve, Not that they die, but that they die like sheep. 13

Ideas similar to Sand's seem widespread at the time. ¹⁴ Bolt recognised that for 'child health' to be effective, it

must be an integral part of the public health. It is intimately related on the one hand to the sanitation of the community and on the other to the home hygiene of the child. Its meaning has gradually broadened to include all health activities for the benefit of mother and child.¹⁵

Child health in the 1920s had moved from being a singular concern to one that would improve alongside enhancement of the greater public health.

This shift is identifiable in mid-1920s and 1930s Queensland government records where departmental reports increasingly promoted the public health to a position where it was the state's primary concern: racial interests remained but seem almost extraneous as departments focused on the provision of a complete health environment in which better adult health would lead to better child health, and vice versa. Bolt foreshadowed such a development in the U.S.A in 1921, with the comments that

In giving consideration to the fundamental factors which enter into the mortalities of infancy we soon discover that a number of the unfavorable conditions which determine a high infant mortality are also detrimental to life at all ages, although acting with diminshing force as age advances. Improvements in sanitation and hygiene, better social and economic circumstamces and more intelligent understanding of mothers in the care of their babies, have had a decided effect in creating more wholesome conditions under which the older children may be reared. Future offspring are thus

¹⁵ Richard Arthur Bolt, 'Newer Aspects of Child Health', p.38

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¹³ Ibid., p. 410, cites Vachel Lindsay, The Congo and Other Poems, New York, 1919.

¹⁴ Sands' ideas support Kevles' argument for a shift in eugenic ideas after the Great War; thus, pre-war eugenics were 'mainline', with their focus on racial inferiority rather than environment, while post-war, or what he terms 'Reform eugenists' paid greater heed to environment, and nature and nurture came to dominate later ideas. See Daniel J. Kevles, *In the Name of Eugenics: Genetics and the Uses of Human Heredity*, New York, 1985, pp. 88, 172-3, in R. Jones, 'The master potter and the rejected pots: eugenic legislation in Victoria, 1918-1939', *Australian Historical Studies*, vol. 30, no. 113, 1999, pp. 320-321

assured a better chance of surviving. Thus infant mortality is at once a reflection upon the past and a prophecy for the future. 16

In the great majority of late 1920s and early 1930s Queensland government health records and departmental reports reviewed for this work, the word 'eugenic' is absent; this is in marked contrast to its earlier prominence or words such as 'racial fitness' as descriptors from the first decades of the century. ¹⁷ (Infant Welfare Department files provide rare exceptions.) The files concerned speak of sanitation and hygiene, of public and community health; they laud improved diets, the benefits of exercise and the contributions of science to community health more than they do the problems of heredity, but it is doubtful that such changing terminologies confused racial purists – in Germany at this time, the term 'racial hygiene' (which encompassed all of these things) had a meaning apparent to eugenists there and overseas. For those committed to the maintenance and perhaps development of a distinct race, only the labels changed. For the everyday white person who had grown up amid predictions of a selfextinguishing Indigenous population, it may well have seemed that the government directed all its health improvement activities at them for the common weal, because the future lay in white hands anyway. Regardless, they would have seen a 1920s Oueensland government committed to health reform.

Queensland government activities became increasingly coordinated and efficient in the decades after Federation. Queensland had separated from New South Wales to become a state in 1859, from which time the state government established local authority bodies according to demand (generally by Petition) as settlement expanded. Municipal or local government powers were defined under the *Municipalities* Institutions Act of 1864, which as Harris explains 'firmly established the role of local government in urban areas'. 18 Formal incorporation came with the *Local Government* Act of 1878, but these arrangements suited densely populated areas and geographically

¹⁶ *Ibid.*, p.9

¹⁷ It endured overtly elsewhere, for example in government and public debates about compulsory sterilization. See Jones, 'The master potter and the rejected pots: eugenic legislation in Victoria, 1918-1939', pp. 319-343. Perhaps this tendency to indirect reference affected historical writing too: in reviewing Australian research on eugenics, Jones noted a historiographical amnesia on the subject until the 1980s, with Roe suggesting that 'occasionally amnesia gave way to suppression'. See Michael Roe, *Nine Australian* Progressives: Vitalism in Bourgeois Social Thought 1890-1960, St. Lucia, 1984, p.14 ¹⁸ Charles P Harris, Local government and regionalism in Queensland, 1859-1977, Canberra, 1978, pp.13-41; 79-80

small municipal divisions more than they did those with lower populations spread over larger geographical areas. In response to the needs of people living in such circumstances and places, the Government introduced the *Divisional Boards Act* of *1879*. This Act provided public services for places outside municipal boundaries: Divisional Boards were responsible for facilities such as roads, parks, reserves and cemeteries, and were also empowered to monitor and regulate building construction, deal with public nuisances and apply standards for slaughter-houses, as well as organise fire prevention and other services (such as traffic control) that residents of densely populated settlements took for granted. The 1878 and 1879 Acts were replaced by the *Local Authorities Act* of *1902*, which abolished divisional boards and created towns, cities and shire councils. From statehood, and until and after the *Local Authorities Act*, whether mandated as divisional boards, towns, cities or shires, local powers undertook the provision, organisation, regulation and monitoring of sanitary and public health services.

The introduction of baby clinics and the regulation of nurses, nursing homes and public hospitals illustrate some of the ways in which Queenslanders benefited from municipal and State programs designed to reduce the health risks associated with public, private and commercial activities. Concerns for a healthy white Queensland underlay all of those health initiatives and eugenic ideas provided a basis for them. By the 1920s, a structured Queensland health bureaucracy had replaced late nineteenth century panics about the fecundity and tropical adaptation of Queensland's white residents with organised enquiry and systematic planning. With child health recognised as dependent upon public wellbeing, it was inevitable that the home too would become a legislation target and site of scrutiny. When Annie Gorman visited, it was certainly scrutinised.

¹⁹ *Ibid.* Jan Wegner demonstrates some of the complexities of organising a Municipal Board: see her account of the formation of the Einasleigh Divisional Board in *The Etheridge*, pp.76-82 ²⁰ Harris, *Local government and regionalism in Queensland, 1859-1977*, pp.13-41; 79-80

²¹ For more on the development and exercise of municipal power, see Department of Local Government, Sport and Recreation, 'Evolution of Local Government in Queensland', http://www.localgovernment.qld.gov.au/?id=6272. Accessed June 2 2008

Somewhere in Townsville, Gorman inspected a bedroom, where she found the 'bedclothes [were] soiled and smelling of urine. To make matters worse, in an unspecified number of homes there, she found that a person or people had not bothered with, or made the distance to, the outside toilet: there was, she said, 'pollution of the soil with urine', which was probably made worse by odours from

The closet pan without a lid and the contents exposed to flies etc., (no sawdust or ashes being used), stale kitchen and bath water lying in pools and uncovered drains, scraps of eatables and garbage lying in yard and drain. Filthy condition of kitchen sink, wash cloth and towels, cooking utensils left exposed to flies (unwashed), bedrooms unaired... 50 per cent of the yards were in a dirty condition, old newspapers, tins and garbage being scattered about, and in many cases the fowls and goats have free run beneath the house and in yards.... ²³

It is easy to imagine Cilento's researcher overwhelmed by sensory perceptions as on a January day she stood amid the clutter of a steaming, muddy yard with a background chorus of clucking poultry, bleating goats and the relentless buzz of flies. These properties stank.

Given the nebulous nature of Cilento's good, fair and poor ratings, and Gorman's sound training in hygiene, it is possible that not all of the homes that shocked her would have seemed as inadequate to others as they were to her or Cilento. On the other hand, it is difficult to imagine that a home with free-range goats and poultry plus an uncovered toilet pan would achieve anywhere near the level of cleanliness that Cilento and Gorman considered desirable. Such a picture of Townsville housing standards undoubtedly would have horrified long-term residents such as Marjorie, who spent her adolescent and mature years in a cool and gracious Townsville home situated on a hill overlooking Cleveland Bay. At another time a consular residence, it remains a dignified and lovely dwelling. That home was not unique in the 1920s: Townsville and its northern counterpart, Cairns, boasted many striking houses; Charters Towers likewise was and remains noted for much of its architecture. Enhanced by greenery, a house did not have to be middle-class to be attractive: NQOHP accounts show that many of those residents unable to afford gardeners took pride in their homes and gardens. Gorman's description accentuates the supposedly random choice of the 'meaner type' of homes that formed the 'larger proportion' of

²³ *Ibid*.

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²² Report, pp. 1-5; Cilento, White Man in the Tropics, pp.78-9

those visited; predominantly rented, and occupied generally by 'those sections of the tropically resident population who live under the worst possible conditions.' ²⁴

It was not surprising that Gorman as a trained nurse commented on the stench: an awareness of smells, and a conviction that they had a relationship to health, emerged during the Enlightenment. Increasingly throughout the late eighteenth century, the odours that western people once accepted as part of their world were no longer tolerable. By the 1780s, Hays argues, 'Air had become the health issue, the nose was a diagnostic tool, and clean water was the solution to the filthy atmosphere that bred disease.' Consequently, European governments began to drain and ventilate their slums and villages and develop better means of sewage disposal than the cesspit long before the twentieth century. Quarantine procedures and practices that developed during the days of plagues became more efficient through the centuries. Nonetheless, as Hay adds, municipal authorities and social activists 'assailed many of the vectors of disease without really knowing why their measures had an effect.' 26

In Victorian and then Edwardian times, medical authorities generally adhered to centuries of belief that attributed human illness to miasma, the putrid smells and gases that arose from rotting matter; this led to the idea of miasmatic disease; part of a group known collectively as zymotic, which some considered to play a part in natural selection.²⁷ In the Registrar-General's Report of 1901, deaths from 'miasmatic diseases' were highest in the category of zymotic diseases, the first of eight classes of death used in Farr's Classification.²⁸ Farr believed that organic, non-living organisms caused zymotic diseases: such organisms emanated from miasma and caused illness when inhaled.²⁹ In this, he shared the ideas of London's sanitary reformer, Edwin Chadwick, whose 1842 *Sanitary Condition of the Labouring Population of Great*

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²⁴ Cilento, *White Man in the Tropics*, p.77. Gorman found '48% of the 300 homes visited in Townsville were rented', for an average rent of 17/6; 33% of those had sublet 'a room or half cottage to another family'. Report, p.4

²⁵ Hays, The Burdens of Disease. Epidemics and Human Response in Western History, p.111 ²⁶ Ibid.

As for example in E Ray Lankester, Review of G. Archdall Reid, *The Present Evolution of Man*, Chapman & Hall, 1896.

^{//}erc.lib.umn.edu/dynaweb/victorian/lankpres/@Generic_BookTextView/104>

²⁸ *QPP*, Registrar-General's Report – Vital Statistics, 1901, xxix

²⁹ As shown in J M Eyler, 'The changing assessments of John Snow's and William Farr's cholera studies', *Soz Präventiv Med*, 2001, vol. 46, no. 4, p. 228

Britain advocated that cesspits be abolished: not for their infectious potential, but because of the dangers of miasma.³⁰

Janice Wegner remarks that miasma became associated with 'anything... that stank'; hence, drains, swamps, excreta and all things rotten became known as 'nuisances'. Belief in the miasma theory was widespread in the late nineteenth century; in Queensland and other places, it inspired the appointment of Inspectors of Nuisances. ³¹ Medical understanding of the ways that disease spread increased rapidly during the later nineteenth and early twentieth centuries, with progressive recognition of the roles played by bacteria and viruses, insect and animal vectors, poverty and poor sanitation. Nonetheless, despite growing scientific questionning of the miasma theory, noticeable smells remained associated with filth, and filth with miasma. The Queensland government referred to 'miasmatic diseases' as late as 1912, although as Wegner shows, against protests from the Commissioner of Public Health. ³² The idea of a relationship between smells and hygiene endured. By the 1920s, human sweat and 'feminine odours' – vaginal emissions, generally indiscernible except to the emitter – had become offensive, a matter significant to the emergence of the 'modern' woman.

Gorman may have developed some doubts about the cleanliness of such women as she proceeded on her survey. Her study of Townsville always provides the most details of her findings. Of the Townsville homes visited, she reported that 'about 30 per cent have no ice chests'; this meant that two hundred and ten of the homes visited in Townsville did; ninety did not. Possession of an ice chest may have been an economic rather than hygienic choice, for the Report goes on to say that ice was 'regarded as an unnecessary luxury by not a few house-wives.' An unspecified number used canvas water coolers instead; these, Gorman commented, were not particularly practical for the climate. (Those who used one might have disagreed: hanging from a verandah

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³⁴ *Ibid*.

³⁰ Roy Porter, *London: A Social History*, pp. 315-6. Chadwick detailed his ideas clearly in 'Circulation or Stagnation', 1899. See

 $< http://www.victoriantimes.org/asset_arena/text/pdf/DA/VT1889LADA.pdf>\ Accessed\ March\ 9\ 2006$

³¹ Jan Wegner, 'Nightcarts and Nuisances', in MacLeod and Denoon, eds, *Health and Healing in Tropical Australia and Papua New Guinea*, p.181

Report p. 1; Cilento, White Man in the Tropics, p. 77

rafter, the canvas cooler remained a fixture in Townsville for many years, and as Diane Menghetti notes, although more dependent upon a breeze than in southern climes, it effectively maintained perishables or cooled water. ³⁵) Of more concern in such a climate was the number of homes without adequate storage for meat and perishables. 'Nearly 40 per cent', Gorman noted, had none; these 120 homes kept 'the fresh meat hanging on hooks in the open air while the cold cooked meats are kept in the ordinary safe or cupboard', while twenty-seven households neither stored separately, covered or cooled their perishable foods. ³⁶ The Report, as required, states many of its findings negatively: really, over 70 per cent of homes had some way to cool spoilable foods, even if only by employment of the 'very unsatisfactory' canvas cooler, and 60 per cent had meat safes. ³⁷ Nonetheless, for the others this raised the potential for gastric illness: a real concern considering the mortality rates.

'Gastric illness' in early twentieth century newspapers and government reports is more usually referred to either as enteritis or gastro-enteritis; such reports may list diarrhœa separately, although the infections are closely linked. Enteritis, at its simplest, refers to a bacterial or viral infection of the small intestine, usually producing pain or diarrhœa; when vomiting also occurs, the disorder is considered to be gastro-enteritis. It can indicate other diseases such as giardiasis (giardia) and tuberculosis. Diarrhœa similarly can be viral or bacterial and indicative of other problems: mostly due to the accompanying effects of dehydration, it remains the largest cause of death among infants in the Third World, with over 1.5 million deaths a year. ³⁸ In either case, infection can be prevented through such simple measures as hand-washing before handling food, controlling flies and drinking pasteurised milk and clean water.

³⁵ Diane Menghetti, pers. comm., December 2006

³⁶ *Ibid*. Refers to 9% with foods uncovered and not cooled.

³⁷ *Ibid*. None of the Oral Histories provided details of the construction of their meat safes. Whether constructed of metal or wood, the safes were cooled by wetting external drapes or coverings. An original silky-oak safe in Toowoomba has removable panels made of fine bamboo strips hanging on each side and front over panels of wire gauze, but also has hooks for other drapes: the bamboo sections might have protected the highly polished wood or the wire gauze from becoming too wet. See the Powerhouse Museum for other examples: one picture shares the ideas of the Hoosier dresser, to have all cooking needs in one location.

http://www.powerhousemuseum.com/opac/92-305.asp

³⁸ World Health Organization, 'Prevention of Diarrhea',

http://www.who.int/chd/pub/cdd/meded/8med.htm Accessed March 6 2006

Untreated water consequently provided a potential disease source. As a newcomer to Townsville, Gorman may have been unaware of long-standing debates about its water supplies. She found that roughly 165 of the homes surveyed had no water tanks and were using 'river water for all purposes', while of those 135 homes with tanks, about sixty did not screen the inlet against mosquitoes.³⁹ Few of the women interviewed had what Gorman considered a good knowledge of insect and dirt-borne disease; although 'the majority' had 'a better idea of the meaning of sanitation' thanks to the Hookworm Campaign, it seems that modern ideas about hygiene and disease prevention were not reaching some working-class women. 40

If Gorman's figures were representative of the larger population, then Townsville had some real problems. Gorman estimated a percentage of women who enjoyed apparently 'normal' health in each town and divided the remainder according to various health problems. It is interesting that in her remarks on Townsville women's health, Gorman showed that at least one in ten of the women she considered in poor health complained of 'indigestion, chronic diarrhoea and constipation'. 41 Although she attributed their problems to inadequate dental care and irregular eating and bowel habits, poor sanitation undoubtedly played some part and might have similarly affected other family members, including children. 42 Certainly, many children, like their mothers, had bad dental hygiene: 'over 50 per cent of the women, young and old', she added, 'appear to consider good teeth of a minor importance'. 43 The outcome of such an attitude in Townsville was that 'the majority have more than half their teeth missing and other[s] have filthy teeth broken and decayed'. 44 This, she added, was undoubtedly due to the 'prohibitive cost of dentistry'. 45 A basic understanding of dental hygiene would surely have prevented some of these problems.

