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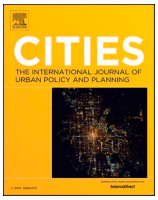

Doing research with busy people: Enacting rapid walking methodologies with teachers in a primary school☆

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ABSTRACT

Teachers are busy people. How do we, as researchers, address the challenges of doing research with busy people—especially if we wish to enact ethical, more radical futures? How do we adhere to the pressures of fast-paced urban life when research, especially interviews, takes away people's time? This paper presents a novel method for doing research with busy people, combining the 'walking interview' method with a 'free listing technique.' The interviews were carried out with teachers at a north Queensland primary school in a rapidly urbanising neighbourhood, and formed part of a larger project exploring the barriers and opportunities of incorporating community gardens (as important green spaces) into schools. The method itself yielded important findings and this paper is a reflective analysis of how simple factors such as the weather, noise, and interruptions shaped 20 min of a teacher's day. We extend these ideas to explore how conditioned and situational temporalities, along with more-than-human influences, affect the knowledge produced in rapid walking interviews. Keeping track of these affections can yield important data relevant to the project. The research will be invaluable for other researchers struggling with ethical and other issues shaping access to stakeholders in a diverse range of urban environments.

1. Introduction

To truly enact counter-cities we need to reconsider our role as researchers in busy, urban environments. In counter-cities alternative futures are envisioned and brought to life, and socio-cultural groups establish spaces infused with hope (Dulhunty, 2023). So, how do we design research to fit into this counter-city vision, or in with a busy urban lifestyle? How to ethically make sure we do not take too much time of busy, over-researched socio-cultural groups? Time commitments are an increasing barrier for people being willing, or able to, participate in research. There are some professional groups for whom gaining access is increasingly difficult: doctors, teachers, nurses, and lawyers are just a few (Clark, 2008). Fitting in work schedules is difficult, as everyone needs their downtime, and trying to do this within the working day is even more so. Nowhere is this more evident than for health researchers during the COVID-19 pandemic, where access to professionals unfolded in the context of extreme time pressure and duress (Vindrola-Padros et al., 2020).

Although they have long existed, rapid methodologies are on the rise (Luciani et al., 2021). Rapid methodologies enable researchers to work with a participant's time constraints, adapting to busy schedules in an ethically-informed way (Clark, 2008). For the research related to this paper, rapid methodologies proved an important way to reach teachers as potential implementors of school-based community gardens. It can be difficult to schedule semi-structured, sit-down interviews with teachers given their workload and time constraints. Moreover, some in the teaching field find value in using a collaborative approach when being involved in research (Arastoopour Irgens et al., 2023; Stewart, 2006). By actively engaging with their input and tailoring research efforts accordingly, the power dynamic between educators and researchers can be transformed, ultimately empowering teachers. The methodology outlined in this study exemplifies a joint effort to conduct research in an ethically sound manner, aligning with teachers' needs. So, to gain their views on the barriers to, and opportunities for, community gardens at

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their school, an innovative technique was required. The school Principal, a gatekeeper who ensures the teachers are safeguarded, suggested walking and talking with teachers who were eager to participate but lacked the time, further suggesting school lunch-time duty as a suitable time/space. This simple suggestion inspired the pragmatic solution of combining a free listing technique with walking interviews.

Although the aim of the walking interviews was to fit into schedules and be ethically responsible in terms of not taking up the teacher's energy and time, the findings yielded an abundant set of evidence regarding the inclusion of gardens in schools. The method itself, and particularly the context of the research, sparked further analysis of the more-than-human and temporal realms, and how they shaped teacher responses. Moreover, although the research unfolded as a conversation, it was also a kind of everyday 'witnessing' of how teachers engage in the ambulatory space of the school grounds (see Dewsbury, 2003). In what follows we explore how combining different interview styles, and everyday witnessing, yields a comprehensive interview method that is ethically informed (considering the needs of the participants) and finely attuned to context-specific temporalities and the more-than-human.

This paper introduces a novel approach that combines free listing and walking interviews, offering an effective method to enrich geographical and allied disciplines. In particular, for urban researchers investigating green spaces and their impact on community well-being, this paper underscores the importance of educational campuses as integral components of green infrastructure (cf. Walshe & Law, 2022). Our method is attentive to the time constraints of research subjects and can complement other research techniques to paint a realistic picture of participant's realities. As a rapid walking methodology, it also helps researchers understand how day-to-day ambulant spaces shape the gathering of knowledge. The next section explores free listing as a rapid methodology in more detail, before providing motivations behind walking interviews. The methodology section then outlines the steps conducted, and the benefits of combining the free listing and walking interviews. Finally, narrative-like reflections on the observations made during interviews are discussed, paying particular attention to how the temporalities of time and space, daily interruptions, and our need for comfort are reflected within the answers. Finally, we suggest why these considerations are significant for the future of research in a busy world. The type of narrative-like storytelling used throughout the discussion helps portray the scene that the listed answers and immersive interview experiences painted. Readers may find this reminiscent of Perec's work who also used lists to capture important details (Becker, 2001).

2. Free listing

Participating in someone else's research is rarely at the top of a to-do-list. Many scholars in the health discipline have recognised this (Vindrola-Padros et al., 2020), and transitioned to rapid methodologies to carry out research in a timely, unintrusive manner. Rapid methodologies are the chosen methodology for only a few research projects outside the health field. Of those that deploy this type of research approach, most fall within the health, sociology, or technologies research domains. Vindrola-Padros et al.'s (2020) critical literature review of rapid methodologies highlights multiple converging reasons for their emergence, including: 1) they are time reduced (which can reduce research costs); 2) there is a growing need for innovative research techniques and/or analysis methods; and 3) people tend to be more willing to participate in research that requires less time. Ultimately, rapid methodologies can be a pragmatic solution to barriers that researchers face from both internal and external sources.

