INTRODUCTION

The general concept of a rural town in Australia is of an isolated inland settlement reliant on the farming or pastoral industries. However, rurality is more complicated than merely living in the "back country". The term can also apply to coastal towns within a relatively close physical distance of large central cities. This applies especially when travel between the two centres is restricted by the lack of transport infrastructure. For instance, a disinterested observer inspecting a map of North Queensland would assume that as the physical distance between Cairns and Cooktown is not great, the latter town would be well served by its larger neighbour. However, until relatively recently Cooktown was less accessible than most "outback" towns in Queensland. Indeed, until well after the Second World War it was not really accessible by land based vehicles. Consequently, for the purposes of this thesis, Cooktown is regarded as a rural town.

Cooktown is a small town situated on the Endeavour River in North Queensland. Soon after it was established in 1873, the town reached its population peak of approximately 4000 residents. Subsequently the population dropped to a low of about 300 during and just after the Second World War. Since then the town has increased steadily in size, with approximately 1500 people currently living within the boundaries of the original Municipality of Cooktown.¹

¹ An accurate assessment of the population of Cooktown is difficult as many "alternatives" live a secluded lifestyle in the area and would be reticent to appear in any census. "Alternatives" refers to the people who choose to live apart from the mainstream society. They are predominantly young and are often referred to locally as "ferals". Many of these people gradually integrate into the general population of the town. The area also has a significant floating population in the winter months when tourists escape the rigours of the southern winter.
A town of tents and iron: Cooktown 1874. (Cairns Historical Society).

Cooktown in its heyday, c. 1890s. Postcard.
The commercial centre of the town is now much smaller in proportion to the population than it was in Cooktown's boom years. In contrast to the 40 licensed premises recorded in 1875, only three hotels now exist.\(^2\) Other types of commercial activity suffered a similar fate, with only one bank and one general store remaining. Shipping merchants like Thomas & Madden and Burns Philp, which in Cooktown's heyday made significant contributions to the town's economy, have long disappeared, and the port that was in 1877 the most important trading port north of Brisbane is now not economically relevant.

Since Cooktown was established the town has survived two very severe cyclones, both of which caused significant damage. The 1907 cyclone, which was unnamed, was particularly destructive. In addition to extensive damage to the town's buildings, it wrecked most of the shipping in the harbour and silted up the channel. Another severe cyclone in early 1949, also unnamed, almost finished the town off. Assistance was offered by the State Government and the broader public in both cases, but this was not enough to counter the damage to private and commercial infrastructure. In both cases many businesses that were "just holding on" could no longer survive. Both cyclones caused an exodus of population and commercial interests. Given the magnitude of the destruction in 1949, very few people would have been surprised if Cooktown had merely died then.

The transfer of population from small towns to the cities is an important factor in rural decline. The social implications of urban drift are still a matter of debate among sociologists, but it is clear that many factors must be considered in any study of the subject. Kinship ties and home ownership are important factors rural people must consider when they decide whether to migrate when the economy of their area stagnates. Other important factors are their skills level, and the possibility of

\(^2\) Two licensed restaurants and two service clubs also offer alcohol to the public.
finding employment elsewhere. Cooktown residents reacted to the decline of their town in a variety of ways. Many families migrated to larger towns, and never returned, while others chose to have the able-bodied males migrate on a seasonal basis to work in the timber and cane industries in other areas.

Isolation was partly responsible for Cooktown's decline, and it still hampers the town's recovery. For instance, at present a reliable mobile phone service is not available, and the television service is restricted. Access from Cairns, the closest city, is approximately 100 kilometres by air, or about 350 kilometres by the Mulligan Highway, the inland road through Mount Molloy. This road, the first feasible road access to Cooktown, has been trafficable only since 1952. Although the Mulligan Highway is being improved each year, approximately seventy kilometres still has a gravel surface, the state of which is heavily dependent on frequent maintenance. A shorter alternative coastal road, opened in 1989, travels through the Daintree World Heritage area. Although this is a scenic trip, the road is usually accessible only by four-wheel drive vehicles. Until 1975, Cooktown had a weekly boat service which provided the only viable means of general cartage between Cairns and Cooktown before the Mulligan Highway was improved enough to allow economic road transport.