The Cairns women surveyed did better in some ways: at least 98 of the 123 surveyed women covered their perishables, and just four reported 'gastric' problems even

³⁹ Report, p.1; refers to 'about 55 per cent.'

⁴⁰ *Ibid.*, '3%' had a good knowledge.
41 *Ibid.* The figure given was 16.5%

⁴² Ibid.

⁴³ Ibid.

⁴⁴ *Ibid.*, pp.5, 17

⁴⁵ *Ibid.*, p.5

though half had no ice-chests and twenty-seven no meat-safes. ⁴⁶ Concerning the latter, this could mean that they visited the butcher regularly, ate little fresh meat or used alternative cooling methods. Butter and milk for example stayed fairly cool when stood in a bowl of water covered with a wet cloth; according to the Oral Histories, this was a favoured technique. One farming woman told of an elaborate homemade cooler using wet charcoal stacked around a trunk; the *Australian Woman's Mirror* still *suggested* this practice for homes without electricity in 1928. ⁴⁷

As stated elsewhere, Gorman's findings on Cairns lack the details provided for other towns. The Institute clearly had told her to work as quickly as possible, and the women visited mostly seem to have been amenable: 'on the whole', she noted, 'I have found the people very hospitable'. 48 Nonetheless, she seemed keen to move on, and wrote to Baldwin that 'There is nothing much to be gained by prolonging my stay in Cairns, as the houses I have seen represent practically all the different types found here.'49 The Cairns report does not show the measurements of levels of knowledge about sanitation or insect-borne disease, but hints that these are lacking. Only one or two homes had 'a proper drainage system', while at least ten had 'unsanitary drains'. 50 Most homes in Cairns had water laid to the house; thus, it was an almost insignificant finding that roughly twenty-four of the homes surveyed had water tanks: considering the need for vigilance against mosquitoes in a malaria-prone area, a more important discovery was that half of those were unscreened, allowing mosquito access. 51 As mentioned, Gorman found that about six Cairns women appeared infected with 'malaria'; so were an unknown number of Cairns school children, but the disease was not reported in any other town.⁵²

The women of Atherton reported the best health of all the towns surveyed: those in thirty-six of the forty-four homes visited appeared to be in a normal state of health. At

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⁴⁶ Report, p. 6

⁴⁷ NQOHP, ID140, 351-3; *Australian Woman's Mirror*, vol. 4, no. 16, March 13 1928, p.21

⁴⁸ Letter, Gorman to Baldwin, 20 July 1924, NAA, SP1063/1, 277

⁴⁹ *Ibid.*, letters, Gorman to Baldwin, July 11 and 23, 1924

Report, p. 6. Refers to 1.5% with a proper drainage system, and 8.4% with unsatisfactory drains.

⁵¹ *Ibid*. Refers to 20% with water tanks.

⁵² *Ibid.* Gorman reported that '3.5 per cent' of children examined in Cairns had 'malarial fever'; see Report, p.17. While they might well have done so, it is also possible that they had dengue or other mosquito-borne infections that they might describe as malaria.

81.6 per cent, this is the highest such rating.⁵³ Only half had ice chests, but most (thirty-nine or forty) homes had meat safes.⁵⁴ Just two Atherton women complained of gastric problems, and the town received Gorman's best rating for healthy cooking.⁵⁵ Their knowledge of insect and dirt-borne disease was also highest.⁵⁶ Additionally, the Atherton Survey produced the highest number of what Gorman called 'proper' drains, sealed and leading away from the house; some thirteen of the forty-four surveyed residences impressed Gorman in this way.⁵⁷ (The next highest outcome for this criterion was Charters Towers; of the 132 homes surveyed there, only about twelve homes were satisfactory.⁵⁸) There was always scope for improvement: as with Cairns, eight households failed to screen their water tanks.⁵⁹

Life was harder for some women in Chillagoe. Those in the relatively comfortable homes provided by the Queensland government for State Smelter staff (as opposed it seems to wages employees) at least had verandahs and an inside bathroom, and although made of iron, the exterior walls were lined and the rooms had wood partitions. Gorman stated that '64 per cent' of cottages in the town 'were built entirely of iron'; over half of these were government built and owned. Lesser employees lived in smaller cottages but still enjoyed a front verandah. While 'appallingly hot' in daytime, the iron houses cooled at night. ⁶⁰ By contrast, for the unknown number of interviewed women who lived in 'privately owned cottages' and seemed not to enjoy government employment privileges, home might be,

Primitive and unsanitary, built of petrol tins, hessian, without flooring boards, some having no windows nor suitable ventilation. Four adults were living in a three roomed humpy of this type, using the kitchen as a general living room, eating, sleeping and bathing in it. In another place, living under similar conditions, were 4 adults and 5 children.⁶¹

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⁵³*Ibid.*, p. 7

⁵⁴ *Ibid*. The figure for ice chests was 90%.

⁵⁵ *Ibid*. Atherton returned a rate of 13.2%, meaning that cooks in six of the forty-four households apparently met the criteria for scientific cooks, using fresh ingredients prepared in a hygienic way, and ensuring that their family ate a portion of each food group daily.

⁵⁶ *Ibid*.

⁵⁷ *Ibid*. The figure for proper drains was 30%

⁵⁸ *Ibid.*, pp. 12-13. The Charters Towers figure was 9.5%

⁵⁹ *Ibid.*, p. 7. The unscreened tanks made up 20% of those surveyed.

 $^{^{60}}$ Ibid n 8

⁶¹ *Ibid.*, p. 9 That means a private ownership of about 68%, of which '20 per cent' were primitive and unsanitary. A cottage count would have been useful.

Yet, in the case above, this was a matter of choice; according to Gorman, the two families had lived that way for over fifteen years, saw their mine-related employment as temporary and had no interest in improving their homes. 62 Gorman noted that 'about 30 per cent of the cottages did not comply with the sanitary Regulations of 1922', as had been reported by the Government Health Inspector at Cairns: this was an unsurprising finding, since the same officer, Mr Austin, had persuaded her to visit the town; he hoped to draw attention to the conditions there. ⁶³ As mentioned earlier, Cilento did not include the Chillagoe findings in White Man in the Tropics.

Although not deemed as competent as their Atherton sisters, Chillagoe's women managed good ratings for their scientific cookery skills, knowledge of insect-borne disease and overall health. The women in twenty-six of the thirty-seven homes reported good health, achieving the second best Survey rating. 64 They retained that position with their level of gastric problems, although this was still a concern. ⁶⁵ Only two homes had 'proper' drainage in place; however, more homes than in other towns surveyed screened their water tanks. ⁶⁶ Chillagoe also returned the second lowest usage of ice-chests, with fifteen in the homes surveyed, but meat safes were popular, and used in all but four homes.⁶⁷ Roughly thirteen of those homes did not have bathrooms or any bathing facilities; although there were bathrooms nearby for fifteen or sixteen homes, only about twelve had water piped directly to the kitchen. ⁶⁸ Gas was not available to Chillagoe residents and only about twelve homes had electricity; although not stated, most probably cooked by the light of kerosene or carbide lamps. ⁶⁹

The women surveyed in Charters Towers also had no electricity, but about sixteen homes had the advantage of gas, and about fifty-six had water to their kitchen. Just four homes lacked a bathroom in or near the house. Over seventy-five homes used ice chests, and meat safes were more popular in Charters Towers than in other places

⁶² *Ibid.*, p. 9 ⁶³ *Ibid*.

⁶⁴ *Ibid.*; refers to a figure of 71.5%

⁶⁵ *Ibid.*, p.10; shows that 11.1% had gastric problems.

⁶⁶ *Ibid;* refers to about twenty-six, or 70%.

⁶⁷ *Ibid.*, p.9; refers to a figure of 42%

⁶⁸ *Ibid.* Specific figures were respectively 34.6%, 42% and 32%.

⁶⁹ *Ibid.*; refers to a figure of 32%

surveyed, being found in at least 121 of the 132 residences. 70 Gorman rated the overall knowledge of sanitation at a relatively high 24.9 per cent: thirty-two homes impressed her in this way, and the interviewed women of twenty-two of those reported good health. Of the remainder, eleven interviewed women reported gastric problems, at least ten were bothered by rheumatism and another five or so returned the Survey's highest incidence of 'nephritis or kidney stones'. 71 The same number testified to anaemia; this was the Survey's highest finding for that condition also.

Such problems may not have surprised Gorman: she noted that 88.4 per cent of domestic drains in Charters Towers were 'unsanitary', and over half the homes had no screens or oil on their water tanks. 72 The former measurement does not appear for most of the other towns: Gorman's concern was evident in this and in her remark that

The town is badly infested with mosquitoes. The disused mining shafts containing water, act as harbourages, and over 30 per cent of the homes are overshadowed by mango and other trees.⁷³

Perhaps it was for these reasons that she judged only two or three of the 132 interviewed women in Charters Towers to have an acceptable knowledge of insect and dirt-borne disease.74

The survey findings for Julia Creek raised similar concerns about knowledge of the role of insect vectors: only two of the twenty-four women surveyed received a 'good' rating. Gorman states Julia Creek's population as being just 150 people; these were 'Government officials, trades people, Railway employees, Land Agents and teamster's families.⁷⁵ Gorman found forty children of school age, and the surveyed women averaged between three to four children each. 76 Those figures suggest that there may have been over ninety children among the town's residents, leaving about sixty adults and making it possible that in this town at least Gorman interviewed most of the

⁷² *Ibid.*, p.12; those who did oil or screen comprised 44.6%.

⁷⁴ *Ibid.*, p.13; refers to a figure of 2.5%

⁷⁰ *Ibid.*; refers to figures of 3.5% for bathrooms; 92.2% with meat safes.

⁷⁵ *Ibid.*, p.14

⁷⁶ In 1911, the school consisted of a small galvanised room to serve nine pupils. In 1922, the DPI added a '24 foot x 12 foot' room with two side verandahs. There may have been 105 students by 1931. See Julia Creek State School, <www.julicreess.eq.edu.au/index.html>

married women.⁷⁷ Those ten or so interviewed women fortunate enough to have water to their kitchens perhaps did better than an unspecified number of the remainder, for whom conditions were less pleasant and less conducive to achievement of a better rating for sanitation.⁷⁸ Just four of Julia Creek's interviewed women merited a 'good' judgement in that regard; but if their homes were subject to the same unsanitary circumstances as found elsewhere in the town, they did well.⁷⁹ Sixteen or seventeen of the interviewed women surveyed reported good health.⁸⁰

Access to water was a privilege in Julia Creek. In the heat, Gorman noted, 'several' of the women had to 'carry water long distances 3 and 4 times a week.'⁸¹ Over half of the homes were built of iron, and the 'teamster's wives in particular' lived rough in homes that were 'unceiled, unlined and with no flooring boards'; some had just one room.⁸² Such residents might have found their conditions worsened by the pervasive stench of Julia Creek's cesspits, which certainly failed to impress Gorman. They were, she said,

Badly constructed and are not fly proof nor fitted with ventilators. At the Julia Creek Hotel, the closets were not provided with dry earth or any covering substances. Lids were invariably left off the cabinets and myriads of flies had free access to the contents. ⁸³

In such conditions, it is surprising that only two women reported gastric troubles: but flies were not the only source of infection. In her inspection of the town's school-age children, Gorman found a high incidence of conjunctivitis and trachoma; for the 2,080 children examined for the Survey, she reported that these conditions were most prevalent in Cloncurry and Julia Creek – over 16 percent had conjunctivitis, and

⁷⁷ Letter, Gorman to Baldwin, October 27 1924, NAA, SP1063/1, 277; Report, p.15. As shown in her October progress report. There is a discrepancy between the number surveyed (twentyfour) and interviewed. Regarding the average number of children per mother Gorman notes that 'fifteen tropical born mothers average 4.4 each'; while 'eleven immigrants average 2.3 children each'; this makes 26 interviewees. The immigrants 'had lived in the tropics for over thirteen years.'

⁷⁸ Report, p.14; the figure cited is 44%.

⁷⁹ *Ibid.*, p.14; the figure cited is 8.4%.

⁸⁰ *Ibid.*, p.15. The healthy proportion was 70%. Of the remainder, the complaints were nerve trouble 4%; rheumatism 8%; gastric 8%; anaemia 4%, and kidney trouble/nephritis 4%.

⁸¹ Ibid

⁸² Ibid.

⁸³ *Ibid.* There were two hotels in the town at this time.

almost 4 percent suffered from trachoma. ⁸⁴ The problem had clearly been worse in the past. Gorman added that she examined the children in September:

and one would probably find a larger percentage with sore eyes during the summer months, in which there is an increase of flies and dust. Reports from the R.M.O. in Cloncurry show that there is a marked decrease in the number of these eye complaints during the last 4 or 5 years, due, he thinks, to a better knowledge of hygiene and sanitation.⁸⁵

Conjunctivitis can be an expression of viral infection, an allergic reaction to dust or pollen, or a symptom of C. trachoma. Trachoma, *Chlamydia trachomatis*, or 'Sandy Blight', is a highly contagious form of Chlamydia endemic to undeveloped areas with poor personal and community hygiene. ⁸⁶ More likely to occur where there is limited access to water and insufficient sanitation, it can be transmitted from mother to child during birth and through sexual activity, but spreads easily by touch. ⁸⁷ The simple act of regular washing can prevent infection – perhaps this did not take place often enough because water was at a premium.

In regard to water, there was no significant advantage in the larger town of Cloncurry, where a lower percentage (twenty-two or three homes) enjoyed the privilege of water in the kitchen, and only eighteen had a bathroom nearby. Another eighteen or nineteen of the eighty homes visited had no bathing facilities at all; for these residences, in a dry and dusty setting like Cloncurry, it would be difficult to maintain the optimum level of hygiene to avoid bacterial eye infections. Cloncurry also shows the lowest level of ice chest usage, with Gorman noting them in just twenty-nine homes; she did not record how many of those or others used meat safes. Thirty-eight

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⁸⁴ Report, p.17; Cilento, *White Man in the Tropics*, p.87. Numbers are unavailable here, as it is unclear whether the percentages refer to all children surveyed, or just those of Cloncurry and Julia Creek. At any rate, figures for Julia Creek are not included in the Survey attachment relating to schoolchildren. The last figure cited refers to 3.7%.

⁸⁵ *Ibid*.

⁸⁶ European settlers probably brought it from 'urban slums' to Australia, where it was a significant problem before hygiene standards became better; it remains a concern here amongst a number of Indigenous communities with restricted access to clean water. Taylor notes that Australia is the only developed country where trachoma regularly occurs. Hugh Taylor, 'Trachoma', *MJA*, 2001, no. 175, pp. 371-372

⁸⁷ David CW Mabey, Anthony W Solomon, and Allen Foster, 'Trachoma. (Seminar)', *The Lancet*, no. 362, July 19, 2003, p.223

⁸⁸ Report, pp.10-11. The figures are 28.7% for water to the kitchen, and 22.5% with a nearby bathroom.

⁸⁹ *Ibid*.; 23.5%

⁹⁰ *Ibid*.: 36.5%

(less than half of the homes surveyed) screened their water tanks. 91 Their rate of gastric illness was low, as probably just three women indicated problems in that area. Other health problems however gave Cloncurry the lowest recorded level of good health, with just an approximate fifty of the eighty interviewed women considering themselves well. 92

Despite the difficulties described, about 70 per cent of the total women surveyed throughout the project were in good health. Cilento found both cultural and racial causes for this; for example,

Australia has not had to contend with the conditions produced in Europe by centuries of vassalage, and there is practically no aboriginal population in the settled parts of Queensland, and consequently the standard of living among the poorer classes is higher than in the southern States of the United States of America, where approximately one-eighth to one-third of the population of some areas is coloured, and where in the poorer towns white and black are unequal competitors for a hazardous living. 93

Unencumbered by such difficulties, he continued, and 'practically free' from problems such as malaria, ankylostomiasis [hookworm] and other disorders, it was 'evident that white residents, including women and children, thrive in Queensland's tropical areas.⁹⁴ Tropical women were as, and in some areas more, fertile than women elsewhere, with comparable figures for 'age at menopause and at puberty'. 95 The children, despite the hardships of 'faulty hygiene and sanitation, and unsatisfactory factors in environment sociologically', also compared well to their non-tropical peers. 96 For these statements, Cilento discarded the negative reporting that he had insisted Gorman employ, and focused on the five hundred and twenty of the seven hundred and forty women interviewed who reported good health. He did not draw attention to the two hundred and twenty, or thirty per cent, of those women who described themselves as unwell. Provided that they could afford it, most of the latter women would have had some access to medical advice, being either in or near to towns with medical services; even the women of Julia Creek, as Gorman noted, had

⁹¹ *Ibid*.; 47.5%

⁹² *Ibid.*; gastric illness at 3.7%; 63.5% reported being well.