Free listing is a rapid methodology used mostly in ethnographic research in the Health and Sociology fields. The aim is to produce a series of 'lists' that represent an individual's mental inventory associated with a specific topic (Bernard, 2016; Brewer, 2002; Goldner et al., 2021; Quinlan, 2018). Much of the literature is based on how to undertake free listing, which quite literally requires participants to list what comes to mind when they think of a particular topic. Goldner et al. (2021) outline how free listing questions are best framed. Often it is best to keep the question as direct and targeted as possible (e.g., "Can you list all the things that come to mind regarding X"); doing so ensures lists are thematically accurate. The sequence of listed answers highlights some form of mental association and provides insight into an individuals' thought pattern (Hough & Ferraris, 2010). Brewer (2002) suggests free listing is just a recall method that is useful in getting answers rapidly, and both Bernard (2016) and Brewer argue that free listing can be applied to large or small groups and still be tested for cultural salience (a quantitative method used to measure the importance of listed answers). Many researchers agree that free listing's simple, targeted approach makes it accessible for all research subjects.

Despite its value as a research technique, free listing has yet to be readily adopted in the Education and Geography disciplines. Bieling et al. (2014), Nekaris et al. (2018), and Goldner et al. (2021) are exceptions. Bieling et al. (2014) use free listing techniques to capture substantial amounts of data where categories are participant-led, rather than predefined by the researchers (see Quinlan, 2018). Although their study is health driven, their inclusion of recreational and environmental values enables environmentally oriented researchers to gain an appreciation of the technique. Nekaris et al. (2018) use free listing to rank and better understand the effectiveness of conservation education. They use the salience analysis method, a numerical way to analyse qualitative data, to understand the effectiveness of valuable knowledge retention (Nekaris et al., 2018). Goldner et al. (2021), compare the 'free drawing' with 'free listing' to determine what method best reveals student's cultural knowledge of food consumption habits. Their findings suggest that free listing is highly beneficial for understanding commonalities in adult groups (Schrauf & Sanchez, 2010), but drawings are more engaging for children (Goldner et al., 2021). They also acknowledge that free listed answers can be exhausted quickly when under pressure to think, and important categories are missed; answers can likewise lack detail in a free listing interview. This sets precedence to combine free listing with another compatible style that can help participants relax, while also inspiring them to tease out all trains of thought. This paper thus draws on research in Geography that uses walking interviews to address some of these limitations.

3. The value of walking interviews

Although geographers do not tend to use free listing, a walking interview is a more common human geography research technique where the researcher accompanies participants on a walk (Carpiano, 2009; Heijnen et al., 2021; Ingold, 2010; Kinney, 2017; Lynch & Mannion, 2016). Walking interviews differ methodologically and cross a spectrum of styles. There are go-alongs, where the researcher accompanies an interviewee on a familiar route. In the middle exists a 'walking with' style, where the participant leads the walk, perhaps drifting and with no certain agenda. At the other end are guided walks that are determined by the interviewer themselves (Evans & Jones, 2011). Each type is used for a different reason, but the type used for this paper sits in the middle of the spectrum as we neither fully accompanied participants nor determined the route ourselves (Heijnen et al., 2021; Langford & Crawford, 2022; Law, 2019; Lynch & Mannion, 2016, 2021; Mannion et al., 2013).

Walking interviews help the participant ease into the interview and attempt create a comfortable, ethical, less 'interrogative' environment (Langford & Crawford, 2022). This type of interview methodology can empower the participant, giving them more control of the situation (Thompson & Reynolds, 2019). Carpiano (2009) suggests walking interviews can be superior to sitting down when considering social and cultural paradigms or phenomena, as they broaden the scope of individual perceptions. Law (2019) argues mobility can spark new memory and insight, contributing different but complementary perspectives to sit-down interviews. Langford and Crawford (2022) simply use them to

ease participants into a natural conversational state (Langford & Crawford, 2022), which is regularly discussed by scholars enacting walking methodologies (Carpiano, 2009; Duedahl & Stilling Blichfeldt, 2020; Evans & Jones, 2011; Kinney, 2017; Kusenbach, 2003).

While this paper does not explicitly explore more-than-human knowledge co-production, we do wish to emphasise a synergistic relationship between the more-than-human realm and the temporalities of weather (de Vet & Head, 2020), time (Carstensen, 2006), and noise (Jafari et al., 2019) that emerged as themes *through walking*. Attuning to this more-than-human world, which acknowledges the interconnections and dependence between humans and non-human entities (Lynch & Mannion, 2021), requires an awareness of the affective nature the non-human world has in the co-construction of daily life/narratives (Evans & Jones, 2011; Lynch & Mannion, 2021). This awareness allows scholars to see the world differently and do research differently. In Dowling et al.'s (2017, p. 824) words, it allows us "to perform, to engage, to embody, to image and imagine, to witness, to sense, to analyse - across, through, with and as, more-than-humans." Scholars such as Thompson and Reynolds (2019) emphasise the value of physical, visual, and verbal interruptions, highlighting how a person's daily narrative takes shape through unique, spontaneous occurrences. Interruptions can be changes in the physical context: as the place of the interview changes during walking, for example, so too does the conversation. They argue these interruptions are data and context for meaning and understanding. Thompson and Reynolds (2019) show how aversion to movement resulted in an interview that felt consistently 'stagnant'; more spatially dynamic interviews reflected a variety of embodied feelings inspired by the atmosphere/landscape (chaotic, busy, calm). While their focus on interruptions is instructive, their interviews are still quite lengthy. In urban environments, walking interviews can be particularly useful in comprehending how individuals interact with their environment as they capture real-time experiences and reactions of participants engaging with the surroundings. This provides insights into the nuanced ways in which the urban setting shapes their behaviors, perceptions, and overall engagement (Thompson & Reynolds, 2019).