The early European settlers recognised that facilities and services such as roads, transport services, schools, hospitals, churches, sanitation, and a water supply were important in promoting growth, or at least in retarding or reversing the town's decline. Although Cooktown managed to retain its school and hospital, public health was comparatively neglected for many years.

---

4 Conrad Leffler Buhmann, interviewed at Mareeba by Peter Ryle, 19 March 1997.
5 Queensland Transport estimates that the road will be fully sealed by 2005.
The availability of educational facilities also plays a part in rural decline, and the absence of higher education in many small towns is a problem for families with school-age children. They are faced with the alternatives of sending children away to school, arranging correspondence lessons, or relocating the entire family to a larger town or city. In Cooktown, limited education was offered to senior students at St. Mary's Convent until it closed, but no high school was generally available until 1982, when some Cooktown parents started a private school for pupils from grades eight to twelve. Division within the community hampered previous attempts to secure higher education facilities. Some parents were intent on having their children educated in larger towns, and the Government used this as an excuse not to provide a high school. The view that education facilities in larger cities were superior to those offered in smaller areas was prevalent in some sections of the population at the time. However, this view is misguided. The high quality of education now offered by the Cooktown High School is a testament to the advantages inherent in a small community where children can be educated while still in the family environment. The recent substantial increase in Cooktown's population can be attributed in part to the presence of this facility in the town.

Soon after Cooktown was established, the residents began a long struggle to get a viable water supply. Their persistent efforts resulted in the town having several water schemes, most of which were unsuccessful. Ironically, the town's declining economy presented Governments with an excuse not to fund the projects that would be most instrumental in reversing the decline. The present Cooktown water supply is the culmination of over one hundred years of pressure on politicians and Government to provide one of the essential requirements of a civilised community. It is an indictment on successive

---

6 The establishment of the Cooktown Community High School resulted from the refusal of some local parents to send their children away to High School. The school, which was registered, operated until the State Government provided higher education facilities in conjunction with the existing State School. It was open to all students who wished to attend.
Governments that in the late twentieth century, the population of any town should be without enough water for adequate personal hygiene, and for at least a septic toilet system.

Another primary objective was an alternative access to Cairns and the southern markets. Cooktown claimed with good reason that a viable road would promote growth in the district. A road would give access to more agricultural land, and remove the total reliance on sea transport. Persistent attempts were made to convince various levels of Government of the necessity of providing rail, road, and later air access to Cooktown.

**History of decline.**

Cooktown was established in 1873 as a port and principal supply point for the Palmer River gold field. By 1877, the town had 4,000 inhabitants, and was the leading town north of Townsville. By the end of the Second World War, this was reduced to about 350. In comparison with other Colonial Queensland ports, Cooktown had distinct advantages. Although the harbour was not deep, it was more accessible than rival ports like Townsville and Cairns. The foreshore was also relatively free of mangroves, enabling a town to be established without the need for extensive clearing. The Palmer River field was an extremely rich alluvial gold producer, with official estimates of 40 tons of gold being taken from the area. Anecdotal evidence claims that more was exported illegally. Although the field continued to produce gold until after the Second World War, by 1885 gold production had dropped to a level where the field ceased to be a significant generator of wealth.

---

Hard-rock reef mining played little part in the Palmer field, although many small reefs were exploited. Initially these prospects showed promise, but the reefs proved to be small and shallow. For many years following the decline of the alluvial field, miners, speculators and Governments continued to believe that the "mother lodes" which supplied the Palmer alluvial field would be located in the Conglomerate Range which separated the Palmer River field from the coastal plain. This belief provided the rationale for the Cooktown to Maytown rail link, despite evidence that the alluvial gold was almost exhausted. The rich "mother lodes" of the Palmer never materialised, and Cooktown would not be nourished by the reefing fields, as were Townsville and Cairns. The railway then proved to be a burden which hampered the town in its efforts to recover.

Cooktown's infrastructure was funded from both the public and commercial sectors. Public sector or Government wealth was generated by fees and charges associated with providing secure escorts for gold shipments, as well as customs duties and wharfage fees on imports and exports. Most of the public infrastructure in Cooktown's early history was provided to secure these fees. These services were provided exclusively by the Colonial administration until 1885, when the Municipal Council purchased the wharves. The local authority was funded primarily by Government endowment, property rates, and license fees collected from various business enterprises. After 1885, when the Government sold the wharves to the Town Council, wharfage fees also contributed to the economy of the local authority. However the wharves, like the railway, eventually proved to be a burden rather than an asset.