⁹³ Cilento, White Man in the Tropics, p.91

⁹⁴ *Ibid*.
95 *Ibid*.

⁹⁶ Ibid.

'the advantage of being on the main train route.' Good domestic science training might of course have improved the health of the sicker subjects by increasing their understanding of sanitary practice.

Committed to public health, scornful of climate as a negative factor and adamant that humans created and perpetuated the only obstacles to long-term white settlement, Cilento possibly allowed White Man in the Tropics to emphasise deficiencies of the north's hygienic standards so that authorities would sooner address and remedy its problems. Many of those standards seem sensible today. For example, Gorman's earlier comments show that sawdust or ashes should be sprinkled over the contents of a closet pan, which should have a lid; used water should be drained rather than sit above ground; garbage should be removed or moved away from the house. The kitchen sink, washcloths, towels and utensils should be washed; bedrooms should be aired, and the fowls and goats barred from house sub-spaces. Yet some of these requirements might have seemed unwarranted at the time: a person who rented might have been unwilling to dig drainage trenches so that wastewater could run away from the house. A privy stank with or without a lid. Goats and fowls helped control garden pests; the subspace shaded them in the heat, and in return, they supplied milk and eggs. (That goats could transmit disease to humans seemed unrecognised broadly at the time.) Gorman also measured sanitary standards by the lack of a kitchen dresser or kitchen cupboards, and the presence of cracked or stained china and 'adequate' utensils. These represent middle-class values to which some might aspire but be unable to afford; decorum could be preserved if one did not serve a guest's tea in a cracked cup, but the Hoosier-type dresser that Cilento asked Gorman to count was for the wealthy.

Gorman's findings about sanitation reinforce the Survey's interest in the working class woman. Cilento's complete instructions concerning the survey of household practices extend to twenty-nine points. Some of these do not appear on the Index Card, and their value seems questionable. For example, one asks whether 'the housewife can see the front gate from the kitchen, or is there any means by which she can see people

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⁹⁷ Report, p.19. Julia Creek had a Bush Nursing Association nurse by 1929. See *QPP*, 'Report of the Chief Medical Officer for Schools', Report of the Secretary for Public Instruction, 1930, p.125

entering the house before they knock?', while another enquires as to whether the kitchen is wainscoted. 98 One can only speculate as to the reason for those questions: perhaps the latter might have encouraged positioning of meat safes so as to be 'pushed out from the wall' to 'prevent the breeding' of insect and other pests. Several other questions that reflect points of interest to Cilento are obtuse at first glance: for example, Gorman was to enquire about whether the kitchen included 'a rubbish shoot' [sic] to an outside dustbin, and whether the kitchen floor was damp, polished or 'cracked and broken.'99 In the interest of establishing whether or not a household food preparation and storage area was actually a kitchen (as opposed to 'a mere penthouse') and a practical one (which as shown earlier met two basic ideas of domestic science, efficiency and sanitation), these and many questions used on the Index Cards had clear purposes. 100 At the same time, they established economic status and class membership: Nellie or Marjorie, if asked such questions, might have recoiled in horror at even a subtle suggestion that there might be room in their homes for 'multitudinous cockroaches and other vermin' or suffered inspection of their larders to establish whether or not they used tinned food because they could not afford fresh. 101 These questions were not directed at women from the middle class.

Gorman inevitably found that a lack of domestic science knowledge matched insufficiency in the standard of hygiene necessary to avoid insect and 'dirt-borne' disease. Cilento repeated her comments on Townsville in the section of *White Man in the Tropics* dealing with the Survey; they supported his criticism of sanitation standards in another part of the work, under the heading of 'The Concomitants of Tropical Residence.' Noting that the 'primary environmental circumstances for tropical life' were different from those in temperate climates, he complained that 'it is exceedingly difficult either to introduce satisfactory measures or to have them observed.' ¹⁰² This problem he attributed firstly to tradition, for establishment of 'certain almost fixed habits and usages'; and secondly to

⁹⁸ NAA, SP1061/1, 350, memo, January 16 1924, Item II, no. 26

⁹⁹ *Ibid*.

¹⁰⁰ Ibid.

¹⁰¹ *Ibid*.

¹⁰² Cilento, White Man in the Tropics, p.92

The feeling which most people have that their stay in the tropics is merely temporary, and a corresponding readiness to make any makeshift do for the time being. 103

The latter 'feeling' cannot be substantiated as an ongoing belief in the 1920s: it may have been so in Queensland's earlier days, but by the 1920s most North Queenslanders were born in the tropics and remained there. None of the NQOHP participants heard, including several of the economically advantaged, suggested that they intended a temporary stay in the north. Nellie scoffed at the idea: born and partially raised near Charters Towers, she had lived for some time in Sydney and had certainly seen middle-class life away from the tropics. The Breinls had the means to travel or to live where they and their family might choose. She recalled that in 1928 they went overseas for a time, but 'had to come back'; they 'loved Australia', and Townsville was home. ¹⁰⁴ However, the residential standards of people such as Marjorie and the Breinls were of no interest to Cilento. The values of the 'makeshift' resident worried him much more than those of the middle class families whose homes probably never or rarely had an untidy or cluttered yard, let alone one with evidence of wanton urination or uncovered toilets and their attendant odours.

Cilento's interest in the working class is apparent and expected but also demonstrated the eugenic beliefs that intelligence reflected one's distance from the lower primates, and that a lowly status brought a tendency to inherited disease and deformity. Certainly, Queensland needed to retain its white blue-collar residents, and the exercises of establishing their health status and taking the opportunity to educate them about sanitation and hygiene were consequently valid ones from an economic and social perspective. However the questions listed for Gorman suggest that he also expected her to encounter working-class wives from the lower end of the socio-economic scale, and that he anticipated she would find a number in particular need of sanitary education that she should provide in a manner appropriate to their intellectual capacity. One of Gorman's duties was to ascertain individual levels of health knowledge, and Cilento's instructions for that task show that he carried some assumptions about working class acumen. Survey task Four had Gorman prepared to advise on 'housing and house management'; 'economic work'; infant welfare, and

¹⁰³ *Ibid*.

¹⁰⁴ NOOHP, ID 20, 51-4

infant and adult diet; 'sanitation as related to housing', and finally, to advise on 'ordinary, practical medical hints within the intelligence of the average working woman.' Task Five required Gorman to study various tropical diseases and conditions, more basic sanitation, and 'Further, to be able to put the importance of dirt and insanitary procedures before the housewife in a form suited to the requirements of her mentality.' Task Six appeared in full earlier: it required Gorman among other things to establish the existence and extent of 'physical feebleness or degeneration' that may have manifested themselves from about 'the age of 8 or thereabouts....' 107

It is not possible to know if Gorman shared her employer's ideas about racial degeneration. It can however be assumed that her training had imbued her with the belief that sanitary education and good hygiene standards could go a long way towards improving the mental and physical health of existing and future generations, and by further extension, the capacity to raise their racial fitness. Gorman's discoveries about the level of knowledge and the application (or lack) of basic hygiene principals seemed to surprise her, but this should not have been unexpected. Changes in public sanitation standards occurred at such a rapid rate in those years that it would be completely unsurprising if the ordinary homemaker felt perplexed about what they should be doing to maintain a healthy home and family. In seeking to reveal the knowledge of northern white women, the Survey accordingly attempted to measure the entire manner in which they managed their homes, with a critical part of that evaluation being the sanitary standards that had developed gradually over the preceding thirty or forty years, but markedly so during the early twentieth century.

¹⁰⁵ NAA, SP1061/1, 350, memo, January 16 1924, Item III

¹⁰⁶ *Ibid.*, Item V

¹⁰⁷ *Ibid*.

'Opaque Whiteness': milk, microbes and sanitation in Queensland.

Behind its veil of opaque whiteness, every quart of milk hides a potential peril to the public health.

Jesse D Burks, 1911

Most of the women interviewed had known that flies were germ carriers, but a fair percentage were not sufficiently interested to prevent the food and cooking utensils from being contaminated....

Annie Gorman, 1924

To detect the presence of foreign matter in flour, squeeze a handful tightly. If it clings together it is quite pure, but if it crumbles away it is adulterated with chalk or whitening.

Townsville Daily Bulletin, November 12 1928

In 1925, Cilento argued that 'evidence is accumulating to demonstrate that the white man may rise, and indeed is rising, superior to his environment'; he also maintained that while tropical disease was a problem, Queenslanders were 'as healthy as the inhabitants of any other part of Australia': it was all a matter of adaptation. Those statements not only reflect widespread but disparate ideas about racial purity and evolution, but the reality that before public sanitation and hygiene standards rose to where disease became abnormal rather than the reverse, the environment was not so easy to overcome.

With their pronounced findings on gastric illness, the Survey results show that authorities were right to worry about tropical hygiene standards. Gastric illnesses were real hazards, and it is highly likely that milk and other dairy products played a strong role in their occurrence: stored carelessly, all provided optimum environments for growth of the salmonella germs that caused gastroenteritis or typhoid. As with lead, the public needed to be informed of the dangers of dairy products, but milk was a potential race improver, and children and nursing mothers should not become discouraged from its consumption. There were of course other health concerns in early twentieth century Queensland. Some that raised particular fears were the ongoing

¹ Cilento, White Man in the Tropics, pp. 74, 92

threats of cholera and plague, together with seasonal illnesses and a steady increase in heart disease. The primary interest here is milk because of its relationship to gastric illness and tuberculosis, the former mostly because of its affect on children, and the latter because of its affect on adults. Regardless of the health problem or its extent, governments had to establish a balance between authoritarianism and democracy to protect their citizens and maintain countrywide wellbeing: they had to simultaneously enable, regulate and encourage ownership of healthy conduct.

The Survey questions made it clear that Cilento worried about bacterial contamination of important foods. Baby clinic pamphlets, newspaper and magazine items similarly enforced the bacteria message, but the NQOHP women used here made no mention of their integration of such lessons into routine household management. An exploration of the motivations and methods behind the introduction and application of food standards, with particular reference to milk, completes the domestic science inspired journey into the lives of the nameless Survey characters and known NQOHP personalities who lived in Queensland's tropics at the time of the Survey. From an official perspective, a good domestic scientist would do her utmost to create a hygienic environment for her children and in keeping with Queensland's concern for the future wellbeing of its white children, a racial imperative for food control reinforces the Survey focus on household sanitation.

Governments had monitored the sale of food for centuries, initially to protect the interests of local merchants and manufacturers, and eventually with a concern about the quality and measures involved in what they sold.² By 1348, punishment for short weighting, the sale of 'bad' meat and fraud made the offender subject to being placed in the pillory with the object in question – bread, bad meat or cereal – around their neck.³ Authorities thought more about deterrence than prevention. However, in the late nineteenth century, as comprehension of the methods of increase and carriage of microbes grew, governments realised the enormity of the challenges they faced in

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³ *Ibid*., p.144

² In 1880, Cornelius Walford identified food laws that dated back nearly six centuries. See Cornelius Walford, 'Early Laws and Customs in Great Britain regarding Food', *Transactions of the Royal Historical Society*, vol. 8., 1880, pp.70-162

their maintenance of food quality benchmarks: it was not just a matter of pillorying offenders, but of persuading the public to raise their standards too.

Peter Swan argues that Australian food laws and regulations generally 'do not have a great deal to do with protecting the health of food consumers': they remain directed towards consumer protection from fraud and deception, except where health or medical concerns promote 'particular prohibition.' Milk safety provides an example of a primary concern for health authorities. The suspicion that it could carry disease emerged noticeably in the mid-nineteenth century; Villemin demonstrated a link in 1865. Clusters of milk-related disease outbreaks were common in Europe and the British Isles, and authorities referred to some as epidemics. 6 Not all such outbreaks were deadly, but they took their toll: in an 1881 outbreak in Aberdeen, Scotland, it was clear that 'fever followed fast in the track of the milk-cart'. In that case, the dairy's cistern was heavily contaminated; located in the byre, it provided 'all the water used about the dairy for washing the cans, for dissolving the nitrate of potash added to the milk' and dampening the hay. 8 Pollution like this led to bad food for beast or human. With or without refrigeration, when sanitation was poor inside a work area that always had a high chance of faecal contamination, the nineteenth century dairy equated to a pathological pudding.

It was no surprise that the Aberdeen milk samples contained 'yeast cells', 'numerous micrococci', fungi, unknown bacilli and 'spores similar to the spores of *B. anthracis*'; Atkins shows similar and worse dairy conditions elsewhere. With microscopic possibilities ever increasing, further discoveries about the sinister potential of milk

⁴ Swan, The Pure Food Laws and Regulations: Burdensome Laws in Search of Meaningful Objectives?, p.46

⁵ Ibid.

⁶ Atkins, 'White poison?: The social consequences of milk consumption, 1850 - 1930', pp. 207-227

⁷ (James) Cossar Ewart investigated a 'febrile disease' with 'influenza-like' symptoms that eventually affected 'about 320 individuals' who all obtained their milk from the same dairy; most recovered. J Cossar Ewart, 'On a New Form of Febrile Disease Associated with the Presence of an Organism Distributed with Milk from the Oldmill Reformatory School, Aberdeen', *Proceedings of the Royal Society of London*, vol. 32, 1881, pp. 492-498
⁸ For an insight into the complexities and challenges of mid-nineteenth century medical research, see Hans Jørn Kolmos, 'Panum's studies on 'putrid poison' 1856. An early description of endotoxin', *Danish Medical Bulletin*, no. 4, November 2006, vol. 53, pp.450-2
⁹ Atkins, 'White poison': The social consequences of milk consumption, 1850 – 1930', pp. 207-227

followed. The following year, Robert Koch discovered the mycobacterium responsible for tuberculosis, and soon published his finding that there were links between human tuberculosis, M. tuberculosis, and M. Bovis, the strand responsible for bovine tuberculosis. Koch theorised that the latter could contaminate milk and dairy products and subsequently infect humans. ¹⁰ His continued research proved that to be the case: M. Bovis could be responsible for 'tuberculous meningitis, abdominal tuberculosis, and diseases of the bones and genito-urinary system'. 11 Koch urged authorities to take the same safety measures against transmission of M. Bovis as they already did with its relative, treating infected meat and milk with the same care as human sputum. Then, in 1901, he changed his mind: because laboratory animals seemed not to acquire human tuberculosis, he assumed that M. Bovis would not travel to humans. 12 Bacteriologist (and eugenist) Mazÿck Ravenel disproved that claim just a year later, with irrefutable evidence of its being a zoonose. 13 Of course, this also meant that the cows concerned were sick: before Koch developed tests to confirm the disease's presence, no one had realised just how widespread it was. 14 The intense international research that followed discovered an epidemic of M. Bovis in Europe and the United States, where an estimated 10 per cent of tuberculosis cases in 1901 were of the

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¹⁰ Koch is also credited with the 1884 discovery of *vibrio Cholera*, the organism that causes cholera. However Filippo Pacini identified it in 1854 and argued that cholera was infectious; the medical community scoffed, and his work in this area was overlooked until some time after his 1883 death. See Marina Bentivoglio and Paolo Pacini, 'Filippo Pacini: A Determined Observer', *Brain Research Bulletin*, vol. 38, no. 2, 1995, pp. 161-165

¹¹ Peter Atkins, P. Brassley, 'Mad cow and the Englishmen. (animal-human pathological links in the United Kingdom)', *History Today*, vol. 46, no. 9, Sept 1996, p. 14

¹² *Ibid.*, pp.14-18. Koch presented his findings at the London Congress on tuberculosis, which led to a Royal Commission that took ten years to investigate the disease; its findings are still useful. He won the 1901 Nobel Prize for his work. See also, 'The Nobel Prize in Physiology or Medicine 1905', http://nobelprize.org/medicine/laureates/1905/press.html. Accessed January 6 2006

¹³ An animal disease transmissible to humans is a zoonose. Ravenel later became uncertain whether disease control was a useful social activity when it allowed the 'unfit' and 'feeble' to survive alongside the fit; it seemed unnatural considering that 'The history of the world shows that civilized people do not hesitate to take territory from inferior races, with the result that the latter often disappear more or less completely. Striking examples of this are seen in our own country, in South Africa and in Australia'; this he saw as a natural outcome of being a higher (or lower) race. See Ravenel, 'The Trend of Public Health Work: Is it Eugenic or Dysgenic?', pp. 331-336. For more on tuberculosis, see Alan Olmstead and Paul Rhode, 'An Impossible Undertaking: The Eradication of Bovine Tuberculosis in the United States,' *Journal of Economic History*, vol. 64, no. 3, 2004, p.3

¹⁴ Attempts to vaccinate cattle failed, but those previously exposed developed a reaction at the injection site: consequently, it was possible to identify asymptomatic infected animals. Orland, 'Cow's Milk and Human Disease. Bovine Tuberculosis and the Difficulties Involved in Combating Animal Diseases', p. 192

bovine form.¹⁵ In London, late nineteenth-century post-mortems found that 30-40 per cent of children died of tuberculosis: the bovine form was probably responsible.¹⁶ Apart from the importance of child deaths, bovine tuberculosis is worthy of special examination: both forms of tuberculosis were eugenic concerns, but as a zoonose found in a popular and important food source, *M. Bovis* posed unique racial problems.