As this paper sits between and across two composite (yet integrative) disciplines, Education and Geography (Brock, 2016), it is essential to highlight that walking interviews are used in both fields – though the use varies. In the discipline of Education, walking is often accompanied by other research methods. Lynch and Mannion (2016) use walking interviews to observe the more-than-human realm and combine walking with a memory box activity. Their research deliberately evokes and examines more-than-human influences on memories, which they relate to the practice of outdoor learning. A memory box allowed them to sift through the material objects that the participants thought co-produced their learning. Heijnen et al. (2021) similarly combine walking interviews with photo-style essays which provide the researcher with a more sensually encompassing experience (Gerritsen, 2021; Middleton, 2010). Photo-style essays also allow the researcher, when not taking written notes on an interview, to recollect and analyse the narrative without relying solely on recall. What Heijnen et al. (2021), and Lynch and Mannion (2016) show through their combined methodologies is that although the walking interview has limitations (as all do), it is easily complemented.

Finally, some researchers use walking interviews for the comfort and power they provide participants. Langford and Crawford (2022) use a style of go-along interviews to encourage participants to find the confidence and power to lead the conversation. Their findings suggest that the culture of the school environment is highly influential on a teacher's wellbeing and can often determine how long a teacher will remain in their position. Langford and Crawford's motivation for the go-along method is different to others, as their use of the walking interview was not focused on the affective role the more-than-human plays. They merely used the go-along as an enactment of ethical research that shifted the power dynamic within their interviews (Heijnen et al., 2021; Lynch & Mannion, 2016; Mannion et al., 2013).

To summarise, combining free listing and walking methodologies results in a rapid interview with many benefits. It enables understanding of cultural phenomena, identifies how knowledge is socially and contextually produced, and supplies a snapshot of routines and practices (Kinney, 2017; Thompson & Reynolds, 2019). To address the potential limitations of both walking interviews and free listing, the interviews in this paper are a combination of the best parts of both. In doing so this paper contributes new insights to the value of walking interviews.

4. Addressing each other's limitations

Walking interviews are often long winded and can take up a large amount of time. Though this is not always the case, there is a tendency to draw out this style of interview as we attempt to immerse ourselves in the place. On the other hand, free listing interviews are rapid and can miss meaningful knowledge and experience. In combining the two, an interview technique that is both rapid (therefore accessible) and contextually rich is created. The first major limitation of walking interviews is the inability to take notes. This can be because 1) taking notes while walking is difficult, and 2) needing to engage with the interview mentally means note-taking takes second place (Heijnen et al., 2021). As free listing requires little engagement or prompting, the researcher is given the mental room to take notes of their surroundings. Being able to take notes or tally the interruptions increases the likelihood the researcher will remember important spatial influences on the participant's verbal dialogue (Evans & Jones, 2011; Thompson & Reynolds, 2019). It also means that things such as weather, which are important more-than-human influences (Ingold, 2010), can be recorded in real-time as well.

Free listing does not often consider the influence that the spatial environment has on participants' mental inventories. As with other free listing interviews, finding the salience (importance) of listed answers is key (Bieling et al., 2014), as it highlights the cognitive importance of answers (Quinlan, 2018). However, as outlined by Brewer (2002), lists are often exhausted before the participant has truly recalled their entire inventory. By combining with a walking interview, it becomes evident how easily lists can be influenced (either exhausted or inspired), by the temporalities of our spatial experience.

5. Research context and location

Our research is based at Tropical North State School (TNSS), an urban/suburban primary school in Gimuy/Cairns, within Australia's Far North wet tropics. It serves as the focal point for a larger project studying hands-on, inquiry-based education, and school gardens in food education. Despite Gimuy's relatively lush environment compared to other Australian cities like Naarm/Melbourne or Meanjin/Brisbane, scholars Bohnet and Pert (2010) predict diminishing greenspaces due to increasing urbanisation and population growth. TNSS stands out with nearly 1000 students from Preparatory to Year 6, making it a prominent school in the region and sits in a part of the city undergoing rapid urbanisation. The campus comprises of ovals, interconnected buildings, community gardens, and ample trees (see Fig. 1, discussed in more detail below).

The two school gardens serve primarily academic, behaviour management, and social purposes, including a lunchtime gardening club. While the broader community members (parents, caregivers, neighbours of the school grounds) are not usually actively involved in these gardens, they have the opportunity to volunteer and contribute to maintenance (such as weeding, planting, and watering). The walking interviews occurred in pre-selected areas within the school grounds, with questions aimed at gathering teachers' perspectives on these school gardening initiatives. This paper is a product of our pragmatic research approach.

