

**A curiosity driven approach to air-conditioning on the Arabian Peninsula:
comparing the accounts of three resident groups in Qatar**

Abstract

The assumption that people should be surrounded by air that has been cooled to meet their presumed needs encourages an undifferentiated and disengaged relationship between local climate and everyday life. It is also leading to huge, and growing, levels of energy consumption. One important research challenge is therefore to identify how existing variation in climate adaptation cultures might be harnessed in fighting the further spread of this assumption. Examining how specific social groups see their relationship with air-conditioning could be part of this and Doha, the capital of Qatar, provides an excellent place in which to explore the potential of such a strategy. Air-conditioning was eagerly adopted by Qataris after the nationalisation of their oil and gas reserves in the 1970s soon made them some of the wealthiest people in the world. In recent years, however, officials have started to consider the social and environmental benefits of other ways of living with the desert heat. This paper describes a project that sought to provide them with an engaging body of evidence by comparing how older Qatari nationals, expatriate professionals, and younger Qatari nationals spoke of their relationship with air-conditioning. In so doing, it reflects on different ways of defining the purpose of empirical research in human geography to highlight the continued value of being curious about the hitherto unknown subjectivities that await us in the field. In this case, this was despite the prevalence of conceptually informed analysis in cultural studies of air-conditioning and the critical commentator position in relevant accounts of urban change in the region.

Keywords: Qatar, air-conditioning, interviews, everyday life, fieldwork, curiosity, academic critique, social theory

Highlights

- Argues for studies of perceived culture in air-conditioning research
- Uses everyday life to question urban change on the Arabian Peninsula
- Describes an interview project with three groups of Doha residents
- Compares how they spoke of their relationship with air-conditioning
- Underscores the value of fieldwork curiosity in human geography

Introduction

In Doha, the capital of Qatar, everyday strategies for dealing with summer temperatures that routinely exceed 40°C are very different from what they once were. After the gradual nationalisation of the country's sizeable hydrocarbon reserves in the 1970's, Qataris soon became some of the wealthiest people in the world. As a result, the answer to the question of how to live with the local heat was increasingly understood as obvious: with cost of relatively little concern, air-conditioning became seen as the only real choice for keeping desert inhabitants who aspired to belong to an evidently modern society sufficiently cool. So, whilst less sophisticated ways of coping with the climate are within living memory for some, many Qataris now live in air-conditioned villas and shuttle between air-conditioned malls, mosques, offices and other indoor spaces in cars that are themselves fully air-conditioned. Most of those currently living in Doha are also immigrants since a further feature of the country's oil and gas exploitation has been a huge influx of people to help with the various public initiatives and private enterprises set in motion by a broader attempt to make good with this newly acquired affluence. These new arrivals will have brought with them a diversity of past experiences of living with other climates before often

confronting a radically different situation in Qatar. Both of these features suggested that Doha residents might be quite articulate on the matter of air-conditioning in their everyday lives: much has changed in terms of living with the local heat and many are quite new to the strategies that currently prevail.

This paper reports on a project that explored this suggestion. Its aim was to take an open-ended approach to how three groups of residents talked about this topic and provide evidence for local decision makers hoping to encourage less energy consumption. Along the way, it makes a series of points to various fields of relevant research, but that was the essential objective. The account begins with a discussion of current air-conditioning research where I make the case for a theoretically agnostic engagement with how those living in particular places see their relationship with this technology in comparative perspective. Then it turns to relevant work on the Arabian Peninsula where I argue for an examination of how everyday life and local climate intersect on the ground as a complement to the more removed form of scholarly critique that has tended to predominate in this literature. With this context in place, the present study is introduced. Taking place between 2014 and 2017, that involved exploratory interviews with three resident groups in Doha, the home to over half of Qatar's population of roughly three million people: older Qatari nationals, professional expatriate workers, and younger Qatari nationals. Reflecting on the research strategy involved, a broader aim is to underscore the continued value of a style of human geography research that begins with a sense of curiosity about those found in relevant field sites as much as an interest in the most promising social theories or beliefs about the power of outsider critique. This is therefore partly a paper about climate adaptation in Qatar and how its future is influenced. But it is also a paper about how we define our purpose as researchers and how we act as a consequence.

Air-conditioning research: from concepts to perceived cultures

It is increasingly acknowledged that future societies will need to live with climates that are both hotter and more changeable. In view of this prospect, it is ironic that current societies are often assumed to be either unable or disinclined

to adapt to the environmental conditions presented by the local climates with which they already live. Such assumptions act to undermine the various adaptation skills that populations may yet be willing to display at a point in human history when retaining them may be more important than ever.