Atkins's study of milk standards and eventual regulation in London clearly portrays the unsanitary way in which milk was often obtained, treated and stored. ¹⁷ Official health responses to concerns raised about milk safety from the 1880s depended upon the evidence offered by the tools and knowledge of the time; both grew rapidly as scientists exchanged information and technology. ¹⁸ As a consequence, municipal, state and national health authorities in Australia, the British Isles and U.S.A had instituted milk standards and instructional programs by 1900. The intellectual atmosphere was such that when Swithinbank and Newman published their *Bacteriology of Milk* in 1903, their claims about its many dangers were not challenged. ¹⁹

The risks were as great in Queensland as they were in London or large centres of the United States at that time: one case of adulteration or viral or bacterial contamination was one too many, and there were more than that. The cow had competition in North Queensland: goat milk and goat meat provided cheap fresh milk, food and often income for numerous families in the large and small towns. Some scientists knew by 1917 that goat milk could transmit disease to humans: Alice Evans had discovered that *Micrococcus melitensis* was the organism responsible for Malta or Undulant Fever, a

 $^{^{15}}$ Atkins and Brassley, 'Mad cow and the Englishmen. (animal-human pathological links in the United Kingdom)', p. 1

¹⁶ Ibid.

¹⁷ See Peter Atkins, 'White poison?: The social consequences of milk consumption, 1850 - 1930', pp. 207-227

¹⁸ Scientists had difficulty in distinguishing between pathogens until the development of Gram staining techniques in the 1880s. For progressive discoveries, see Joseph Lister, 'On the Early Stages of Inflammation', *Philosophical Transactions of the Royal Society of London*, vol. 148, 1858, pp. 645-702; C. C. Pode, E. Ray Lankester, 'Experiments on the Development of Bacteria in Organic Infusions', *Proceedings of the Royal Society of London*, vol. 21, 1872, pp. 348-358; C. C. Merriman, 'The Preparation and Mounting of Double Stainings', *Proceedings of the American Society of Microscopists*, vol. 1, 1878, pp. 71-73; G. F. Dowdeswell, 'On the Infectivity of the Blood and other Fluids in Some Forms of Septic Disease, and the Reputed Occurrence Therein of an Increase of Virulence in Successive Inoculations', *Proceedings of the Royal Society of London*, vol. 34, 1882, pp. 449-469.

¹⁹ Atkins, 'White poison?: The social consequences of milk consumption, 1850 – 1930', p.217. See his p. 216 for a list of diseases that can be caught from contaminated milk.

disease described by Hippocrates and now known as brucellosis; she argued that it was 'usually spread through goat's milk'. ²⁰ In fact, cattle were just as likely to spread it, but such uncertainties were common: there were at any rate plenty more organisms to find and plenty more animal hosts willing to share them. ²¹ For example, although it seems to affect adults and the elderly most, Q (for Query) Fever is communicable through goat milk, but the bacterium that causes it remained clinically unidentified until Edward Derrick isolated its causative organism in Brisbane in 1935. 22 Goats can carry other zoonoses and parasites that posed similar risks for children and adults before antibiotics and improved antihelminths become available. 23 However, the likelihood of infection did not seem to occur to those who kept them; most of the women mentioned here spoke of them with amusement. For example, Amy's mother kept goats, who roamed free in the unfenced pastures and hillocks around their home at Charters Towers in the 1890s. All their goats had the one name (Winnie) and were tame despite their daily liberty: Amy's mother would call 'Winnie-ee-ee' and the goats would come down from the hills to be milked – and sometimes killed. 'We ate them as well', Amy recalled cheerfully. 24 Once cow's milk became regularly available

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²⁰ Louise Hostman, 'Undulant Fever', *The American Journal of Nursing*, vol. 34, no. 8, 1934, p.753; cites Alice C Evans, 'Undulant Fever', *American Journal of Nursing*, November 1930, p.1349

²¹ U.S. researchers in 1912 compared goat and cow milk; see Arthur Harden; Janet E. Lane-Claypon, 'Occurrence of Ferments in the Sterile Milk Collected by Milking Tube from Cows and Goats', *The Journal of Hygiene*, vol. 12, no. 2, 1912, pp. 144-151. See also John Waddell, 'Milk, Sanitary and Otherwise', *The Scientific Monthly*, vol. 4, no. 2, 1917, pp. 155-164, and Leo F. Rettger, 'Some of the Newer Conceptions of Milk in Its Relation to Health', *The Scientific Monthly*, vol. 5, no. 1, 1917, pp. 64-79

²² Cilento (then Director-General of Health and Medical Services) appointed Derrick Director of the Laboratory of Microbiology and Pathology in Brisbane in 1935; see Australian Academy of Science, Biographical Memoirs, Edward Holbrook Derrick 1898-1976,

http://www.science.org.au/academy/memoirs/derrick.htm In 1944, McFarlane Burnet added to the scientific knowledge of Q Fever: see Barry Marmion, 'Q fever: the long journey to control by vaccination', *eMJA*, 19 February 2007,

http://www.mja.com.au/public/issues/186_04_190207/mar11343_fm.html.> See also E.H. Derrick, 'The query fever', *The Elkington Oration. Queensland's Health 1964*; 1, no. 5, pp.3-22. Q Fever – *Coxiella burnetii* – is a gram-negative coccobacillus from which most humans recover without antibiotic treatment. However, the disease can cause liver damage and pulmonary infections and up to 30% of infected people will contract pneumonia.

²³ Goats also transmit a number of other pathogens, such as anthrax, Yersinia, and

Corynebacterium, as well as parasitic infections such as Cryptosporidiosis and various nematodes. See Bronwyn Murdoch, DPI (Victoria), 'Zoonoses - Animal Diseases that may also Affect Humans',

<www.dpi.vic.gov.au/dpi/nreninf.nsf/LinkView/6FAAE27A05E3552ACA256C1D00065721C A91B09F1C0FC6E84A256DEA0028280B> For parasites, see VEIN (Veterinary Education and Information Network) <//>//vein.library.usyd.edu.au/links/parasitology.html> ²⁴ NOOHP, ID 15, CD 41-2

(at some time before Amy left home to marry in 1909) they had it delivered. Whether fresh or processed, cow's milk remained the major dairy concern of most health authorities in the British Isles, U.S.A and Australia, and provided that they could afford it, constituted an important part of the diets of invalids, the elderly and children: all of any society's most vulnerable members.

After Federation, the Queensland government moved swiftly to introduce and ratify regulations to prevent and restrict the spread of disease, and create a sanitary environment. Effectively, they continued many pre-Federation practices but mandated them in the new political setting. The Home Secretary's Department for example promptly introduced The Infectious Diseases Regulations of 1901; they did so under the power bestowed on the Commissioner of Public Health in *The Health Act* of 1900.²⁵ Additionally, under the 1900 Act, the Home Secretary's Department provided a report with suggestions on food standards in 1901; this was the *Report of the Commissioner of Public Health Upon Food Preservatives and Adulterated and Unwholesome Food.*²⁶ Official guidelines such as these were essential: governments and municipal powers accepted, even embraced, the idea of responsibility for the health of their subjects, but they needed the empowerment of guiding principles and punitive measures for offenders. At publication of the Report, Queensland had a new standard and a new Commissioner of Public Health.

Dr B Burnett Ham was a visionary person who previously worked for Queensland's Central Board of Health.²⁷ He had a reputation in New Zealand, where John Leahy referred to him as he spoke of sanitation and disease:

Most of the colonies have legislation on the subject of meat and milk. Queensland has been very behind-hand in the matter, but under the *régime* of the newly appointed Health Commissioner there is promise of more efficient control.²⁸

²⁵ *QPP*, The Infectious Diseases Regulations of 1901, C.A. 37-1901. The new regulations rescinded the rules formerly operating under *The Health Act of* 1884.

²⁶ *QPP*, C.A. 60 - 1901

²⁷ That department ceased to exist when Queensland ceased to be a British colony. For more on Burnett Ham, see M J Thearle, 'Dr B Burnett Ham. Father of Queensland's Department of Health', *Medical Journal of Australia*, 1994, July 4, vol. 161, no.1, pp. 55-7.

²⁸ John P. D. Leahy, 'The Fight against Tuberculosis in the Australian Colonies and New Zealand', vol. 35, 1902, *Transactions and Proceedings of the Royal Society of New Zealand*, p.223. National Library of New Zealand,

<//rsnz.natlib.govt.nz/volume/rsnz_35/rsnz_35_00_001480.html>

The latter was certainly his intention: according to the *Northern Miner*, the Health Commissioner had 'several schemes in view for educating the public in sanitary subjects' at the time of his appointment. ²⁹ Burnett Ham based the Queensland food report on a London Local Government Board investigation; although the Premier had instructed Burnett Ham in 1900 'to take immediate action in this matter', he was unable to do so at that time because few of the English project's findings were available. ³⁰ He also had to wait until early 1901 for gazetting of his new position, and conduct local research; this required him to appoint 'competent inspectors' who gathered samples for the Government Analyst, as required by the Health Act. ³¹

Writing to Burnett Ham from London, Local Government Board medical officer Theodore Thomson noted that the Report concerned English conditions and questioned whether the milk standards it suggested would be as useful in Queensland because of the climatic difference. 'It is conceivable,' he added, 'that measures of cleanliness, accompanied either by pasteurization or refrigeration or both, might answer here and yet fail with you.' The government could legislate and monitor at production and processing stages to ensure that the consumer obtained milk in a hygienic condition, but if not stored safely in a domestic setting it would soon deteriorate. As it eventuated, storage was the least of the food problems identified: similar to English research findings, levels of adulteration were more of a concern.

Adulteration began from the practice of adding preservatives to food in order to prolong its usable life. These were useful activities in the days before refrigeration, when (even in colder climates) there were practical and economic limits to the quantities of food that could be stored in ice-cellars. Many meats and fish preserved fairly well when salted, but salt could not maintain sweet foods. Smallgoods such as the English type of fresh (rather than cured) sausages perished quickly, while bulk jams, condiments, cordials and alcoholic beverages fermented or discoloured without preservatives. By the twentieth century, innovative producers had developed a

²⁹ Northern Miner, January 8 1901, p.3. These included the idea of writing a textbook on sanitation for use in State Schools; 'offering diplomas to teachers who pass examinations in sanitary matters', and 'popularising sanitation' through public lectures that included Magic Lantern slides to demonstrate 'slipshod sanitation' as well as good hygienic principles.

³⁰ QPP, C.A. 60 - 1901

 $^{^{31}}$ $\tilde{I}bid$.

³² *Ibid*.

catalogue of chemicals that, at best, lengthened the life of their products by retarding bacterial action, and at worst, masked their deterioration. For authorities in New York and France, pressured by hygienists who wanted only to see fresh (unadulterated) milk sold, any changes were unacceptable: they prohibited additives in milk but allowed some in other foods. Germany forbade any antiseptic in food, while Belgium, Spain, Italy and Holland forbade the addition of any preservative.³³

Burnett Ham was cautious about a complete ban; rather than forbid all additives, he preferred to prohibit some and regulate the use of others. English researchers found that the preservatives mostly used there included chalk, used to 'freshen' sour milk; salicylic, benzoic and boracic acids, added to butter in quantities of up to two per cent with the intention of prolonging its usability through antisepsis; and formalin, similarly used as a disinfectant. Although some scientists argued that manufacturers had no reason to exceed safety limits, others identified problems with uncontrolled usage. Burnett Ham cited Birmingham's Dr Alfred Hill: he recognised that 'purveyors' had a vested interest in delivering apparently fresh food, and so long as the goods contained harmless preservatives, he said, they were no problem. However, considering recent increases in the type and application of food preservatives, the problem was whether they could consider any as risk-free. Hill argued that:

neither experience nor knowledge can sufficiently assure us on this point....The opinion is general among physiologists that all preservatives, whether effectual, either from their nature or their quantity, in so injuring the micro-organisms which bring about fermentation or putrefaction in food as to inhibit their action, also injure those persons who consume such food...³⁴

For example, formalin might preserve milk, but adversely affected juvenile mucous membranes; its addition also 'tended to obviate the necessity for cleanliness in the dairy.' Regulations regarding dairy produce standards encompassed fat and water levels as well as additives: milk itself was defined, as were cream and cheese so that dairies had a clear standard. The standards also required that a registered dairy only

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³³ Barbara Orland, 'Cow's Milk and Human Disease. Bovine Tuberculosis and the Difficulties Involved in Combating Animal Diseases', p.179

³⁴ *QPP*, Report of the Commissioner of Public Health Upon Food Preservatives and Adulterated and Unwholesome Food, 1901, p.1

³⁵ *Ibid.*, p.3

³⁶ As for example under the *Dairy Produce Act of 1904*, which was amended as required. Craies noted that 4 Ed. VII No.18 provided for 'the registration and inspection of dairies'; it also regulated 'the manufacture, sale and export of dairy produce'; Herman Cohen; W. F.

employ people 'of European or aboriginal Australian descent', unless they could 'read and write from dictation words in the English language.'³⁷ The government similarly regulated and monitored additives to non-dairy foods from alcohol to meats and breads; many such regulations operated in Queensland prior to Federation, and required little later amendment.³⁸ Standards monitoring required expertise and consistency: before long, Burnett Ham's inspectors became a permanent part of Queensland health activities and the government regularly prosecuted for non-compliance. However, additives and standards formed one part of the food health picture. Infection control made up the other, and in this regard, Queensland's thriving dairies were subject to scrutiny from 1899, when the Home Secretary's Department appointed an Inspector of Dairies.³⁹

Oral History accounts reveal the usefulness of home-grown milk, especially for people who lived away from the larger centres with access to dairies. For example, Holly married a cattleman from a station near Kuridala in 1918, and spent almost sixty years on the land. Kuridala was some kilometres west of Julia Creek and south of Cloncurry; drier and hotter, the township had electricity because of its mines but

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Craies; Edward Manson; C. J. Zichy-Woinarski; W. Harrison Moore; A. Buchanan; R. W. Lee; Godfrey R. Benson, 'Review of Legislation, 1904, British Empire, Australasia', *Journal of the Society of Comparative Legislation*, New Ser., vol. 7, no. 1, 1906, p.115. A year later, 5 Ed. VII. No. 33 established a 'minimum standard of butterfat in cream' and prohibited the sale of substandard cream, or its purchase by a dairy for butter manufacture. Further amendments occurred through introduction of the *Dairy Produce Act of 1920* (10 Geo. V., No.15) which protected producers in their dealings with dairies (s.16), introduced grades for cream and butter (s.17) and forbade the addition of 'putrescent cream' to butter (s.17, s.19) plus encompassed labelling of dairy produce packages (s.25). W. F. Craies, 'Review of Legislation, 1905, Queensland', *Journal of the Society of Comparative Legislation*, vol. 7, no. 2, 1906, p.439; L. E. Groom and J. F. Gamble, 'Review of Legislation, 1920, Queensland,' *Journal of Comparative Legislation and International Law*, 3rd Ser., vol. 3, no. 2, 1921, pp. 45-102

37 4 Ed. VII No.18, (s.30), in W. F. Craies, 'Review of Legislation, 1904, British Empire, Australasia, Queensland', *Journal of the Society of Comparative Legislation*, New Ser., vol. 7, no. 1, 1906, p.116.

³⁸ For example, *Act 64 Vict.*, No. 28, part v. regulated the sanitary arrangements of factories and shops, while two Acts dealt with public health; one of those allowed for a Commissioner of Public Health. See W. F. Craies, 'Review of Legislation, 1900, British Empire, Australasia', *Journal of the Society of Comparative Legislation*, New Ser., vol. 3, no. 2, 1901, pp.353-4 ³⁹ Farmers turned to dairying because of lowered sugar prices, and found conditions ideal. For more on Queensland dairies, see Anne Statham, *The Fight for a Fair Go: a history of the Queensland Dairyfarmers' Organisation*, Brisbane, 1995; and Vincent Cottell, Queensland dairy farming 1885-1985 – technological impact and social change, M. Sc. Thesis, Griffith University, 1987.

Holly's property was further out and did not get power until the 1930s. ⁴⁰ In the meantime, Holly kept milk cows, and made her own butter. To cool quantities of perishable foods, her husband built a 'charcoal chiller': they made an enclosure of wire netting around a pile of cart tyres and placed an 'old iron trunk' in the middle with wet charcoal around it. The trunk stayed cool inside. ⁴¹ Similarly, Bessie grew up on a sugar farm near Brandon, a verdant town near Ayr, and stayed there until her 1920 marriage. ⁴² They kept cows because it was the only way they could have fresh milk, cream and butter. In the larger centres however milk could come to the door, and then be ladled straight into the householder's own containers.