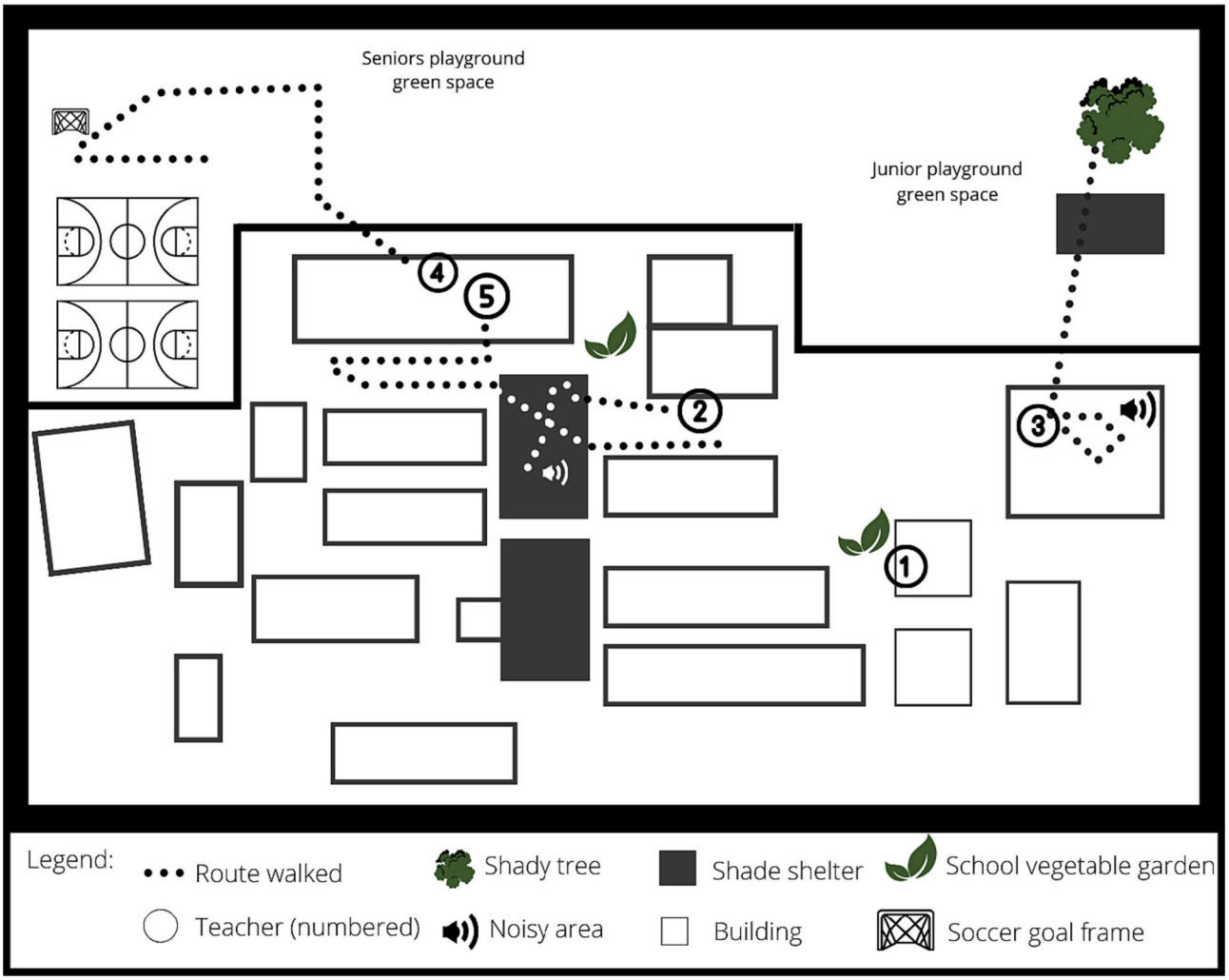

Fig. 1. Basic depiction of the school grounds, location of the gardens, and routes of interview walking paths.

6. Methodology

As mentioned above, the walking interview during playground duty was suggested by the school as a viable way to conduct interviews. After ethical clearance was granted from the universities *Human Research Ethics Committee* (#H8386) the school was approached. The walking interview method was well suited to teachers who would be performing these duties and walking these routes whether the researcher was there or not; in this sense they supplied insight into day-to-day routines and practices (Kinney, 2017; Kusenbach, 2003). The lead researcher accompanied five different teachers who were eager to participate yet lacked time for the original proposal on their lunch time duties. A microphone (a ZOOM recorder) was clipped to the teacher that also picked up background noise, allowing for the lead researcher to focus on what was going on around them rather than real-time transcription. The following four questions were asked:

1) Can you list the benefits of gardens in schools?
2) Can you list the barriers for gardens in schools?
3) Can you list the benefits of inquiry-led education? and,
4) Can you list the barriers of inquiry-led education?

These questions, while relatively 'simple' in construction, probed the benefits and barriers of gardens as well as types of learning used in the classroom (inquiry-led education is a student-centred and hands-on pedagogical approach useful for engaging students in real-world learning activities (Amels et al., 2019)). The answers supplemented data from twelve semi-structured sit-down interviews that were conducted with teachers, parents, administrators, and school staff. Moreover, because free listing requires little engagement from the researcher, and the lists were recorded, the lead researcher could take observational notes. This provided a sense of comfort that no detail would go unnoticed. The rapid interview opens the research up to those with limited time, and although some researchers suggest a minimum of 30 interviews (Bernard, 2016), we agree that a minimum of 5 can still create meaningful data (Schrauf & Sanchez, 2010).

An important part of free listing analysis is measuring salience – or saturation. Salience analysis measures the saturation of data and ranks answers in terms of importance, and allows scholars to gain an understanding of whether something has a consensus within cultural, social, or professional groups (Quinlan, 2018). Because individual lists are subject to length and individual answer variations, the salience analysis method helps account for both the frequency and order of mention. This paper uses Quinlan's (2018) salience analysis calculation method. The salience (S) was calculated by ranking the answers inversely and then dividing each rank by the total number of given answers for that specific interview. To find the composite salience value, or the mean salience for all interviews, the scores for each interview are compiled and then divided by the number of informants – which was 5 in this case. Although there are more comprehensive and rigorous equations to find salience values, this method proves reliable and easy to perform.

The following section presents the data collected and reflects on

moments in the interviews that were clearly influenced by either the temporalities of the school space, or the more-than-human realm (specifically the weather). The results are a case study-like example that could inform future researchers on how to interpret the data from combining free listing and walking interviews. Thus, while a results section is unusual in a methods paper, we believe it highlights the power of rapidly and haptically collecting data with busy people. The following stories and discussions contain reflections from teachers who are referred to in a gender-neutral manner. Not only is this for protecting identity, but an ethical decision made by the authors (after discussing with the participants) to contribute to the growing counterculture that combats existing gender bias in education (Frawley, 2005).