Commercial income was generated initially by catering for traffic associated with the Palmer field. Most supplies arrived at Cooktown by ship and were delivered to the field by road. Local entrepreneurs were also involved in gold mining activities on the Palmer and other fields in the district. However, marine resources, timber, agriculture and tin
mining soon provided alternative avenues of commercial enterprise. As a result, the decline in gold production on the Palmer field, and the subsequent loss of trade, did not have as dramatic an effect on Cooktown as expected, and as is often claimed. Although Cooktown's economy did decline when the returns from the Palmer field dropped, the decline was slow, with intermittent resurgences of commercial activity. Rather than Cooktown experiencing a "fall" after 1885, much of its significant public works occurred after that period, and in many instances business flourished. In contrast to the perception of general decline, the most substantial building programme, both public and commercial, occurred in the period 1885-1891.

Cooktown's survival as a viable town well after its supposed "fall" was due in part to the diversified nature of its economy. As a port of entry and a customs port, it also played a significant role in North Queensland and overseas trade for many years after economic gold production on the Palmer ceased. The port was a transhipment centre, where cargoes were transferred to ships servicing the Gulf of Carpentaria and New Guinea. Cooktown also remained, for a considerable period, a principal port for the export of beche-de-mer and pearl-shell.

Although for a short time it had enjoyed a position as the principal town in far North Queensland, Cooktown was eventually surpassed by Cairns as the premier port in the north. Construction of a rail connection from Cairns to the Atherton Tablelands and the Chillagoe, Etheridge and Hodgkinson mineral fields helped that port to flourish. In contrast, Cooktown derived little benefit from its railway to Laura. The growth of Cairns, nourished by its expanding hinterland, had a disastrous effect on Cooktown, replacing it as the premier town of the Far North, taking business away from it and suppressing its recovery.

Until the 1960s, the wharf complex was the principal transport infrastructure in the town. The people of Cooktown constantly agitated
for a deep-water facility and improved shipping services. However, the gradual decline of shipping services, and the refusal of Government to provide road access to Cooktown and its hinterland, further hindered progress in mining and agriculture, and degraded the value of the port facilities. This is in stark contrast to the high level of assistance given by various Governments to extend and maintain infrastructure in the Cairns hinterland. Whereas Cooktown was virtually ignored, the State Government purchased and maintained the Chillagoe and Etheridge railways and various mining enterprises in the Cairns hinterland, to the benefit of that port. While farmers in the Cooktown district sought in vain for meaningful assistance to provide infrastructure to support their agricultural industry, Queensland taxpayers financed support services for farmers in other areas. Although the district's resources could not compare with the riches of the Cairns hinterland, Cooktown and its port would have fared better if the area had had a better road system.

Despite the decline in Government support and the lack of an industry capable of replacing gold mining, Cooktown had other assets that helped it survive with much of its infrastructure intact. These included a benign climate and the availability of good hunting and fishing close to town. Many people who had no other reason to remain in a declining town saw Cooktown's "other" assets as sufficient reason to remain. Even during the period of its most serious decline, Cooktown was seen as a place to "get away from it all". The town has in recent years experienced a resurgence in population and prosperity. This would indicate that the study of coastal towns, as opposed to rural towns in general, involves different parameters, including the lifestyle advantages of a more benign climate.

Although the decline of inland rural towns in Australia has been the subject of considerable investigation, the survival or decline of rural ports has been virtually ignored. Some aspects of the generally accepted theoretical models of the structure and survival/decline of towns can be applied to rural port towns such as Cooktown. However,
the reality is complicated by factors outside the confines of any single theory. It is clear that Central Place Theory can assist in understanding some of the physical implications associated with Cooktown's decline and survival. Similarly, Myrdal's economic theories have application in appreciating the survival of its commercial sector. However, it is obvious that other factors are relevant. These include political expediency, and the temperament of the personalities involved.

Factors influencing decline.