Elizabeth recalled that when she was first married, their milk in Townsville was delivered by 'a little girl, Maggie Woods.'43 Mary Jane was not much more than a little girl when she moved to a Townsville dairy farm in 1918 at the age of eleven. 44 From arrival, she helped with 'cattle and horse work'. Milking started at midnight and finished at breakfast. The milk was then separated: the cream would be held overnight and churned the next day, and the milk strained into cans for delivery in the milk-cart: Mary Jane held the horses while her step-father measured out the milk at each house.⁴⁵ Such early starts took their toll. Elsie was often too tired to do her homework because she had to do a milk round early each day. She noticed that children of 'all the old Irish families' at her school often pleaded their parents' late and noisy hospitality as a reason for not completing theirs. Elsie tried the same excuse, saying that her family had had visitors who had been up all night drinking, but got no pity. 46 Near Charters Towers, Daisy K's grandmother got her up at 3am to help with the milking. They had two tanks – the front one held goats' milk, and the back had cow's milk. After milking, all the pots and pans had to be cleaned and scalded with boiled water, which Daisy was allowed to use for her morning wash. By then, it was usually cold.⁴⁷

⁴⁰ They had a telephone much earlier: Holly said that the 'government' wanted a telephone in their area, and installed one at their property. NQOHP, ID140, CD351-2, 3

⁴¹ *Ibid*. Holly was born in 1895.

⁴² NQOHP, ID 85, CD248-1, 3. Bessie was born in 1897. Brandon is about 60 kilometres from Townsville.

⁴³ *Ibid.*, ID16, CD 44-3

⁴⁴ *Ibid.*, ID 43, CD100-4

⁴⁵ *Ibid*. In 1927, she married a family friend who also ran a dairy, and carried on with the dairy chores that had occupied most of her formative years.

⁴⁶*Ibid.*, ID53, CD 122-1

⁴⁷*Ibid.*, ID 111, CD 311-4, 312-1

People with room to do so might keep domestic cows: at the higher end of the social scale, Marjorie recalled of her friends that 'most had three or four acres' in Townsville; most had ponies, she said, and most had a cow. Alice similarly spoke of their 'stables at back' and of the servants who gardened and did chores; her family 'had an Aboriginal man' – 'a black' (she thought his name might have been Tommy, but was uncertain, although he was with them for many years) who gardened, milked their cows and 'got the sulks now and then.' Nurse Annie Steele's family on-sold milk from their Charters Towers store: the first thing they did when the milkman came, she said, was to boil the milk to keep it from going sour. Once it was boiled, they could easily 'skim off' the cream."

Nellie saw another reason for caution: she recalled that they had 'fresh meat and unpasteurised milk delivered every day'; the milk came in a billy-can and had to be boiled because 'cattle often had TB'. Blaming 'that queer triple play, leg-man to telephone to rewrite man, by which most of the local news is put out', an American scholar complained in 1925 that 'The use of 't.b.' for tuberculosis is so common as almost to replace such common terms as the modern 'consumption' and the ancient 'phthisis.' Terms such as this entered the vernacular in the U.S.A and Australia because tuberculosis posed a problem. All of the Oral History women who mentioned the disease referred to it in the abbreviated way, with Holly adding a twist to an Australian legend. Speaking of her mother-in-law, Holly said that

Her brother was the original man from Snowy River; many others claimed to be, but her brother was the real thing, although they never spoke about it much. His name was Jimmy Troy, and he did not live for long afterwards, as he died at 30. He died of TB; several members of the family had it.⁵²

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There were cracks like Owen Cummins, and the odd brave stableboy,

And Spencer, Clarke and Cochrane, and Jack Riley and Jim Troy...' Pers. comm, December 11 2007. See Mark O'Connor, 'A New Ballad of the Man from Snowy River', www.australianpoet.com/poems.html#snowy

⁴⁸*Ibid.*, ID 37, CD87

⁴⁹ *Ibid.*, ID 25, CD 59-1

⁵⁰ *Ibid.*, ID 20, CD51-4. A billy is a round lidded metal container with a wire handle.

⁵¹ Morris Fishbein, 'The Misuse of Medical Terms', *American Speech*, vol. 1, no. 1, 1925, p.26 ⁵² NQOHP, ID140, CD351-2. She added that 'He did not come from Snowy River, but Banjo Patterson knew that. There was no old man called Harrison either and no 'hair as white as snow': all that family were blond, but they did not use to say "blond" then.' Poet Mark

snow'; all that family were blond, but they did not use to say "blond" then.' Poet Mark O'Connor published an interesting version of *The Man from Snowy River*, for which he researched characters who might have inspired Patterson: his poem states that

^{&#}x27;There were Macnamaras, Pendergasts, and Barrys and O'Rourkes,

A Woodhouse and some Sheahans whose address was "Snowy Forks";

It would be ironic if a possible inspiration for an Australian icon, from a respected cattle-farming family, died from a disease he might have caught from a glass of milk.

Identified tubercular infections accounted for around ten of every hundred deaths in Queensland between 1896 and 1900.⁵³ These figures were not divided racially, but racial degeneration theories assumed that non-whites would dominate: an idea that extended back to early eugenic concepts.⁵⁴ For example, American E. Ray Lankester argued that some races were more susceptible to deterioration than were others.

According to a reviewer, Lankester believed that 'certain human races' were:

degenerated descendants of higher, more civilized peoples; such as the present descendants of the Indians of Central America, the modern Egyptians, and "even the heirs of the great Oriental monarchies of pre-Christian times," while the Fuegians, the Bushmen, and even the Australians may also be degenerate races... while he is indisposed to regard all the human races as degenerated from an early high type of mankind, he recognizes the fact that numerous races have fallen away from a higher stage.⁵⁵

Lankester's belief in the susceptibility to disease of 'degenerate races' was apparent from early in his teaching career: arguments such as these contributed to beliefs in the contaminative potential of 'certain human races', and in Australia's case, Aborigines. Yet, in 1901 the Queensland government reported a lower death rate for its Chinese citizens than its white. The Registrar-General rationalised the Chinese mean rate of 10.61 per thousand against the European rate of 11.31 by arguing that they were 'all

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⁵³ *QPP*, Registrar-Generals Report, 1901, xxi-xxx. The principal cause of death in 1896, 1897, 1898 and 1900 was phthisis, respectively presenting 7.87, 7.71, 6.74, 6.62 and 7.43 of every hundred deaths. Allied to those losses were deaths from scrofula and *tabes mestenterica*, both tubercular, which added a further 1.56 and .94; 1.24 and 1.00; 1.35 and 1.06; 1.3 and 1.2, and 1.27 and .96 respectively to the toll.

⁵⁴ *Ibid*., xxi

Anon., 'Reviewed Work(s): *Nature Series. Degeneration. A Chapter in Darwinism* by E. Ray Lankester', *The American Naturalist*, vol. 16, no. 12, Dec., 1882, p.997. A prolific writer, Antarctic and African traveller and a Fellow of Exeter College at Oxford, Lankester was Professor of Zoology and Comparative Anatomy at University College, London by the 1890s. He was also Director of the British Museum of Natural History from 1898. Apparently a friend to Thomas Huxley and H.G. Wells (of whom he spoke warmly in several of his articles), one of his students was Galton's later associate, Walter Weldon, and James Cossar Ewart was one of his own associates at the University College. Lankester wrote in a readable style: see E.R.L., Instruction to Science Teachers at South Kensington', *The American Naturalist*, vol. 5, no. 11, Nov., 1871, pp.685-693. He died in 1929. For more, see 'Linacre Professors of Zoology', University of Oxford http://users.ox.ac.uk/~zool0456/linacreprofessors.htm, and John Alroy, 'Lefalophodon. An Informal History of Evolutionary Biology Web Site', http://www.nceas.ucsb.edu/~alroy/lefa/Lankester.html. Viewed April 22 2007

practically males in the prime of life'.⁵⁶ If all Europeans deaths were in the prime of *their* lives, he argued, they would have 'even a lower death rate'.⁵⁷ He could explain why the highest death rate that year occurred in Pacific Islanders, because they were 'not a virile race', and why the next worst were 'Other Asiatic Races', who tended to 'comprise classes much given to a disregard of the most primitive laws of sanitation.⁵⁸ Those sanitation standards might have been inadequate against the onslaught of diseases to which such 'other' races had had little time to develop resistance.

In his 1920 report, Chief Protector Bleakely linked 'primitive habits' and poor sanitation to the state of Aboriginal health and remarked that 'the native' was 'an active agent in the spread of germs'. ⁵⁹ Other remarks however show the belief that contamination was a reciprocal process: it was necessary to protect the 'natives' from being 'spoiled' by civilisation and its diseases. ⁶⁰ The Department remarked that 'in each report for some years' it had emphasised the:

urgent need for a definite and generous policy for the betterment of the aboriginals as a race... [most were] existing in greater or less destitution and degradation... complete segregation and protection are essential if we would save these people from destruction.⁶¹

Bleakely continued that the 'large majority' had 'already suffered contamination' and that Aboriginal racial strengths were presently incompatible with those of the white man.⁶² Nevertheless, eugenists did not restrict the idea of primitiveness or decay to non-white groups.

'Primitive' was a favoured word that provided a facile separation between the advanced (fit) and backward (unfit) races; in the case of the white working class or poor, the concept extended to individuals. Most eugenists considered illness in lower types predictable: they believed that disease accompanied poverty because the unfit

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⁵⁶ *OPP*, Registrar-Generals Report, 1901, xxi

⁵⁷ *Ibid.* The definition was 'all Persons, exclusive of Chinese, Polynesians, and Other Asiatic races'. The small 'Javanese' population experienced least mortality: of 270, only two died. ⁵⁸ *Ibid.* The Pacific Islander rate was 31.28 per thousand, and the 'Other' category rate was 17.42 per thousand. Non-white groups (a total of 24,682 people) composed just 5% of Queensland's 1901 population of 465,643.

⁵⁹ *QPP*, Report of the Aboriginals Department, 1920, p.5

 $^{^{60}}$ *Ibid.* Bleakely noted that the influenza epidemic of 1918-19 entered Queensland through its major ports, not its Aboriginal settlements.

⁶¹ *Ibid*., p.7

⁶² *Ibid.*, p.5

were not clever or able enough to change their circumstances. Gastric illnesses and tuberculosis particularly worried them; in the latter case there was concern that tuberculosis could spread from the unemployed and unwell to the fitter middle-classes. Some eugenists seem to have retained ancient beliefs that tuberculosis was inheritable: Charles Davenport would still be arguing that to be the case in the 1930s. 63 Others saw differently. The microscope, Lilian Brandt remarked in 1903, had proved that tuberculosis was a social rather than inherited problem: it spread through social processes. 64 It seems that she would have preferred proof of a racial basis. 65

Brandt found it frustrating that United States census materials studied according to race and nationality opened 'an alluring field of speculation' but insufficient detail, because 'The racial factor' was obscured by census classifications that considered age, sex, place of residence, economic status, occupation, 'and even their amusements'. ⁶⁶ She would have liked a genetic history of every person counted; since this was not available, Brandt compared tuberculosis death rates between whites, 'Indians', Japanese and Chinese and found that 'the consumption death-rate is... higher for all elements of the colored population than for the white.' However, there was no denying that whites suffered from tuberculosis, and Brandt brought a class perspective

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⁶³ Charles B. Davenport, 'Heredity and Disease', Science Service Radio Talks, *The Scientific Monthly*, vol. 34, no. 2, 1932, pp. 167-169

⁶⁴ Brandt, 'Social Aspects of Tuberculosis', p. 65

⁶⁵ There is little question racial or ethnic backgrounds can predispose people to some conditions, and provide them with particular resistance to others. For example, the Rockefeller Foundation's 1920s hookworm campaign in the American South found that African-Americans there had considerably less hookworm infestations than European-Americans: Coelho and McGuire recently re-examined those statistics. They reasoned that since 'Tropical West Africans were exposed to endemic hookworm infection for millennia, their innate resistance to hookworm was pro-adaptive'; while as American whites did not have such 'strong evolutionary selection pressures' in regard to hookworm, they were genetically disadvantaged against the African-American descendants of those who did, and who also had innate resistance to malaria. Philip Coelho and McGuire, 'Racial Differences in Disease Susceptibilities: Intestinal Worm Infections in the Early Twentieth-Century American South', *Social History of Medicine*, vol. 19, no. 3, 2006, pp.476-7

⁶⁶ Brandt, 'Social Aspects of Tuberculosis', pp.65-76.

⁶⁷ Later eugenic researchers took racial susceptibility to another distinction when they examined (white) racial subgroups in Wales; with an interest in genealogy and cephalic indexes, they evaluated 'Mediterranean or Neolithic types' alongside red-heads, blondes and people with 'long heads' and actually found little that makes sense to a present reader. The most pertinent findings were that people who had lived or worked in or near mines had more phthisis: but this was hardly news in the 1930s. See Emrys Bowen, 'The Incidence of Phthisis in Relation to Race-Type and Social Environment in Central Wales', *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, vol. 63, Jan., 1933, pp. 49-61

to her explanation through her argument that a successful fight against tuberculosis depended upon better housing, recreation and work conditions alongside instruction in domestic science and the health disadvantages of alcohol. Hence, she contended that tuberculosis control relied upon:

The improvement of the housing of the working classes; the multiplication of parks and playgrounds, gymnasiums and baths; the widening of streets; the enforcement of a standard of healthful conditions in all occupations; the reduction of the working day; the raising of wages; the education of the women and girls of the tenements in the art of housekeeping and the science of food-preparation; the crusade against the noxious features of the saloon; the substitution of scientific instruction about the effects of alcohol in place of the nonsense too often taught now in the public schools – all these and kindred efforts tend, less indirectly than might be thought, to reduce the death-rate from tuberculosis. ⁶⁸

Brandt's solution to tuberculosis lay in the poor working class, or simply the poor.

Apparent in the social approaches to medicine shown previously, that attribution would continue to the 1920s and beyond. The University of Illinois' J. Howard Beard remarked in 1916 that

The poverty-stricken individual is a fourfold menace to the nation – a poor progenitor, an inefficient producer, a potential source of disease, and frequently a malcontent. ⁶⁹

Poor and malcontent they might have been, but their economic situation may have protected them from some diseases. Milk-borne diseases affected middle-class families more than their social and economic inferiors, because they could afford, and used, more milk. The problem was that the poor seemed to have a worse environment, and it was easy to make connections between it and environment-attributed diseases such as tuberculosis that might spread to the better class. Jones argues that for this reason the social remedy for tuberculosis involved the 'alteration of an environment that was "unhealthy" into one conducive to health.' This

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⁶⁸ Brandt, 'Social Aspects of Tuberculosis', p.76

⁶⁹ J. Howard Beard, 'The Avoidable Loss of Life', *The Scientific Monthly*, vol. 2, no. 2, 1916, p.115. Beard (1883-1950) was a Professor of Hygiene in 1916. University of Illinois, J. Howard Beard Papers, 1908-1950.

<//web.library.uiuc.edu/ahx/uaccard/UAControlCard.asp?RG=33&SG=1&RS=20>

⁷⁰ Burks remarked that 'It is found that the homes of the well-to-do are often attacked in greater proportion than others, owing to the fact that families with larger incomes commonly drink more milk than those with smaller resources'. Burks, 'Clean Milk and Public Health', p.196

'environmental conception' she continues, was particularly prominent in the United States and the United Kingdom.⁷¹

Bovine tuberculosis presented particular social dilemmas for eugenists, but also for people who lived their humanity rather than constantly analysed it. Animal-borne diseases acquire a special significance when linked to a food perceived as a fundamental part of a society's diet, its economy and perhaps even its identity. Although bubonic plague was also a concern for Queensland health officials at the turn of the last century and beyond, people did not generally catch it through eating infected rats, and no-one farmed rats; however, they could acquire M. Bovis through consuming contaminated milk, cheese or other dairy products, all of which had acquired a real economic importance. On one side, the consumer saw scientists who argued that milk might be harmful, while on the other were scientists who argued that milk was essential to infant health. Farmers sat in the middle of a socioeconomic dilemma: they had to accept the risks but protect their own wellbeing. 72 The domestic cow became a potential human threat, and as food safety controls and population pressure saw her increasingly removed from the towns, farmers risked psychological as well as physical separation from the urban community. Their part and responsibility in milk production highlighted and potentially increased the distance between producer and consumer. Jones shows the extent of those quandaries in her study of Anglo-American control strategies before World War One, where she notes that as a zoonose, 'bovine tuberculosis blurred the boundaries between urban and rural, production and consumption, and human and animal bodies. '73 Betty the backyard cow was once a part of everyday life: by the mid twentieth century, she would be a memory. Her demise had begun around the time of Australian Federation.