Part of the reason why we find ourselves in this position relates to the appeal of setting and adhering to 'standards' of ambient temperature as part of an attempt to define and provide 'comfortable' conditions for everyone (van Hoof, 2004). Such standards appeal to architects and building managers because second guessing at the combinations of personal response and physical sensibility that might be encouraged by less prescribed forms of ambient temperature control can seem comparatively risky (see, for example, Cass and Shove, 2018). But one implication is that an increasingly widespread attempt to meet such 'thermal comfort' standards may eventually serve as a self-fulfilling prophecy as people start to expect conditions they do not yet always want or need as an indirect effect of an understandable attempt to cater to everyone. This is worrying because of the vicious circle of increasing energy consumption that follows - a process so significant that *The Economist* (2018) recently argued that a fuller focus on air-conditioning, as a relatively 'overlooked' industry, could prove 'the single most effective way of reducing greenhouse gas emissions'.

In response, a number of researchers have undertaken studies that underline how those currently found in different parts of the world continue to possess varied and variable ideas about the ambient temperatures that are most attractive to them, along with a diversity of strategies for living with their local climates. Championing the idea of an 'adaptive thermal standard' (Brager and de Dear, 2003) in which indoor temperatures vary across space or 'drift' over time (Clear et al., 2014), this work has sought to revise international building codes so that architects and engineers are more inclined to embrace, rather than ignore, the persistent variations revealed by their studies. However, a more rounded sense of the subjectivities linked to how different cultural groups see their relationship with particular heating and cooling practices has not often been sought after in this work so far. This is largely because the most popular way of

studying the experience of air-conditioning has involved the statistical analysis of survey results and, though such methods could feasibly explore place-specific cultural sensibilities, traditionally they have not.

A series of more culturally focused studies have since taken us closer to this topic. Shove and colleagues, in particular, have argued that researchers could usefully explore the rise and fall of particular strategies for keeping people sufficiently warm or cool in identified places (see, for example, Shove 2003, Chappells and Shove, 2005, Shove et al., 2008). By exploring the combinations of contextual factors at play, their contention is that we are better placed to see, and potentially steer, the cultural processes involved (see also Ackerman, 2002, and Cooper, 2002, for two detailed American cases that reveal the potential of cultural histories of air-conditioning or, more recently, Chang, 2016, for an examination of its spread through 'the tropics'). Yet, within this body of work too, the various cultural groups in question are not often asked to reflect on the place specific nature of their personal heating and cooling practices (Hitchings et al., 2015). In some respects, this is surprising when part of the whole point of this work is to understand, and positively engage with, geographical variation.

One reason may be that explicit discussion of the potentially distinct adaptation cultures found in particular places can stray uncomfortably close to the suggestion that some are doing things wrong and others are doing them right. In other words, the potential for implied judgment about whether the thermal 'ways of life' found in different parts of the world are modern, backward, environmental or self-indulgent makes them immediately unappealing topics. This would fit with one of the most heated academic debates about cultural variation in societal cooling, namely that triggered by Prins' (1992) provocative argument that Americans should face up to their self-indulgent air-conditioning dependence. Published in a journal that more often trades in the comparatively dispassionate evaluation of results, he argued that we should not shy away from the 'cultural origins' of current use, connecting its spread across the United States to issues that ranged from racialised ideas of physical capability to new anxieties about human embodiment as evidenced through a personal aversion to

sweat (for more recent conceptual work on sweat and sustainability see Waite, 2013 and Waite and Stanes, 2015). His argument was contentious partly because it took 'thermal comfort' out of the comparatively depoliticised register within which others had previously kept it. Some were outraged about how readily he laid blame at the door of a single nation (Cohen, 1992). Others were concerned about the strength of his evidence base (Rose, 1992). Yet others were keen to highlight the complexities of comfort science (de Dear, 1992). Irrespective of the truth of his claims, the debate that followed suggested the potential of a more culturally focused framing to engage audiences and encourage debate.