This study will involve an examination of the internal and external forces that influence the ability of a town to control its own destiny. It will demonstrate that Cooktown's reason for existence changed over time, and that its prosperity waxed and waned correspondingly. Like other contemporary settlements, Cooktown's economic "heart" was provided by its private sector, but the ability of private enterprise to successfully exploit the region's resources was dependent on the provision of Government infrastructure such as roads. The Government was willing to provide roads for the exploitation of the gold fields, which provided an immediate financial return to the Treasury, but was reluctant to provide infrastructure to help establish an alternative economy. It is ironic that the Cooktown to Laura railway, the most expensive item of transport infrastructure provided, proved to be a liability to the Government and the local population, and failed to generate enough income to recoup running costs. It is reasonable to assume that this failure influenced successive Governments against further investment in the district. A good road system might have made it possible for secondary staples to help counter the decline, but even when the town faced the threat of invasion during the Second World War, Cooktown was unable to attract enough funds to construct a road to allow the people of Cooktown to evacuate to a safe area inland.

When Cooktown started to decline, Government regulations, and in some cases Government inaction, severely restricted the local
authority's ability to improve the town's financial position. The Council's inability to protect itself from anomalies in the various Local Authority Acts compounded the economic problems it faced as the district declined. For example the Government's hospital precept system, which made local authorities responsible for a portion of the cost of operating the local hospital, also placed a burden on the local economy. While the precept had a minimal effect on Councils with larger populations, it constituted a larger proportion of the income of smaller local authorities. Cooktown had a central hospital servicing a big catchment area, and suffered severe economic hardship from the imposition of the precept.

Another example is the economic liability imposed on the town by the purchase of the Government wharves. Ironically, while gold exports from the Palmer River field provided an economic base for the port, the Government resisted all attempts by the local authority to purchase the wharves. If it had sold the wharves when the Council first suggested the idea, the town would have had a solid economic resource in its formative years. When the Government finally agreed, the wharf had become of dubious economic benefit. A facility that should have been an asset to the local community eventually became a drain on the town's economy.

External forces were not responsible for all Cooktown's problems, however. Disunity within the community caused some projects to be abandoned, and at times the people prevented the local authority from acting on matters which, in retrospect, would have been beneficial to the town. On the other hand, the Council's failure to grasp opportunities that arose also proved detrimental to the area. In this respect, Cooktown merely reflected the variety of pressures that influence the democratic process in small towns.

Cooktown's progress was also affected by its position as a central town with a large hinterland area. The original area of the Municipality of
Cooktown was only fifteen square miles, but its prosperity relied heavily on the mining and agricultural production of a hinterland over which it had little influence. The Daintree Divisional Board and the Hann Divisional Board controlled this area until 1919, when the two Boards were amalgamated to form the Shire of Cook. However, this did not prevent informal cooperation, inevitable with such a small population. For instance, in 1888 the Inspector of Nuisances for the Municipal Council, A. McNickle, also held the position of Chairman of the Daintree Divisional Board, and the Clerk of the Divisional Board, E.A.C. Olive, was a member of the Municipal Council.

The absorption of the Town Council of Cooktown into the Cook Shire Council in 1932, brought some cohesion. However, the enlarged Council was responsible for roads and bridges over an enormous area. (see map page 13) It was also too poor and weak to take advantage when new mineral ventures occurred. This was evident in 1960 when the State Government excised Weipa from the Shire to allow Comalco to construct a town to exploit the bauxite reserves at Weipa. The Cook Shire Council was deprived of rates, but was responsible for the maintenance of most of the roads in Cape York Peninsula, including the road to Weipa. The population of Weipa utilised the Shire's roads, but the Council was deprived of revenue from this important area.

**Attempts to reverse the decline.**

This study will demonstrate that repeated attempts were made by the local authority and various public and commercial organisations to reverse the decline in Cooktown's economy. Despite what was regarded locally as neglect by the Colonial/State Government, and also by the Commonwealth Government, the residents of Cooktown persisted in their efforts to achieve progress in several critical areas in an effort to promote growth. They showed ingenuity in lobbying various
Map of Cook Shire, 1947. (Cairns Historical Society, A27, E/L, 1947)
Governments to secure services and facilities. Simultaneously, pressure was applied to State and Commonwealth authorities to encourage growth in the surrounding area, and especially in fostering agriculture. The members of the local authority in particular showed great skill in using the political process to further their aims. Close personal associations were established with various politicians, irrespective of the party in power at the time. They also fostered a close association with various State Governors, some of whom supported Cooktown more vigorously than their elected Members.