⁷¹ Susan D. Jones, 'Mapping a zoonotic disease: Anglo-American efforts to control bovine tuberculosis before World War I. (Material Flows And Public Health)', *Osiris*, vol. 19, 2004, p.134

p.134
⁷² Barbara Orland, 'Cow's Milk and Human Disease. Bovine Tuberculosis and the Difficulties Involved in Combating Animal Diseases', p.179. Orland adds that even when a product is known to be harmful, economic pressures may affect or inhibit official responses; regulations and legislation intended to control may thus be imperfect or tardy

⁷³ Jones, 'Mapping a zoonotic disease: Anglo-American efforts to control bovine tuberculosis before World War I. (Material Flows And Public Health)', p.133

In 1901 despite (and perhaps because of the contradictions) of Koch's findings there had remained a suspicion that tuberculosis was a hereditary rather than communicable disease. ⁷⁴ Instructions for Queensland public health officials in The Infectious Diseases Regulations of 1901 paid most attention to the apparently more aggressive infectious diseases of plague, smallpox, cholera, scarlet fever and typhoid, mostly in respect to vessels and immigrants. Where a medical officer confirmed or suspected that a person carried a serious illness, their 'soiled linen' and 'personal effects' had to be fumigated. ⁷⁵ As Bashford has argued, regulations such as these when applied to incoming vessels and passengers disguised issues of racial integrity: measures designed to protect the population at large were often 'perfectly justified' means of managing communicable diseases, but also reflected intimate links between 'nations, citizenship and public health.'

The Infectious Diseases regulations did acknowledge the part played by personal hygiene in their application to domestic emergencies, as well as the importance of milk as a potential medium for disease transmission, as shown in parts IV and V of the Act in relation to scarlet fever and typhoid. In those cases, if the officer linked either disease to a 'cowkeeper, dairyman or seller of milk', the dairy owner or operator had to provide a list of all its customers. They also had to suspend all operations until the officer believed the danger had passed. Infected people, or those who had been in recent contact with an infected person, were not permitted to 'milk cows or to handle vessels used for containing milk for sale.' These rules made the milk producer's hygienic responsibilities clear: their milk should be bacteria and contaminant free.

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⁷⁴ Ravenel complained in 1903 that American health authorities were not spending enough on tuberculosis eradication. He found that difficult to understand for three reasons: it was communicable, preventable and in early stages curable. He attributed the main cause of such reticence to 'the persistent belief in the hereditary character of the disease, which is even now quite prevalent among the masses, and held by many physicians.' He added that it was true that the disease ran in families, but this was because 'the children of phthisical parents are constantly exposed to infection.' Mazÿck P. Ravenel, 'The Warfare against Tuberculosis', *Proceedings of the American Philosophical Society*, vol. 42, no. 173, 1903, p.212 ⁷⁵ *OPP*, The Infectious Diseases Regulations of 1901, C.A. 37-1901, pp. 4-6

⁷⁶ For quarantine regulations and their relationship to public health and eugenics in the late nineteenth and early twentieth century (and beyond) see Alison Bashford, 'Migration, borders and public health: Histories of the future?', *Wellcome History*, no. 26, Summer 2004, p. 1 OPP, The Infectious Diseases Regulations of 1901, C.A. 37-1901, pp. 4-6

Dairy co-operatives functioned on the Atherton Tablelands at the turn of the nineteenth century, and collected from Daisy's family in Charters Towers by about 1910. The government wanted dairies to sterilise their milk, but the precise processes preferred at that time are unclear in the records found. Complete sterilisation was unlikely: it affects the taste of milk adversely. Pasteurization kills many bacteria, but does not eliminate them all – it should reduce bacteria and pathogens to a safe level but preserve taste. ⁷⁸ Despite such precautions, milk-borne illnesses remained a threat to child health.

There was another infection that threatened Queenslanders, once again, mostly through its impact on the very young and old. Queensland's 1901 vital statistics showed the prevalence of gastric illness. For the 1,456 Queensland children under five years that died in 1900, enteritis was the deadliest cause: two hundred and eighty-two contracted fatal enteritis infections before the age of one and another 324 succumbed before they were five years of age. Prematurity was the second greatest cause of death, and diarrhœa third. For babies before their first birthday, there were 143 deaths attributed to diarrhœa, with another 165 affected before their fifth. Combined, these gastric illness figures accounted for roughly 40 per cent of deaths under one year, and 37 per cent of deaths before five years. If accurately diagnosed, many of these deaths would have related to levels of sanitation and other environmental circumstances. Millward and Bell's study of Victorian Britain found a number of

⁷⁸ The only completely safe process in this regard is UHT sterilization. For more, see Orland, "Cow's Milk and Human Disease. Bovine Tuberculosis and the Difficulties Involved in Combating Animal Diseases', pp. 181, 186-7. Atkins and Brassley show that pasteurization was less effective before the 1930s: industrial sterilisers were cumbersome and inefficient, and the pasteurized milk needed cooling to complete the sterilisation process; this required two sets of equipment; see Atkins and Brassley, 'Mad cow and the Englishmen. (animal-human pathological links in the United Kingdom)', p.14

⁷⁹ *QPP*, 'Attributed causes of death in children under five years in Queensland in 1900', Registrar-General's Report, Vital Statistics, 1901

⁸⁰ *Ibid*. There were 198 premature births listed.

⁸¹ Ibid

⁸² Convulsions and pneumonia were the third and fourth causes. They were followed by 'whooping cough and dentition'; 'want of breast milk'; bronchitis; diphtheria; 'inflammation of the brain or its membranes', and 'Tabes Mesenterica'. The latter generally inferred tuberculosis of the abdomen but could signify other problems.

measurable variables that affected infant mortality; maternal health was a significant one of these, but sanitation provided the key to most mortalities.⁸³

Gastric illnesses remained difficult to diagnose despite technical advances in microscopy because of the similarity between enteric bacteria; symptoms also overlapped in the early stages of an infection. Enteric infections are often caused by the salmonella bacterium, which might be expressed in two serious conditions: salmonellosis (enteric fever or typhoid) and acute gastroenteritis. 84 The former is a bacterial infection in the bloodstream, and the latter food-borne. Since both are spread as a result of contact with infected faecal matter, the prominence of gastric illnesses in any mortality list accentuates the value of later sanitation and hygiene reforms in industry and domestic environments. 85 Between 1896 and 1899, enteritis had accounted for four to five deaths per hundred in Queensland; in 1900, it increased to account for more than six. 86 Diarrheal deaths (the fifth highest listed mortality cause) increase those figures significantly. Combined, figures for enteritis and diarrhœa match the fatal impact of tubercular illnesses: they accounted for more than nine deaths per hundred in 1900, and as such caused more fatalities than phthisis. The feared disease of typhoid caused less than a third of those totals in any of the five years under consideration.87

⁸³ Maternal health, they note, 'crucially affected the three issues which determined the infant's life chances: the condition of the foetus, the quality of the immune system, the quantity of breast feeding'. They also measured environmental conditions according to availability and quality of water, sewerage facilities, housing and population density, as all affected sanitation standards. See Millward and Bell, 'Infant Mortality in Victorian Britain: an economic and social analysis', pp. 9-14, 36

These and a number of other salmonella are from the family *Enterobacteriaceae*, to which E. coli (*Escherichia coli*) also belongs. Kenneth Todar, University of Wisconsin-Madison (Department of Bacteriology), 2005, *Todar's Online Textbook of Bacteriology*, http://textbookofbacteriology.net/salmonella.html. Viewed April 27, 2007.

⁸⁵ Directly, through poor personal hygiene, or in a secondary way after contact with food that someone else has contaminated by the same means. The initial symptoms of these conditions are also similar, with diarrhoea, vomiting and abdominal pain; in the case of typhoid, there is later a high fever, general malaise, sometimes a headache and rash, a slow heart rate, and the chance of severe or fatal complications. Koch cultivated the typhoid bacterium in 1881, but serodiagnosis was not possible until 1896; *Todar's Online Textbook of Bacteriology*, viewed April 27, 2007. See also Zulfiqar Bhutta, 'Current concepts in the diagnosis and treatment of typhoid fever', *British Medical Journal*, 333.7558, July 8, 2006, pp.78-160

⁸⁶ *OPP*, Registrar-Generals Report, 1901, xxx

⁸⁷ *Ibid.* This is based on figures for enteritis and diarrhœa per 100 deaths for 1896-1900 respectively of 4.39 and 5.05 (9.44); 4.72 and 5.37 (10.09); 5.45 and 3.64 (9.09); 5.55 and 3.16 (8.71), and 6.21 and 3.50 (9.71). Typhoid: 2.3; 3.4; 2.39; 2.42; 2.37

The United States also experienced disturbing levels of gastric illness. Burks likened enteric problems to tuberculosis, noting that typhoid generally received more attention. Yet, he said,

Important as it undoubtedly is to safeguard the milk supply of a community as a means of controlling the ravages of typhoid, scarlet fever, diphtheria and tuberculosis, it is even more important as a means of reducing the enormous mortality among infants which is chargeable in very large measure to gastroenteritis (diarrhea), the dominant cause of which is unclean milk and ignorant feeding. The number of deaths among infants under one year old in the United States, for the year 1909, was approximately 250,000, which is about one-fifth of the total number of deaths of all ages. Of this startling number of infant deaths, it is estimated that almost two-thirds were preventable; at least one-quarter being caused by enteritis alone - a shocking sacrifice to ignorance and carelessness.

Weather and other local factors probably played their part in gastric infections. In the U.S.A, Howard Beard argued, 'infantile diarrhea' occurred because of 'summer heat, want of care, ignorant feeding, improper food and bad hygiene'. ⁸⁹ Breastfeeding saved lives, he continued, for 'enteritis may be largely prevented by maternal feeding', and 'the death rate of the artificially fed infant to the breast nourished is in the ratio of 32 to 1. ⁹⁰ Because of the cyclical nature of outbreaks, other writers similarly attributed the increased death rate in England and Europe to hot, dry summers, with Morgan arguing that increased horse transport brought a unique set of problems in the form of 'street manure and flies', which also spread enteric diseases. ⁹¹ With hot, wet summers substituted, all of these are credible factors for Queensland.

Mining towns posed particular risks. Betty Cosgrove describes typical conditions in these times in her study of the mining town of Mt Morgan, south-west of Rockhampton. There, women struggled against dust and dirt as well as disease, and generally did so with poor water supplies and bathing facilities. ⁹² Their daily lives

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⁸⁸ Burks, 'Clean Milk and Public Health', p.198

⁸⁹ Beard, 'The Avoidable Loss of Life', p.112

⁹⁰ Ibid.

⁹¹ Nigel Morgan, 'Infant mortality, flies and horses in later-nineteenth-century towns: a case study of Preston', *Continuity and Change*, 2002, vol. 17, pp. 97-132. Also cited in Millward and Bell, 'Infant Mortality in Victorian Britain: an economic and social analysis', p. 3
⁹² Betty Cosgrove, Mount Morgan: images and realities – dynamics and decline of a mining town, PhD thesis, School of Humanities, Faculty of Arts, Health and Sciences, Central Queensland University, August 2001, p.277 http://library-resources.cqu.edu.au/thesis/adt-QCQU/uploads/approved/adt-QCQU20050427.131849/public/ In the early years, water could

reflected the 'constant critical factor of a polluted and dirty environment'. 93 Residents of such places had to deal with the dust and accumulation of silt and debris around the mines, as well as the higher risks of occupational hazards like silicosis (Miner's Phthisis), which has a different aetiology to tuberculosis. 94 References to phthisis are not a clear indication of infection with tuberculosis in mining areas. However, as Diane Menghetti notes, people who contracted silicosis were less able in their weakened states to resist tuberculosis. 95 Having a spouse with such debilitating diseases could only increase a woman's economic and emotional load; children constantly infected with gastric illnesses must have added even more strain.

In 1903, Queensland had recorded 433 deaths from enteritis-type problems. ⁹⁶ This epidemic subsided in 1904, when there were 255 deaths. In 1905, 'gastro-enteritis' claimed 250 lives, with the statistician noting that such infections were 'chiefly fatal to the very young'. ⁹⁷ Enteritis deaths had also declined since the 1903 problems, when 163 were recorded; there were 'only 91 deaths in 1904, and 106 in 1905.' 98 The link between enteritis and gastro-enteritis was established: the tragic reality that 95 per cent of the victims of gastro-enteritis deaths in 1905 were under five years of age was worsened by an additional 106 deaths 'certified as due to enteritis... so that the total number of deaths attributable to these allied complaints was 356.⁹⁹ Once again however these figures do not encompass all of the enteric illnesses: they exclude the other worrying sanitation-related disease of typhoid.

The typhoid death rate was not as great as for gastro-enteritis: the problem was that a typhoid epidemic was always possible, and that mortalities could be greater in such an

be carted from standpipes provided by the mine, and then stored at home if the household had a well or tank. Otherwise, carting smaller quantities of water might be a regular chore.

⁹⁴ As its name suggests, silicosis comes from build-up of silica particles in the lungs. A disabling disease, it is irreversible and sometimes fatal. See WHO, Silicosis, <www.who.int/mediacentre/factsheets/fs238/en/>

⁹⁵ For a discussion of specific sanitation and health risks in mining towns, see Diane Menghetti, 'Mine and Town: Health and Safety on Charters Towers', Royal Historical Society of Queensland Journal, vol. 13, no. 6, May 1988, pp.215-228 ⁹⁶ QPP, Report of the Statistician, 1905, xxviii

⁹⁷ *Ibid*.

⁹⁸ *Ibid*.

⁹⁹ *Ibid.* 56% occurred in the summer months, between December and March.

event. 100 In 1905, the Statistician blamed poor hygiene for typhoid incidences: acknowledging a reduced mortality, he saw 'great room for improvement'; 'there is no doubt', he said, that 'a grave responsibility rests on a community where this cause is in the slightest degree prevalent.'101 The Commissioner of Public Health's Report for 1906 similarly worried about typhoid and community attitude: in his discussion of typhoid and phthisis, Burnet Ham paid considerable heed to the need for improved sanitation but deplored at least one response to the problem of typhoid. Although the state recorded eighty-two less cases that year, 'the continued incidence of typhoid fever' at Charters Towers troubled him. Mr Simpson, an inspector, found there untidy streets with no 'systematic rubbish control', and sometimes 'several dray loads' of refuse among the rubbish heaps found 'in the corner of nearly every yard in town.' 102 'Nearly every house', he continued, had a cesspit, but some had no real toilet enclosure, instead, they built 'dilapidated conveniences' of 'saplings and old chaff bags... set over deep cesspits, many of which latter were full to overflowing. 103 Burnet Ham stressed the need for municipal concern and compliance, apparently lacking at Charters Towers, but present in the distant south-western town of St George, in Balonne Shire. 104 In the latter case, there had been thirty-four cases of typhoid and local authorities 'cordially' and quickly responded to a directive to end cesspit usage, and install sanitary pans. Despite the concern about regional episodes however most cases of typhoid actually occurred in the metropolitan area, from where almost half of the state total originated. 105

Public education was essential for disease awareness and prevention. Bubonic plague, for example, had been a source of government fear in Australia and Queensland since European settlement. By 1903, the means of infection (firstly rats carrying the *Yersinia pestis* bacterium, then their fleas) was basically understood. One apparent

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¹⁰⁰ Almroth Wright discovered a vaccine in 1905 but it was not used widely before mass troop inoculations in the Great War; at any rate, typhoid vaccines are not always reliable. See Michael Worboys, 'Almroth Wright at Netley: Modern Medicine and the Military in Britain, 1892-1902', Clio Medica/The Wellcome Series in the History of Medicine, vol. 55, pp. 77-97

¹⁰¹ QPP, Report of the Statistician, 1905, xxviii

¹⁰² *QPP*, Report of the Commissioner of Public Health, 1906, p.8

 $^{^{103}}$ \widetilde{Ibid} .

¹⁰⁴ *Ibid*.

 $^{^{105}\}mbox{ }Ibid.$ Of 506 cases, 247 came from the metropolitan area.