7. The conditioning of time and space

The interview begins as we walk out of the teacher's classroom. They have spent the beginning of the lunch break supervising their students while they complete their unfinished work. The teacher grabs a hat from their bag and we walk downstairs. We head straight for the school oval and are running late for lunch duty. It is an overcast day, but humidity levels are above 70 % and we joke about the children looking sweaty. While listing the benefits of gardens in schools we are interrupted three times. Children are misbehaving on the play equipment and, after calling them off, the teacher returns to our interview to list the behavioural benefits gardens have. The participant suggests that gardens encourage children to relax, they are not confined to four walls all day. Then when asked about the barriers to gardens in schools, the teacher quickly looks at their half-eaten apple, holds it up and proclaims, "we're already so time poor."

We are interrupted (again). A child is asking the teacher for a pen. After instructing the child to bring the pen back the teacher begins to suggest that all their work hours actually occur outside of work. When they are in school, they are caring for these children, so anything added to their workload needs to be an extra-curricular activity. Following this, the teacher then starts to list other barriers. We begin walking over to more children misbehaving, this time they are climbing up the metal soccer goal frame. The teacher suggests, after crossing the length of the oval, that staff ratios are a barrier – there are just too many children for the number of staff the school has. The teacher is relaxed the whole time, strolling around the school oval, and never looking frantically around. The school bell rings, and the interview wraps up.

This section begins by exploring how time, the physical layout of the school, noise, interruptions, and weather all shaped the way interviews unfolded. Although the research did not set out to explore temporalities behind teacher responses, it became clear as the research progressed that the influence of both conditioned and situational temporalities, interruptions, and comfort was profound in not only the answers provided – but the design of the study. The above narrative reflects on time, as it was the initial driving factor for combining the interview styles, but it also reflects on how the affective space of the school grounds shaped teacher responses.

Time is both a social construct embodied by teachers and a departure point for the use of the school space. Not only was it mentioned in most of the interviews (80 %) but often listed first, meaning it was the most salient (weighted) answer (n = 0.654). Time is a human-perceived organisational system that, although subject to cultural variations, dictates much of our lives (Billmayer, 2019; Carstensen, 2006). School is one of the first places where we are disciplined by the rigid structure of time, and those who operate within this space are manifestly shaped by it. The use of the school space also reflects time, as there is a distinct structure of when and why particular areas of the school are used (Billmayer, 2019). Pathways are ambulatory, transitionary spaces, for example, and the ovals and greenspaces are associated with 'free time' for lunch, sport, or play. Classrooms are sometimes designed for the teacher to command respect and authority, with the 'desk' positioned as a longstanding material representation of that power (Billmayer, 2019; McGregor, 2004). While many may agree that schools are not necessarily the same rigid spaces they once were, the temporality of time still dictates the design and use of the space. Schools, and the bodies within them, are a modern-day by-product of the complicated time/space disciplining that has long resonated throughout western society (Dorsch, 2013).

Walking with Teacher 4 offers insights into the synergistic nature of time and space on school grounds. Lunchtime for teachers at TNSS is either spent in the lunchroom or on ground duty – a task rotated among staff. As Teacher 4 began to eat their apple on the school oval, they quickly listed the first barrier to school gardens as time: "we're already so time-poor." After an interruption, they circle back to the interview with "I'm not getting paid for this right now." On the outside space of the school grounds, and in contrast to the classroom, children have more autonomy and control and are on their 'free time', they are encouraged to be active yet there is disapproval if they become wild (Dyment et al., 2009). Teachers, although they know the value of unstructured play and less discipline during breaks, need respite from the classroom too. These musings remind us that although 'time' might have been the reason for free listing, there is a clear correlation between limited free time, the dynamics of outdoor spaces, the use of school grounds, and interview answers. Indeed, many researchers argue time is a significant barrier to successfully implementing and maintaining community gardens in schools (Blair, 2009; Bucher, 2017). Gardens inherently operate on their own time – you cannot rush plants to grow. This makes us wonder whether they fit in with the rapid environment of the school. Moreover, the teacher tends to hold less authority 'outside' as they are not traditionally considered 'learning spaces' (Reinus et al., 2021). If time spent using outside spaces on school grounds was viewed for its benefits and not just the students, but also teachers, then perhaps time would not be seen as a barrier.

8. Situated temporalities of noise and space

We are in the under covered lunch area of the junior school building; the rows of metal tables are filling up with children. We begin the interview as the children start to open their lunch boxes. The beginning of Teacher 3's interview is relatively uninterrupted, though they are constantly scanning the surrounds to ensure kids remain seated during designated eating time. The children gleefully chatter away. The noise is shrill and echoes throughout the area. As the volume rises it is reminiscent of cicadas in the peak of Australia's summer. We raise our voices as there is a constant hum to compete with. The teacher watches the children while attributing the socialness of gardens as a benefit for students. As children begin finishing their lunches, however, their arms start to raise in the air to signal that they are done. Thus begins the interruptions. Seven children attempt to approach the teacher to show their lunch is finished. The teacher becomes distracted, turning in circles and pacing back and forth, having to signal to each individual they are allowed to go and play. Amid this, the teacher lists a barrier to gardens as being the staff to student ratio in state schools. This feels inspired by the sheer chaos that has just unfolded.

The teacher signals it is time to go to the oval to finish playground duties. It is a particularly sunny day, 31 °C and there is little shade outside. The teacher wears a wide brim hat and instantly relaxes into a stroll. Although children are still shouting, and louder now, something seems different. As we are walking outside, surrounded by green grass, the teacher circles back and suggests that being outside is emotionally beneficial for children. On rounding out the answers, the teacher then walks past the metal shade shelter where children are playing and stands underneath the shade of a fig tree—a common tree in tropical environments and a feature of the school oval. Our interview finishes and although the noises around us are still shrill, chaotic, and ad-hoc, the teacher is relaxed enjoying the shady environment.