**Factors influencing economic growth.**

Revenue from mineral exploitation played an important part in the early stages of Cooktown’s economic life, but the local population was aware that for the town to survive, they must encourage alternative sources of wealth generation. Consequently, the establishment of an agricultural economy was a constant goal. It will be shown that interested organisations and individuals proposed a series of agricultural schemes in the area, including tobacco and sugar cane production.

The tourist industry is primarily responsible for the recent resurgence of Cooktown's economy. It is perhaps ironic that a town plan and land use zoning system, including a tourist complex, was proposed for Cooktown prior to the emergence of the Gold Coast as a tourist centre. This development proposal failed through lack of support by the local population. After years of feeling neglected by the authorities, the locals were suspicious that any development would benefit outsiders without having any appreciable advantage to the district.

The contribution to Cooktown's economy by the Aboriginal inhabitants of the district, including Hopevale and Wujal Wujal, was an important factor in Cooktown's recovery. After the referendum of 1967, Aboriginals achieved equal pay, and also became eligible for unemployment and other social service benefits. The referendum also
ended the policy under which the majority of Aboriginal workers' pay was placed in a bank account, which could only be accessed with the permission of a Government representative. After they were released from the "protection" of the Act, they were able to spend their funds as they saw fit, and many chose to buy supplies from Cooktown, rather than from Mission shops supplied by the Government State Stores. Cooktown businesses now derive a significant proportion of their trade from the residents of the communities of Hopevale and Wujal Wujal. An assessment of the contribution of these communities to Cooktown's economy would require an extensive investigation, and is not addressed in this thesis. However, it is to be hoped that the contribution of Aboriginal communities to the economy of neighbouring towns will soon be recognised.

Exploding the myths.

Another purpose of this thesis is to expose the historical myths which surround Cooktown. It has, perhaps more than any other town in Australia, been falsely portrayed in popular history. Despite the availability of official statistics on every town of consequence in Queensland from the start of European occupation, sensational claims have been made concerning Cooktown's early history. Unfortunately, these stories have been presented, and in many cases accepted, as fact. They include claims of a population of up to eighty thousand people, predominantly men, living a riotous life. In one example, the forty licensed hotels became ninety-six, with a quoted one hundred and eighty brothels to cater for the eager miners. Robert Ormston, in his thesis, The Rise And Fall Of A Frontier Mining Town: Cooktown 1873-85, traces the history of Cooktown's first twelve years. He successfully

---

9 George Farwell claims that official estimates gave the population of Cooktown as 25,000 assorted Europeans and 30,000 Chinese, but that "one old resident" said it was closer to 30,000 and 50,000 respectively. George Farwell, 1976. Ghost Towns Of Australia. Rigby, Adelaide, p. 158.
exposed these spurious claims, and showed the reality of Cooktown's "boom" years.\textsuperscript{11}

Any examination of Cooktown's decline must first establish the reality that was Cooktown, as opposed to the rhetoric of popular "history". This will allow the decline to be seen in its true perspective. It will also help to establish that Cooktown's decline was not as dramatic as indicated by the misleading information contained within many of the works that purport to be historical accounts of the town's past.

**Structure.**

In writing this thesis it was apparent that problems would arise in maintaining continuity, whether it was presented in a thematic or chronological format. The decision to adopt a thematic approach was influenced by the considerable time span covered, with some subjects having application to the present time. It was felt that this format would more successfully accommodate the recurrent nature of some of the subjects addressed than would a chronological approach. A thematic format also allows each subject to be addressed as an entity within its relevant chapter. A purely chronological approach would necessitate extensive cross-referencing between chapters, which would prove confusing to author and reader alike.

As the thesis primarily examines the economic decline and ultimate survival of Cooktown, an attempt has been made to place the themes treated in order of economic importance. This will obviously be controversial, as the concept of importance is subjective, and it is understandable that some will disagree with the format. Problems also arose because it was desirable to maintain some order by keeping related subjects together. For instance, the chapters dealing with the

\textsuperscript{11} It is probable that the confusion over Cooktown's population came from early estimates that about 35,000 people accessed the gold fields through the town. This
port, roads, railway and aerodrome were placed together, despite their having different economic impacts. The chosen structure has the disadvantage that it lacks historical flow. For instance, chapter six, which deals with tourism, is a comparatively recent subject, while the port facilities, which were of great economic importance in Cooktown's early history, are covered in a later chapter.