¹⁰⁶ In 1903, *The Age* reported that 'It is only a few years since the discovery was made that rats are chiefly responsible for the spread of bubonic plague. Dr. J.S.C. Elkington, who has just

plague death occurred at Ipswich in 1905, while Cairns reported two 'mild' infections, where one patient was a Council rat-catcher – both survived. ¹⁰⁷ Townsville was less fortunate, with six cases and six deaths reported, while Rockhampton experienced what Burnett Ham described as an epidemic, with eleven cases and four deaths, all from one warehouse. In all, the state reported twenty-eight plague infections, with fifteen deaths. ¹⁰⁸ Plague was a disease that inspired public dread, yet in 1906, Burnett Ham could still see an urgent need for a Health Act amendment to make householders 'responsible for keeping their properties free from infestation with rats.' ¹⁰⁹ The largest problem was in making the public want to live in a more hygienic way, and for that, they had to understand the importance of good sanitation. ¹¹⁰

Inspector Simpson's findings in the then parish of Enoggera, near Brisbane, highlighted the importance of that need; child mortality was high, as was the incidence of infectious disease and illnesses related to poor sanitation in towns within the Shire; forty percent of all deaths in the district came from the seventy-nine children under five years of age who died in 1905-6.¹¹¹ Over all ages in the town of Ithaca, infections

returned from India, where he was engaged in the Imperial plague research laboratory at Bombay, states that there is now little doubt that fleas are an almost equally important factor in disseminating the disease.' *The Age*, July 1, 1903, in 'Electric Chronicle',

http://www.echoed.com.au/chronicle/1903/jul-aug/general.htm

¹⁰⁷ *QPP*, Report of the Commissioner of Public Health, 1906, p.5

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

Sanitation played a significant role in plague occurrence, as plague spread where rats were uncontrolled, but once X. cheops (the flea vector of Yersinia pestis) bit, people had little control over infection. Christina Amiet argued that plague diagnoses were questionable because the number of reported cases seemed to vary according to whether the reporter considered them to be 'true plague'. See C. Amiet, The second angel: plague in North Queensland 1900-1922, Honours Thesis, James Cook University, 1995. Amiet's argument is supported by the admission of aetiological quandaries as late as 1925: see I. S. Falk, 'Some Riddles in Epidemiology', The Scientific Monthly, vol. 20, no. 4, April 1925, pp. 383-404. Government reports of plague however must be considered to have some credibility where laboratory tests were used for confirmation; the bacterium is distinct and could be identified microscopically in rat and other animal tissues from at least 1903. The Institute of Tropical Medicine conducted such tests on a regular basis in cooperation with the government pathologist in Brisbane. ¹¹¹ QPP, 'Report of John Simpson, Chief Inspector', Report of the Commissioner of Public Health, 1906, p.12. Changes in Enoggera's legal structure illustrate the development of local government, as mentioned earlier. Under the Local Authorities Act of 1902, Enoggera Divisional Board had become Enoggera Shire Council. In 1925 it was amalgamated with the City of Brisbane, which was created on October 1 1925 under the City of Brisbane Act of 1924. The towns of Ithaca and Windsor also became part of the City of Brisbane under this Act. See Department of Local Government, Sport and Recreation, 'Evolution of Local Government in Queensland', and Office of the Queensland Parliamentary Counsel, City of Brisbane Act 1924, http://www.legislation.qld.gov.au/legisltn/current/c/citybrisa24.pdf; accessed June 2 2008

killed eighty-nine people: 'fifty-three of these', Simpson noted, 'were typhoid fever'; there were also 'seventeen cases of diphtheria, seventeen of phthisis, and one each of erysipelas and puerperal fever.' The town of Windsor had fourteen cases of typhoid, thirteen of diphtheria, eight of phthisis, two of erysipelas and one of scarlet fever. Simpson was confident about the cause of these problems: he had seen the houses where the diseases occurred; most of the illnesses, he said, were 'purely filth diseases, and therefore preventable.' 114

By 1906, associations between filth and miasmatic causes of disease were obsolete elsewhere: sanitarians now aimed to rid human living spaces of refuse and sewerage because they harboured germs, not for the 'abatement of nuisances' that created miasma. Burnett Ham had still been pursuing the earlier-mentioned personal initiative of public lectures aimed at 'popularising the science of sanitation. He felt compelled to do so because

An essential factor to success in the administration of a new and somewhat arbitrary Health Statute is that the community should be in a position to understand and appreciate what is being done for its benefit, as a whole and individually. It was understood that it would be difficult to administer sanitary measures unless the public was willing to accept them and co-operate in their practical application. To educate and advise, to persuade and teach, rather than to compel, was thought to be the true position of the sanitarian. ¹¹⁷

With miasmatic ideas largely discredited, sanitary focus had moved to civilians and their responsibility for their own and ultimately the community's hygiene.

This did not mean that infectious disease ceased to be a problem, in the short-term or later: the concerns and reform intentions continued, but without antibiotics, so did the diseases. Quarantine and isolation procedures undoubtedly helped affected individuals

¹¹² *QPP*, 'Report of John Simpson, Chief Inspector', Report of the Commissioner of Public Health, 1906, p.12. Erysipelas was a streptococcal infection of the skin, once known as 'St Anthony's Fire'. In fatal cases, it probably entered the bloodstream; there may have been septic shock. Since antibiotics, it is rarely fatal.

¹¹³ *Ibid*.

¹⁰¹a. 114 Ibid.

Vincent stated that the first was when 'disease was seen chiefly in the environment. Stress was laid upon the "filth" theory. Effort was directed to sanitation, to improve water supplies, to sewage and refuse disposal and to abatement of nuisances.' Vincent, 'Public Welfare and Public Health', p.36.

¹¹⁶ *QPP*, Report of the Commissioner of Public Health, 1906, p.10 117 *Ibid*.

afflicted with diseases like tuberculosis, and helped to deter plague outbreaks, as did simple measures such as rat control. Similar progress occurred in the United States, where science, sanitation and a committed society had achieved positive results by 1916. Howard Beard argued that such collaborative efforts were essential to disease prevention: science had a responsibility to reveal the causes and functions of diseases, and society was duty-bound to implement its findings. At that time, Beard saw a rosy future. ¹¹⁸ Certainly, there had been amazing scientific progress, and there was cause for optimism. Unfortunately, the situation was about to change.

Between 1916 and 1918, influenza swept the globe; historians generally accept that this occurred in three waves. ¹¹⁹ Known as Spanish flu, the disease was unique in that it had its most devastating effect on people in their prime, rather than infants or the elderly. With its tendency to produce death through complications, predominantly pneumonia, a milder version of Spanish influenza may have reached Queensland in about 1918, but appeared at its most virulent in 1919. ¹²⁰ Thanks largely to Cumpston's quarantine vigilance over ports, Australia fared better than many other countries. ¹²¹

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list Beard, 'The Avoidable Loss of Life', p.117. Jenner's vaccine discoveries had 'ended the devastation of smallpox'; thanks to Laveran and Ross, malaria was no longer 'the scourge of mankind', while Carroll and Lazear had 'made the Panama Canal a possibility and closed our ports to yellow fever', and 'the information concerning diphtheria' was 'as definite as that of yellow fever'. Furthermore, the 'epidemiology of typhoid fever and cholera' had been found to be 'practically identical'; understanding of the 'Koch vibrio' had helped restrict 'Asiatic cholera'; 'a scientific attack upon plague has prevented its spread and practically driven it from the country', syphilis was understood as clearly as malaria, and 'the knowledge of tuberculosis' was 'as complete as that of plague.'

The pandemic did not start in earnest until 1918. For more on Spanish flu, see Sandra M. Tomkins, 'Colonial Administration in British Africa during the Influenza Epidemic of 1918-19', Canadian Journal of African Studies / Revue Canadienne des Études Africaines, vol. 28, no. 1, 1994, pp. 60-83; Geoffrey W. Rice, Edwina Palmer, 'Pandemic Influenza in Japan, 1918-19: Mortality Patterns and Official Responses', Journal of Japanese Studies, vol. 19, no. 2, Summer, 1993, pp. 389-420; P. Leppard, G.M. Tallis and C.E.M. Pearce, 'The effect of World War I and the 1918 influenza pandemic on cohort life expectancy of South Australian males born in 1881-1900', Journal of Population Research, vol. 21, no. 2, Nov 2004, pp. 161-177; Niall P A S Johnson and Juergen Mueller, 'Updating the accounts: global mortality of the 1918–1920 "Spanish Influenza" pandemic', Bulletin of the History of Medicine, vol. 76, 2002, pp. 105-115

pp. 105-115

Reid suggests that the virus responsible [probably an avian influenza] emerged in 1915 but was not recognised as such then; she adds that 'isolated outbreaks of the disease labelled purulent bronchitis were occurring in England and France in 1916 and 1917'. Death certificates and health visitor's records show symptoms consistent with Spanish influenza. See Alice Reid, 'The Effects of the 1918–1919 Influenza Pandemic on Infant and Child Health in Derbyshire', *Medical History*, 2005, vol. 49, no. 1, January 1, pp. 29-54.

¹²¹ For a detailed examination of Spanish influenza in Australia, and Cumpston's part in dealing with it, see Anthea Hyslop, 'A question of identity: J. H. L. Cumpston and Spanish

There seem to have been somewhere between twenty-one and fifty million global deaths: Johnson and Mueller attribute such a large variation to underreporting, caused largely through selective reporting or misattribution. ¹²² Queensland did not emerge unscathed: officially, influenza caused 830 deaths in 1919, of which 487 were male and 343 female. 123 The toll was probably higher, due to vagaries in identification and diagnosis. Deaths from pneumonia and pneumonic infections, although described as 'exclusive of Influenza', increased from nil in 1918 to 200 in 1919; there were another 103 deaths attributed to 'broncho-pneumonia', for which the toll was twelve higher in 1918. 124 It is difficult to speculate as to the success or failures of personal sanitation in such a catastrophic event, but it does seem that Cumpston's quarantine measures restricted the disease to one significant wave rather than the three elsewhere.

Queensland had also achieved results in its battle with plague; by 1919, it was practically unknown, and 'Organic Diseases of the Heart' had displaced tubercular disease as Queensland's largest cause of death, but this was a pyrrhic victory. The influenza epidemic produced the second highest number of mortalities, but as the third highest cause, tuberculosis had just moved further down the list; its death rate had not improved. 125 When other diseases are added to the toll, 1919 was not a good year for Queensland: diphtheria took twenty-nine more lives than in 1918 and typhoid fever an additional eighteen. 126 'Purulent Infection and Septicæmia' were responsible for thirtysix; another thirty-five people died of syphilis; four of scarlet fever and two of 'Hydatid Tumours of the Liver'. 127

Queensland's rural sanitary services had improved markedly by the mid 1920s. Inspector Austin of the Cairns district was able to report with some satisfaction that although his district encompassed 'some 132,000 square miles of country and a

influenza, 1918-1919 [Expanded version of a paper presented at a symposium entitled Intellect and Emotion: Perspectives on Australian History (1996: University of Tasmania)], Australian Cultural History, no.16, 1997-1998, pp. 60-76.

122 Johnson and Mueller, 'Updating the accounts: global mortality of the 1918–1920 "Spanish"

¹²⁵ *Ibid.* Heart diseases were listed as the cause of 941 deaths, of which 586 were male and 355

Influenza" pandemic', pp. 105-115

¹²³ *QPP*, Report of the Statistician, 1921, p. 18 ¹²⁴ *Ibid*.

¹²⁶ *Ibid.* Diphtheria is listed as the cause for ninety-six deaths and typhoid for seventy-two. ¹²⁷ *Ibid*.

population of about 53,000 persons', there had been no epidemics. With the exception of an increase in incidences of diphtheria and an unspecified number of cases of dengue fever, there had been a fall in the occurrence of disease. 'Matters of sanitary executive', he added, 'are being gradually improved, and the Cairns Shire Council intended to install 'an incinerator for the disposal of nightsoil' as an improvement on the previous method of burying the soil. ¹²⁸ Rat destruction continued; swamps and waterholes were routinely sprayed to eliminate mosquitoes, and installation of 'flyproof cabinet pansteads in closets and the mosquito-proofing of rain-water tanks and other nuisances' was proceeding well. 129

Food inspections also continued. In 1925, health inspectors identified fourteen cases of adulterated milk and obtained convictions; they also successfully prosecuted three publicans for 'selling spirits adulterated with added water and twenty butchers for using excessive preservative in their mince. ¹³⁰ In the latter cases, Inspectors preserved the public safety as well as ensured that the public got value for their money. One city shop keeper was fined for selling 'adulterated' (decomposed) fish, five bakers faced prosecution for selling 'bread short of due weight', and several retailers incurred the Department's wrath by 'falsely' describing produce such as soap and vinegar. ¹³¹ By 1926, Health Department annual reports concerning food inspections covered up to ten pages. Officers watched for the 'promiscuous distribution of dangerous poisons' which might inadvertently contaminate food containers; the quality of bread and preservatives used in its manufacture, as well as monitoring food handling standards in the bakeries themselves, and tested alcoholic spirits at hotels, presumably by laboratory analysis. 132 Inspectors were responsible for enforcement of 'the provisions of Part VI. of the Health Acts (Food and Drugs), the Food and Drug Regulations, Milk-sellers Regulations, Fish Supply Regulations, Footwear Regulations, and Poisons Regulations.' 133 Inspector Hiddins of Brisbane conducted 'regular and systematic supervision over fish supplies at the State Fish Markets'; additionally, he 'examined all consignments of cured fish arriving in the port from overseas', with the

 $^{{}^{128}}$ QPP, Report of Commissioner for Health, 1926, p. 17 129 Ibid.

¹³⁰ *Ibid.*, p. 20

¹³¹ *Ibid*.

¹³² *Ibid.*, p. 18

¹³³ *Ibid*.

outcome that over sixty-one tons of fish were condemned and destroyed.¹³⁴ It is impossible to feel pity for importers who may have lost large amounts of money, but might also have been responsible for large-scale illness.

The preceding activities show that the Queensland government had established a regular system of health scrutiny by the time of the Survey, and that while it continually increased activities to better the overall public health, it was motivated by high infant and child mortality rates that threatened Queensland's white population and ultimately its economic security. Health authorities had a particular interest in determent of hygiene-related infections such as enteric or tubercular diseases, because of established and scientifically proven links between milk safety and the incidence of both ailments. Eugenic ideas also focused on the health of the child as a portent of white racial wellbeing, but did not adequately explain why the supposed fittest in society seemed as susceptible to enteric and tubercular disease as the least fit.

Raymond Pearl, who inspired several of Cilento's key observations about race, presented some novel ideas in this regard in 1920 when he announced that human health depended upon 'innate constitutional biological' or 'endodermal' factors rather than environmental; it was organ break-down that caused the problems. In most cases, he argued, organs failed because individuals had genetic weaknesses that made them susceptible to particular conditions; hence, the problems were on the inside, not the outside. At the same time, he proposed that even genetically superior humans had two particularly vulnerable organ systems because disease organisms had direct access to the body through the nose and mouth. These two weaknesses facilitated infection with the two great scourges of infant health (phthisis/tuberculosis, and

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¹³⁴ *Ibid*.

¹³⁵ After challenging the rationale behind most arrangements in the International Classification of diseases, Pearl attributed nearly all human health problems to an 'evolutionally speaking... very old-fashioned and out of date ancestral relic... his own endoderm.' Pearl, 'Certain Evolutionary Aspects of Human Mortality Rates', pp.5, 35, 41-44

¹³⁶ *Ibid.* Even suicide demonstrated an internal weakness: 'a constitutionally and hygienically sound mentality weathers the environmental storm which suggests suicide', while alcoholism occurred because of 'the want of will-power and self-control' associated with 'mental defectiveness', pp.26-27. He cites Amy Barrington and Karl Pearson, 'A Preliminary Study of Extreme Alcoholism in Adults', *Eugenics Laboratory Memoirs*, XIV, 1910

'alimentary tract illnesses'), making public health important and mothers responsible for racial protection. ¹³⁷ Hence, child welfare:

both prenatal and postnatal, seems by long odds the most hopeful direction... This is a matter fundamentally of education. Ignorant and stupid people must be taught, gently if possible, forcibly if necessary, how to take care of a baby both before and after it is born. It seems at present unlikely that mundane law will regard feeding a two months old baby cucumber, or dispensing milk reeking with deadly poison makers, as activities accessory to first-degree murder. But we are moving in that direction.... 138

In Pearl's view, racial protection depended upon mothers, who were best placed to ensure that their offspring were able to overcome any genetic susceptibilities.

Pearl's theories provide an extreme example of the tenuous connections that eugenists made between racial status and public health. In Cilento's hands, ideas such as these were more coherent, and probably more persuasive: but then, Pearl wrote for an educated audience, while (in the case of *White Man in the Tropics*) Cilento's was more ordinary. Where they and most hygienists of the time agreed was that breastfed infants were less likely to suffer from the illnesses associated with unsterilised milk; hence, Cilento's interest in whether or not the Survey mothers breastfed, and the age at which they weaned their babies. Early weaning obviously exposed babies to the same ills as those bottle-fed. Mothers carried the responsibility for their children's health: they were the last contact with milk before their children drank it. Burks for example stated that milk-spread disease would be reduced only by 'educating mothers and caretakers to prepare and administer such milk in a manner suited to the nutritive requirements of infants.' The problem was not one of class or race but contact with infection.

In 1924, the *Townsville Daily Bulletin* had reported on the way in which the sugar industry was addressing its future, with remarks that encompassed eugenic beliefs and concerns and predictably considered the role of white women in the tropics. 'For a generation', it read, 'a quiet pressure has been exerted towards the white ideal'; sustainable white settlement and population growth was critical to the long-term

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¹³⁷ *Ibid.* In relation to other conditions, Pearl dismissed most public health activities on the basis that if one was genetically inclined towards a particular disease then all the clean water or asepsis in the world would make no difference.