Noise heavily influences mental clarity and focus. When out on the school oval Teachers 3 and 4 seemed less distracted, more attentive, and

tended to ease into a relaxed rhythm. They were circling back on the benefits of being outdoors and trying to steer the 'listing' into a conversation style. In contrast, the disposition of the teachers when in the undercover areas was much more rigid. Teachers were distracted and had trouble focusing, with Teacher 2 stating "Wow, this is hard" as the volume rose around us. Teacher 1 was the calmest and the only one with minimal background noise to compete with. To reconfirm whether the lead authors memory of noise was correct, the audio files were placed in a sound editing software (Garageband) and considered in a visual way. Note the noise difference (which is basically all background noise) in the wavelengths in Fig. 2, comparing Teacher 3 (the most distracted) to Teacher 1 (the least).

By participating in teacher's everyday spaces and duties, the free listing interviews occurred amid noise that many scholars filter out, fail to address, or simply avoid talking about (Hall et al., 2008). In free listing methodologies with teachers (and others) this oversight requires addressing, since noise (as a situated temporality or spatial experience) directly influences participant's lists. Exposure to noise, and/or increased volumes, can significantly reduce cognitive performance and the ability to concentrate (Jafari et al., 2019). Teacher 1, who had complete silence and no interruptions for their interview, unsurprisingly had the longest list. Their list also seemed to be less influenced by their physical surroundings. Thus, perhaps the influence of noise ought to be more deeply considered when performing free listing methodologies. Without considering the exhaustive influence such experiences might have, it cannot conclusively be said that the mental inventories are representative of what that individual at that time knows.

We are influenced by the temporalities of space (Edensor, 2010) and noise is a profound part of spatial experience. Due to its synaesthetic configuration and ability to evoke memory, noise is recognised as an encompassing truth; noise becomes embedded in the body (Flint, 2021). This research was undoubtedly influenced by the chaotic, shrill noise of children, and this in itself can be recognised as powerful data. As the outside world becomes more chaotic, so too does the internal state. Although noise levels remained high, once surrounded by green spaces rather than concrete floors and metal tables, teachers showed signs of calm. This suggests noise is a situational temporality that directly influences our hourly well-being throughout the day-to-day, and aligns with the research arguing stress levels related to noise are instantaneous but can also be de-escalated instantly as well (Tao et al., 2020). Moreover, research shows that connection to greenspace and outdoor environments increases attention (Tennessen & Cimprich, 1995), and decreases stress levels over time (Ohly et al., 2016). Thus, despite all the barriers, community gardens can be calming green spaces that contribute to a more focused, peaceful atmosphere. In the next section, the physical spaces of the school campus are explored as shaping interview narratives.

9. Interruptions are productive

Power is an important part of routines and is found within daily disruptions or interruptions (Thompson & Reynolds, 2019). It was obvious that, being in a busy school ground during lunch time, there would be ample interruptions while the teachers attempted to go about their jobs. For this reason, the lead researcher observed and recorded instances that could be seen to 'interrupt' the flow of the interview. The instances observed were a culmination of more-than-human (weather, noise, etc.), and human interruptions. Below we reflect on the interruptions as valuable points of data, before exploring weather as a more-than-human influence on our need, and quest, for physical comfort.

Interviews occurred in various locations across the school grounds where teachers were doing lunchtime duty. Fig. 1 above shows the school grounds and the routes walked for each interview. The physical location of the interviews tended to also shape the length of the free lists. Teacher 1, who was stationary, provided the most comprehensive list. Teacher 5, who was walking mostly along pathways, gave the shortest list. Teacher 5's interview also had a steady stream of interruptions, which reflected the number of people who we passed. Observing these interruptions shows how knowledge can be co-constructed by the spontaneously changing narratives we have to both people and place (Duedahl & Stilling Blichfeldt, 2020; Thompson & Reynolds, 2019). While place relationships are rarely considered in free listing literature, when paid attention to they yield surprising insights. In this research they provide an example of how mental inventories are affected by location.

While many interruptions were short, some took extended amounts of time and required focus/attention from the teacher. Mostly these occurred in the undercover area where noise resonates the most; or on the pathways, which are transitionary spaces where brief interactions are expected to occur. The interview with the least number of interruptions was with Teacher 1, as seen in Fig. 3 where they chose to sit down as the children played. This difference highlights that when given more space to think, or a quieter environment, teachers can give their thoughts more space and stay on topic. While some may view fewer answers from other participants as a hindrance or limitation to the interview, the prevalence of interruptions emphasised the power of ever-changing daily narratives on concentration (Thompson & Reynolds, 2019).

The interviews were interrupted on average 2.8 times and each time concentration was broken a new narrative was introduced. Indeed, Thompson and Reynolds (2019) suggest that bearing witness to these interruptions offers insight into how daily narratives are always shifting and colliding. In this research, witnessing interruptions for just a fleeting moment of a teacher's day highlights the pressure teachers are constantly under and why staff ratios may have been included as a listed answer.

10. A quest for comfort – thermal regulation in the tropics

There is silent anticipation hanging in the air. The lunch bell finally rings. A repetitive whooping. Doors fly open and aircon spills out onto the pathways - a welcome contrast to the pressing heat. Children rush to their bags and the noise begins to rise. A chorus of shrill voices and

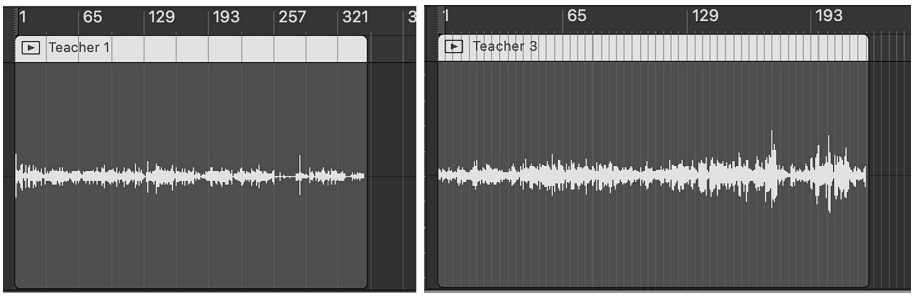

Fig. 2. Comparison of wavelengths between Teacher 1 (left) and Teacher 3 (right).