Chapter One: Review of Sources. There is a conspicuous lack of secondary material relevant to the history of this subject. Consequently, the principal sources used were newspapers, and the archives of the State and Commonwealth Governments and the Cook Shire Council. The chapter also contains a review of literature useful for analysing the decline of small provincial towns like Cooktown.

Chapter Two: Mining 1880 to 1999. Mining continued to play an important part in Cooktown's economy after the decline of the Palmer River gold field. Tin was exploited, by both alluvial and hard-rock mining methods, from the 1880s to at least 1980. Coal exploration was also important to Cooktown, despite the failure to find a viable deposit. More recently, silica sand mining has contributed to the district's economy.

Chapter Three: Agriculture 1873 to 1999. Agriculture played a significant part in Cooktown's history. However, its effectiveness as a factor in reversing the decline of the area was hindered by a lack of transport and a central sugar mill.

Chapter Four: The Fisheries. Ocean products, particularly Beche-de-Mer, pearl shell and trochus contributed significantly to Cooktown's economy over a long period, but could not replace gold as a staple.

was then taken as the town's population by later commentators, and expanded as they saw fit.
Chapter Five: The Town Economy: Construction activity. Most of the significant construction activity in Cooktown occurred after 1885. This included the railway, the present Westpac Bank building, St. Mary's Convent (the present James Cook Museum building), and the Annan River Bridge. These indicators of a booming economy proved false, being based on earlier gold production rather than a solid future. However, they did bring money into the area. Tourism brought in a second and smaller building boom in recent times.

Chapter Six: Post War Developments: Tourism. Since the construction of an all-weather road to Cooktown, tourism has become the most important wealth generator for the town. Some tourists arrive by air, and a significant number are carried by tourist boats. However, the majority reach Cooktown by either the coastal road through Daintree, or the inland road through Mount Molloy. This industry has proved to be the source of an economic revival.

Chapter Seven: Port Facilities: Lifeline to the town. This chapter examines the efforts of Cooktown residents to maintain and improve their port facilities. Until the construction of the road, shipping was the principal method of transport for people and goods between Cooktown and the "outside world". Thus, good wharves and a deep harbour were critical to the town, as were reasonable shipping services.

Chapter Eight: Roads: Connection to the outside world. Examines the struggle of Cooktown people to secure a road connection with markets and sources of supplies, and particularly with Cairns.

Chapter Nine: The Cooktown Railway: The track from "nowhere to nowhere". Follows the construction of the Cooktown to Laura Railway, which was originally planned to go to the Palmer River gold field at Maytown. The line never returned a profit and was dismantled in 1961. It proved a disadvantage for the district, as an object lesson to the Government in spending taxpayers' funds on towns in decline.
Chapter Ten: Aerodrome: A step into the future. Three aerodromes were constructed in Cooktown between 1935 and 1942. The last one, which was built as a defence facility, is the present Cooktown aerodrome. The construction of the original aerodrome provided a first step in the move to counter Cooktown’s isolation, thereby attracting and keeping new residents.

Chapter Eleven: Council: The local authority's struggle for survival. The local authority was the focal point in the fight of the people of the Cooktown district to survive. The struggle was complicated by the complexity of relations between the various Councils representing the people of the area, and between them and Government departments.

Chapter Twelve: Electricity: Joining the twentieth century. Cooktown was provided with electricity only after the Second World War. Even then the town had a restricted supply until it was connected to the power grid in 1968. The long period without power aggravated the town’s decline.

Chapter Thirteen: Water: The lifeblood of survival. Although the Colonial Government commissioned a plan for a water supply for Cooktown in 1884, the town did not get a reliable reticulated supply until the late 1980s. Several interim schemes were failures, or have not lived up to expectations. As for electricity, the lack of this amenity caused major problems in attracting and keeping business and population.

Chapter Fourteen: Cooktown at War: Saved or sacrificed? War can both depress and aid a local economy. Disruptions to shipping stop both imports of supplies and export of goods. Rationing can seriously hamper production, and fund-raising drains capital from the area. Evacuation of civilians can also harm local businesses, which find
recovery difficult, even if the people later return. Against this is the promise of infrastructure through defence works. For Cooktown, the disadvantages well outweighed the advantages.