¹³⁸ *Ibid.*, p.34 139 Burks, 'Clean Milk and Public Health', p.200

development of the sugar industry, and particularly important to Queensland, which had 'about one-half the tropical territory and 25 per cent. of the production of the continent, and 95 per cent. of the total tropical population. According to Prime Minister Bruce, it said, increased white settlement in Queensland was necessary, 'to justify to the world our mortal right to this magnificent country' and to 'act as a first line defence and the bulwark of our most cherished policy of white Australia.¹⁴¹ The article saved its deepest concerns until the end. There were, it said, 'some social and economic problems involved which demand serious attention and wholehearted solution'; the most grave of these was 'the life of the women' and the architecture of their homes, which were 'built entirely too much around the comforts of the man.' 142 'Modern woman', it added, will not stand for it.' In the Queensland tropics of which it spoke, however, modern woman endured a great deal, making the best of homes built to meet economic or practical circumstances rather than those of their health. Those remote from good health services, and in an unsanitary domestic environment, risked their wellbeing and those of their families, sometimes (as Gorman showed) by choice, but at other times through lack of it.

While his personal and professional concern about the health of young white families is not questioned, Cilento did not seem to appreciate that some women may have lacked agency. Throughout *White Man in the Tropics*, he argued that the levels of determination, preparation and organisation with which white northerners addressed their daily schedules and work lives diminished most problems associated with tropical life. His interest in women's conditions, attitudes and knowledge as well as his clear statements to that effect reveal his belief that women carried a large part of the responsibility for reduction of such problems. The white race in the tropics could only benefit from women's attention to hygiene, sanitation and good diet, and their commitment to organising their lives in such ways that efficient home work became racial work.

¹⁴⁰ 'White Australia. An American View. Work in the Tropics', *Townsville Daily Bulletin*, January 10 1924, p.10

¹⁴¹ *Ibid.* Institute of Tropical Medicine research findings also figured largely: Breinl's experiments with wharf labourer physiology and advances in research into tropical disease predictably appear in many such arguments of the time; the same material, sources and quotations appear in the *Bulletin* at regular intervals; only the headings change. ¹⁴² *Ibid.*

¹⁴³ *Ibid*.

Conclusion

White women in North Queensland in the 1920s were subjected to particular racial pressure: a pressure that in this case had an outcome that Cilento, the Institute and other parties involved may not have envisaged. Cilento and the Institute of Tropical Medicine conducted the Sociological Survey to prove that white women could thrive in North Queensland, but as the Survey assessed its subjects' health and circumstances, it created an enduring historical resource by preserving details of the everyday lives of northern women in the 1920s.

It was probably not their intention to do so: as this work has showed, the Survey's designers and implementers saw an immediate problem that they believed needed resolution for the sake of Queensland's future. With domestic science viewed internationally and locally as a means of racial improvement, the information obtained at the time enabled Cilento to attribute poor as well as better knowledge or circumstances to factors other than climate, and to emphasise the racial importance of scientific conduct. Domestic science had meaning elsewhere because of its diverse applications in domestic, economic and political situations, but the Sociological Survey applied it as its benchmark for measurement of the physical and racial wellbeing of white women in North Queensland.

This multi-layered examination of the Survey, its place in the history of White Australia, and the significance of its relationship to public health concerns and developments, revealed the ways in which white women in North Queensland experienced the various developments of state, national and international concerns and innovations about population, health and hygiene. Expressed in domestic science imperatives tied to eugenic and other racial ideas, the Sociological Survey provided an avenue for exploration of ideas that were inseparable from the themes of White Australia, and, in this case, from the social, scientific and political pressures that those concepts placed upon white women in North Queensland.

The Sociological Survey also reflected and signified the depth of racial concerns in Queensland before the 1920s. As part of *White Man in the Tropics*, it reveals the

anxieties, contradictions and confusion that surrounded late nineteenth and early twentieth century racial beliefs and theories about white tropical settlement. In its enquiries about sanitation and cleanliness in the home, in its curiousity about women's health and its obsession with establishing the quality of their routines and conduct, it shows the extent of concerns about the safety of the home and individuals within it at a time when scientists seemed to find new microbial organisms on a daily basis, and when these discoveries threatened to demolish the idea of the home as a civilised sanctuary. Moreover, it adds to existing knowledge of the racial beliefs held by its designer and the way in which his personal ideas influenced his science. These are important supplements considering that until the late 1940s Cilento developed and exercised power in Queensland and Commonwealth government offices, tertiary education and through service on Australia's behalf with the United Nations.

In isolating his ideas, this research found Raphael Cilento to be a typical scientist and white citizen of his time. His racial beliefs were not unique to the late nineteenth and early twentieth century, and mirrored those expressed regularly in the popular press as well as scientific literature. While few who espoused eugenics had the opportunity to implement them at an administrative level, and while Cilento nevertheless seems to have directed his opinions on racial health into the development of better health services from which all Queenslanders ultimately benefitted, exploration of his academic sources provided significant insights into his eugenic ideas. The literature that supported this work reinforced the interplay of eugenic concepts with those of domestic science, as well as the racial concerns embedded in activities aimed at decreasing infant and child mortality rates, and improving white health in all aspects of daily life. Overall, it showed the way in which Queensland adopted and endorsed international and interstate activities for the sake of its white citizens, and particularly those who resided in the tropics.

The Survey obtained specific as well as comprehensive information about the lives of its subjects. Since they seemed to be predominantly from the working class, Gorman's remarks on their health, homes and social environments provide valuable insights into the attitudes, actions, health and environment of working class women. Nonetheless, those surveyed remained distant and depersonalised. Conversely, recordings from the North Queensland Oral History Project offered personal perspectives on early

twentieth century white female life but lacked reference to social and racial themes that affected the daily lives of the narrators. Combined, the Report and NQOHP stories provided an intimate view of racialised lives in North Queensland societies, with important gaps filled inductively (as in the case of childbirth processes), by reference to academic debates and writings in circulation before and during the Survey period, and literature from commercial and government sources.

While the overall value of the NQOHP accounts support the usefulness of oral histories as research tools, its free-form structure probably allowed participants to narrate selectively without always attracting attention to omissions. Some NQOHP spaces however were patent: manifested as sporadic vague references and terse comments, they promoted speculation about what remained untold. In this regard, curiousity led to the development of data that provided clarification on some issues and raised questions on others. For example, Florrie's indistinct account of her age at marriage inspired interest in obtaining an indicator of the extent of turn of the century pre-marital pregnancy as indicated in Birth, Death and Marriage records. Similarly, with the benefit of NQOHP notations of maiden names, brief references to deaths from disease or childbirth motivated a search for those deaths. Intended originally as a useful but peripheral data set, collation of the first collection of several hundred records according to family name led to recognition of familial patterns in infant and child mortality and the subsequent expansion of the sample group into a record of over two thousand births. Although the group remained small in comparison to total Queensland births over the same period, the patterns observed were consistent enough to justify a larger retrospective cohort study. A collection of events such as births, marriages, deaths and divorces by family, complemented by electoral records, would add to knowledge of the lives and challenges of Queensland's late nineteenth and early twentieth century residents, but particularly its women.

A comprehensive longitudinal investigation would be informative for several reasons. Firstly, the expanded data collection, as expected, showed some maternal deaths close to childbirth, but also revealed that some of their daughters similarly died after one or more births. Lateral records do not provide such information, but a longitudinal study could show repetitions of these deaths over several generations, with obvious value for present descendants. For the same reason, a downward list of families who

experienced multiple child deaths may prove valuable and eventually inform present descendants of genetic risk factors. It is entirely possible that electoral rolls will show that the families concerned lived close to high-risk locations such as mines or abattoirs or were isolated from medical assistance that might have been enough to preserve the lives of children suffering seasonal illnesses elsewhere. It is also possible that the children concerned lived in the poor domestic environments that so concerned Gorman, Cilento and health authorities, which increased the likelihood of their becoming ill: the latter might show in municipal records. Another avenue of exploration could arise through verification of apparent links between the sample group child-death occurrences and seasonal disease outbreaks.

The sample group also revealed a surprising number of what seemed to be unmarried mothers, and although present researchers in Queensland do not have access to the quality of historical census information enjoyed by historians in the United Kingdom, a careful examination of electoral registrations for a select few of such women in regional Queensland may provide matching with males (or perhaps other females) who shared their residences. Findings such as these could challenge this work's contention that marriage was desirable for most women, but might also reveal that more heterosexual couples than we assume chose to live conjugally with new partners rather than divorce.

Because race and race issues were central to the Survey and hence this work, it showed the way in which theorists such as Francis Galton used scientific premises to authenticate racial and racist ideas. These in turn impressed other scientists eager to understand the ways in which humanity functioned; for white societies with a predilection for ideas of their superiority, eugenics provided solutions as well as explanations for health and social problems. Committed and articulate, diverse yet with much in common, eugenists left comprehensive written records of their beliefs and disagreements that enabled matching with other racially-biased concepts such as those of domestic science. These records also demonstrated the way in which eugenic and similar race beliefs prompted and reinforced social and scientific attention to women's social status, rights and 'place'; among them, the belief that women were responsible for family physical, intellectual, and genetic wellbeing.

The emphasis on both civil and maternal health responsibilities grew alongside the new century, but just like the producers who engaged so enthusiastically with the developing consumer society, governments had to market their ideas. Domestic science provided an ideal medium because it addressed the woman within her residence and in her outside employment and social life. It had an interest in her sexuality and sexual conduct, her fertility and the way in which she exercised or controlled it, as well as her relationship with her husband, brothers and father. It counted the pennies and pounds of her daily life in the same way as it counted the seconds and minutes of her work and relaxation times, yet was contradictory. It allowed her the benefits of consumer society so long as they enhanced her efficiency, but denied those that might give her more time: she could buy the electric oven, but not the packet mix; she could plan some 'her' time in a comfortable chair on the verandah, but must take care not to stay there too long. Whether she was considered black, white or a member of other racial groups, it promoted pride in her racial origin, but denied racial equality; it argued for self-awareness, social responsibility and human membership, but encouraged her to accept a stratified, socially uneven world coloured in different hues.

These ideas and contradictions were evident in Queensland and North Queensland at the time of the Survey. Under examination, they showed an application to white and non-white women in other places, but were found particularly important to the lives of northern white women and their families. Because the domestic science markers that Cilento employed for the Survey were distinctive, it was possible to build a prismatic view of the lives of white northern women in the early twentieth century. Together, the Sociological Survey Report and the reminiscences of a group of women from the North Queensland Oral History Project retrieved more than 750 Survey subjects from the facelessness of a black and white typed record and recalled some of the vibrancy and texture of their daily lives.

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Appendix 1 - Survey Health Assessments

Source: NAA, SP1063/1, 277, 'Report on house to house visitation etc. Sociological Unit'

			Charters					
Location	Atherton	Cairns	Towers	Chillagoe	Cloncurry	Julia Creek	Townsville	
Households surveyed	44	123	132	37	80	24	300	
Assessment:		Percentage recorded:						
Apparently in normal health	81.6	70	71	71.5	63.5	70	70	
Nerve trouble*	7	4.5	4.2	3.8	10	4	5	
Rheumatism	0	3.4	8	5.5	3.7	8	3	
Goitre	2.3	0	0	0	0	0	1.5	
Gastric^	4.3	3.4	8.5	11.1	3.7	8	16.5	
Anaemia	1.5	0	4.2	0	2.5	4	1.5	
Alcoholism	0	0	0	5.4	0	0	1.5	
Uterine complications	4.6	3.4	4.2	0	3.7	0	2.1	
Nasal Catarrh	0	1.5	0	0	0	0	4	
Bronchial Asthma~	0	2.5	0	0	2.5	0	0.4	
Malarial fever	0	5	0	0	0	0	0	
Lung trouble#	0	1.5	0	0	0	0	0	
Kidney trouble/Nephritis	1.5	1.5	4.2	2.7	2.5	4	0	
Gall stones	0	0	0	0	2.5	0	0	
Delicate health	0	0	0	0	2.9	0	0	

Gorman's alternative descriptions: * - 'Neurasthenia neuritis etc'; ^ - 'Indigestion, Chronic diarrhoea and Constipation'; ~ - 'Chest trouble'; # - 't.b.'

Appendix 2 – Sample group findings as indicators of child mortality occurrences

Sample group source: Queensland Births, Deaths and Marriages; Analysis: Gillian Colclough

Sample group births in comparison to Queensland births for the same period							
	1851-	1861-	1871-	1881-	1891-	1901-	1911-
	60	70	80	90	00	10	20
Sample families births by							
decade ¹	10	65	125	161	255	256	260
State births by decade	4035	34383	58618	103722	143826	143958	192688
Sample group percent of state	0.25%	0.19%	0.21%	0.16%	0.18%	0.18%	0.13% ²

^{1.} According to Queensland Births, Deaths and Marriages online Historical records.

Sample group summary and miscellanea

- The sample group consisted of 791 couples or individuals that could be identified as families.
- There were 238 deaths of children under 6 years.
- 53 (6.7%) of the 791 families experienced two or more deaths of children under 6 years.
- This 6.7% of families experienced 123 (52.5%) of all child deaths.
- The 6.7% of families that experienced two or more child deaths also had 45% of deaths up to the age of 21. The War might be responsible for three young male deaths in 1914 but the other older young people's deaths that year were of females between the ages of 13 and 20.

^{2.} This figure is disproportionate: Most Queensland BDM online records cover just the period until 1914. BDM are expanding them.

Appendix 3 – Examples of births and deaths, sample group.

Column A							
Born	Name	Died	Father	Mother			
Unkn	Gregor	1872	Alexander	Jane (d. 1883)			
1866	John						
1868	George						
1869	Elizabeth						
1871	Alexander						
1872	William						
1874	Isabella	1875					
1875	Alexander						
1877	Jane						
1878	Sinclair						
1880	Catherine						
1880	Lily		Arthur	Mary			
1882	Benjamin						
1884	Blanche						
1886	Pearly Venetta	1887					
1892	Amanda Vinetta	1893					
1886	Thomas		Anthony	Ellen (d. 1886)			
1887	Harriett		Alfred	Harriett			
1889	George						

Column B								
Born	Name	Died	Father	Mother				
1888	Alexander	1888	Alexander	Ada				
1891	Robert	1891						
1892	Arthur	1892						
1893	Walter							
1894	Herbert	1894						
				Elizabeth (d.				
1889	Elizabeth		Andrew	1889)				
1891	Alexander		Alexander	Mary Ann				
1893	Andrew	1894						
1895	Violet	1898						
1897	Mary	1904						
1891	Alfred		Alfred	Susan				
1892	Thomas							
1894	Edward							
1897	Ethel	1899						
1898	William							
1900	Evelyn							
1902	Edward							
1906	Ellen							
1908	Margaret							
1910	Edith							

cont'd next column

Unkn = unknown birth; it possibly occurred outside Queensland. No later marriages were found for any widower here. Unlike Jane and Susan, many large families did not experience loss, regardless of decade.

Appendix 4 – Key NQOHP women

ID	Name	Born	Place	Occupation/s	Married	Date	Children
3	Barbara	1893	Ch Towers	Sales Assistant, Haberdasher, Home worker	Yes	1916	6
4	Daisy S	1885	London	Domestic servant, Home worker	Yes	1908	12
6	Marjorie	1896	Ch Towers	Home worker	No	N/A	N/A
8	Susan	1892	Limestone	Dressmaker	Yes	1914	4
11	Edith	1896	Ch Towers	Domestic servant, Farm worker, Boarding house keeper, Café proprietor	Yes	1909	6
13	Florence	1896	Mackay	Domestic servant, Seamstress, Boarding house keeper, Dry cleaner	Yes	1912, 1948	3
15	Amy	1888	Gympie	Home worker	Yes	1909	4
16	Elizabeth H	1890	Caboolture	Home worker	Yes	1912	4
19	Estelle	1899	Townsville	Milliner, Buyer, Home worker	Yes	1940	0
20	Nellie	1890	Ayr	Secretary, Nurse, Home worker	Yes	1914	3
25	Annie	1896	Ch Towers	Infant Health Nurse	No	N/A	N/A
28	Alice L (Allie)	1894	Townsville	Home worker	Yes	1913	3
35	Adelaide	1897	Townsville	Home worker, Dressmaker	Yes	1917, unkn	5
37	Alice H	1903	Atherton	Home worker	Yes	1924	5
40	Ethel M	1889	Bundaberg	Teacher, Home worker	Yes	1923	4
43	Mary Jane	1907	Ch Towers	Dairy farmer, Home worker	Yes	1928	4
48	Grace	1899	Townsville	Shop assistant, Home worker	Yes	1942	1
51	Sarah	1899	Ch Towers	Secretary, Home worker	Yes	1923	3
53	Elsie	1902	Unknown	Home worker	Yes	1929	5
64	Isabella	1891	Ch Towers	Tailoress, Home worker	Yes	1923	2
111	Daisy K	1902	Ch Towers	Dairy worker, Home worker, Cattle farmer, Shire Councillor	Yes	1916	3
119	Ethel C	1902	Townsville	Home worker	Yes	1925	5
140	Holly	1899	Kynoona	Farmer, Home worker	Yes	1918	4