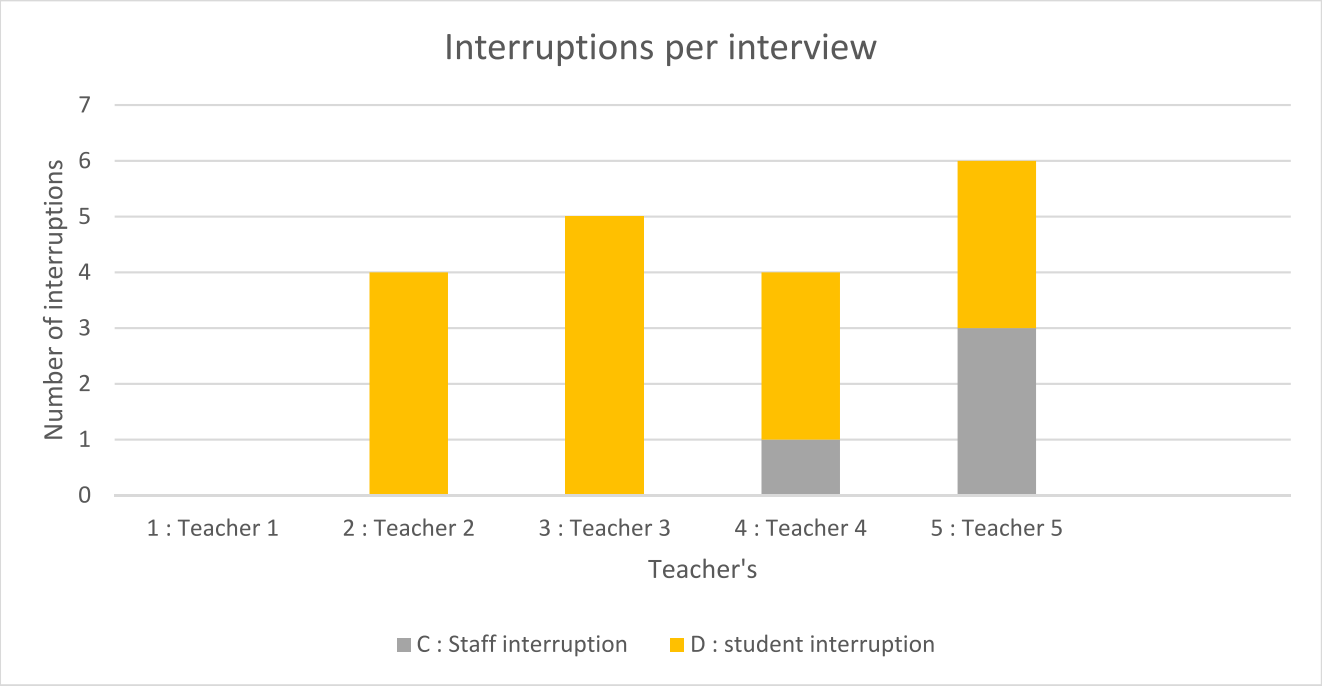

Fig. 3. Interruptions in each interview.

drumming chatter sweeps and echoes throughout the shed-like undercover areas. It bounces from concrete floor to metal ceiling and back. The children sit themselves down, crammed under a shade shelter like sardines in a can. We're all avoiding the harsh tropical sun. The air is hot and heavy, clinging to small bodies layered in uniformed polyester. It is 31 °C with a humidity level of 80 %. We are all aware 'build-up' [a rapid increase of humidity and heat before the monsoonal shift] season is here. The end of the year is swiftly approaching.

There is a buzzing lunch time excitement. Walking towards an undercover area where the children are sitting to eat their lunch, Teacher 2 and I begin our interview: "Can you list the benefits of gardens in schools?" As quickly as we start, we are interrupted. A young student is crying. Their mother forgot to buy them an ice cream from the tuckshop. "Perhaps tomorrow" says the teacher, patting the small child on the back. Damage control for wild emotions. All part of the teacher's job. We circle, raising our voices to compete against the children. Distracted by the chaos around us and trying to keep an eye on the 360-degree raucous scene, the interviewee slips in and out of focus.

Just as the sweat forming on their brow begins to bead down, they state "the weather is a barrier to gardens." The list of answers begins to slow. The hot air makes everything harder, hazier. So, we move on. "Can you list to me the benefits and barriers to experience-centred, or inquiry-based, education?" Another interruption. This time it is a green ant inside a glue stick container. Its captor, a young child, is determined to keep it alive. A strange occurrence. Though children can often be surprising. The teacher laughs. Lizards were the craze last year. We begin to talk again as the teacher peers with a glazed expression at the concrete ground, their answer is guided by the surroundings. "Children need concrete learning, it's concrete, in their hands." They snap back to attention as the children begin leaving the sheltered area "Hats must be on" they yell, forgoing the answer they were forming. Inspired by the behaviour of the children, the teacher lists behaviour, and staff ratios as barriers. A young student brings their lunch container up to us, the teacher attempts to shut it and fails. "Just keep it in the fridge." Before we can refocus another student is making sure the teacher emails their parents, reminding them that they've been good recently. With pride across their face, they scurry off with reassurance that an email has been sent. The interview ends. Their mental inventory of benefits and barriers is exhausted, and from their lunchtime duties, they appear to be as well.

Humans, whether we accept it or not, are creatures of comfort and often seek it out (Sleegers & Proulx, 2015). One aspect of life we struggle to find comfort in is the weather. Weather shapes our daily lived experiences (Ingold, 2010), and nowhere is this more prevalent than in the build-up to the rainy season in northern Queensland. The walking method places researchers in the same climatic conditions as the participants daily realities, helping us to identify and understand the nuances behind their reflections and actions. Teacher 2 listed weather as a barrier, reflecting on their discomfort with the pressing heat and humidity (above 80 % humidity) – yet did not mention the weather in their longer supplementary sit-down interview when they opted for it later. Teacher 3 sought shade from a tree, engaging with the natural landscape to ease discomfort. Once in the shade, Teacher 3 reflected further on the benefits of being outdoors, eagerly trying to engage in a comfortable conversive style. Teacher 1 simply took a seat just inside the door of the classroom, in quieter area with air conditioning where they could still see the children playing (something we have been assured the teacher does regularly to cope with the heat of the tropics). Ironically, in seeking comfort of the air-conditioning Teacher 1 is hindering their adaptability to such thermal conditions (Wang et al., 2020). This comfort is yet another reason behind Teacher 1's list was longer than all the other participants and why, when in a cooler environment, Teacher 3 began to feel more inclined to retrace our (figurative) steps and answer previous questions.

If we had just considered the free listed answers as a normal free listing survey would do, weather would be a negligible response – and yet, it had an underlying influence over all participants' answers and actions. While weather was very evidently embodied in every interview, it has one of the lowest salience scores (n = 0.2). In witnessing their quest for comfort, we were able to reflect on the importance that extreme weather and thermal conditions pertain regarding outdoor activities in the tropics (Schweiker et al., 2018). Moreover, without experiencing it alongside them, it is hard to gauge just how scattering and draining the humidity of tropical North Queensland can be. It is for reasons such as this that combining the free listing and walking methodology yielded unexpected benefits.

Some scholars performing walking methodologies consider the

weather as a barrier to interviews (Carpiano, 2009; Kinney, 2017). However, Ingold (2010), Lynch and Mannion (2016), and Barry (2019), recognise its intrinsic more-than-human value; we are entangled with the weather and it is the underlying factor in everything we do. In the context of the broader research, the weather poses a massive barrier to running successful community gardens. With alternating wet and dry tropical conditions, coupled with extreme temperatures and humidity for half of the year, using gardens as outdoor classrooms is profoundly challenging and not in the least bit comforting. Considering this barrier in future research, regardless of the mental comfort greenspaces provide, is paramount.

11. Conclusion

Walking interviews are powerful tools for examining the intricate occurrences of human interactions in their social and environmental context. When combined with other research methodologies, such as free listing, they provide deep insight and work within the time constraints of busy communities. This unique methodology contributes to the discourse of counter-cities by challenging traditional research methods and providing a deeper understanding of the often overlooked facets of urban life. In the city of Gimuy (Cairns), it provided a new way to think about the importance of green spaces in a rapidly urbanising/expanding neighbourhood and city. The research elucidates the value of having green spaces (such as school gardens and trees) in suburban/urban environments, notably by improving the well-being of those who engage in them.

Combining free listing and walking interview techniques enables access to the lived reality of workplaces. Workplaces, for the most part, are often inaccessible spaces for researchers and are thus an underrepresented social and cultural domain. This is especially true in primary schools, where there is a pressing need for immediate attention to children. This dynamic leads to a hectic atmosphere for teachers, especially those engaged with young children. This rapid method provided important access to busy teachers in their workplace–a vital cultural and social realm for understanding the realities behind school-based community gardens that would otherwise remain out of reach. Furthermore, the methodology developed here helps address the challenges of gaining entry to workplaces and environments where children are present. Our methodology thus enabled new ways to engage with workplaces and children. Our analysis, although using a small sample, yields meaningful data.

In trialling free listed, walking interviews in a Far North Queensland primary school, we found that the situated and conditioned temporalities, alongside more-than-human elements such as the weather, directly influenced participant's responses. Researchers using walking interviews often consider observations of the more-than-human realm an important dimension of the interview. We argue that combining these methods promotes the witnessing of the more-than-human impact on verbal dialogue as well as culturally salient domains, or rather, the construction of knowledge. This is valuable in understanding how unconscious most of our decisions and understandings tend to be. Using a free listing style, which requires little engagement while the interviewee is speaking, allows the researcher to split their focus and observe the participant within their surroundings, while ensuring they can accurately recall the interview by taking notes. We also note that this methodology resulted in a sense of comfort for the lead researcher who faced difficulties in taking notes while on the move. The free listing technique and recording provided relief by eliminating the need for detailed handwritten field notes. These simple, yet creative, implementations in the interview process allowed the researcher to focus on noting instances of interruption or observing the teachers more closely.

Geographers can benefit significantly from experimenting with rapid methodologies like free listing. These methods not only complement conventional research and interview approaches but also open up new avenues for research. In the fast-paced and occasionally chaotic urban environment, particularly within urban schools with high student populations, the rapid walking interview technique allows researchers to explore the city's ambulatory spaces and the individuals operating within them from a unique perspective. Researchers face various challenges – including time constraints – but by accommodating participants' schedules as we did in our research, we can continue ethically uncover rich personal narratives, without disrupting daily lives.

CRediT authorship contribution statement

Rachael Walshe: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Resources, Software, Validation, Visualization, Writing – original draft, Writing – review & editing. **L. Law:** Supervision, Writing – review & editing.

Declaration of competing interest

No author in this paper has any conflicting interests relating to the work within this paper.

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Data availability

The data that has been used is confidential.

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