Though this exchange indicates how some (quite understandably) do not like their climate adaptation styles being challenged by outsiders (particularly those from milder climes with less apparent 'need' for cooling), others suggest those who live with a lot of air-conditioning may not always respond so defensively. On asking young Singaporeans about growing up in the 'air-conditioned nation' they have rather shown themselves to be resigned about the cultural disappearance of heat adaptation (Hitchings and Lee, 2008). Though not drawing on detailed fieldwork, Arsenault (1984) points to a diversity of local reactions to how air-conditioning spelled the end of the 'long hot summer' in the American South: some marveled at how they had lived without it before; others saw it as an alien invention that had come to erode their culture. In Manila, Sahakien (2014) has also highlighted the appeal of a certain kind of 'thermal modernity' (Sahakien 2014) in which Philippino returnees, in particular, are drawn to the cultural associations of air-conditioning (see also Chang and Winter, 2015, on the link to presumed societal 'progress'). Though Christmas in the Phillipines is hot, global representations of how it is celebrated have encouraged some Philippinos to turn down the temperature so that they can wear seasonal woolen jumpers. A similar story seems to hold true in India where no longer sweating has become a marker of middle-class distinction (Wilhite, 2008). By contrast, inhabitants of the Australian northern territories have been seen to take pride in how their continued heat 'tolerance' allows them to resist the temptations of indoor air-conditioning and persist with a more culturally valued outdoor lifestyle (de Vet, 2017). This work encourages us, as researchers, to recognise the full range of

cultural registers in which respondents might place air-conditioning since sometimes the issue may not be about 'comfort' at all (Hitchings et al., 2014).

How those living in different places might compare their personal cooling practices has rarely been the focus of this work. However, some evidence can be found in a small number of studies with an interest in migrants. Healy and Webster-Mannison (2012), for example, found Australian office workers to be well aware of how they had different tolerances by virtue of the varied countries from which they came. Fuller and Bulkeley (2013) have shown how British retirees to Spain are quite able to compare their own heat adaptation strategies to those of the native Spanish population. Finally, Strengers and Maller (2017) have learnt from how international students in Melbourne describe their adaptation to the local summer and how they see country of origin playing into this process. It was with all the above studies in mind that the present project was conceived. If there is potential in evaluating air-conditioning in the terms of those who live with it, if people are potentially alive to cultural variation in climate adaptation, and if the results of exploring these issues with them could pique interest and promote debate, the argument was that it may be worth undertaking an exploratory study of how different resident groups in Qatar talked about their ongoing relationships with this technology. The hope was that doing so would, firstly, provide a record of how air-conditioning has infiltrated everyday life in an intriguing cultural context and, secondly, generate new ideas about encouraging less energy hungry ways of living with the Qatari climate.

The ambition was therefore to engage as fully as possible with the specifics of how these groups spoke of their ongoing relationship with air-conditioning. As already intimated, and somewhat surprisingly, this specificity can sometimes be downplayed in relevant culturally focused work despite being often underpinned by an argument about safeguarding exactly that. Beyond the potential discomfort of talking in a comparative register, the reason for this is, I think, partly about the popularity of certain social science research practices, and, more particularly, an interest in testing out potentially useful concepts. In this case, this has centred on the most promising way of imagining the relationship between air-conditioning

and everyday life (see, for examples, Shove et al. 2014, Strengers and Maller, 2011, and Hitchings, 2011). This kind of interest certainly has its benefits. Theories help us to question how air-conditioning becomes socially embedded and they also bring individual studies into productive conversation with potentially comparable cases. Finally, and as will be further discussed, they can also provide a comfortably familiar structure for fieldwork. But overt theoretical interests can also mean that hitherto unknown ways of relating to our topics can end up being squashed into our chosen analytical frameworks. In this respect, the present project shared the worries of Potter and Hepburn (2005) about how often concepts are allowed to 'flood into' our field sites in ways that effectively curtail our engagement with what awaits us within them. Flyvbjerg (2006) has expressed similar anxieties about a widespread tendency in contemporary social science to prize theoretical dexterity over an openness to the detail of the case at hand. For all these reasons, and others that will be more fully described, the present study decided to downplay conceptual framings during fieldwork.

Relevant research on Qatar: from critique to lived experience

In terms of recent change in how Qataris, and others on the Arabian Peninsula, are using air-conditioning in response to the challenge of living with desert heat, it is common to see commentators take a position of outsider critique. This has, to be fair, often been with some justification when this is part of the reason why Qatari nationals, for example, already have some of the world's largest energy footprints and national policies such as free domestic energy stand to encourage even further growth (Luomi, 2012). One notable example relates to the outcry that followed the suggestion that the 2022 football World Cup in Qatar should be almost entirely air-conditioned as a means of allowing the event to take place in a baking hot summer without causing harm to players (Kassim et al., 2018). This discussion slots directly into a broader tradition of casting a critical eye over the environmental and social costs of engineering indoor cold in the region (see, for example, Graham, 2015, on indoor ski slopes in Dubai). In Doha, these criticisms connect to worries about the pace, style, and implications of infrastructural change in the region (see, for example, Rizzo, 2014, Günel, 2019, or Molotch and

Ponzini, 2019 on the advent of ‘spectacular’ Arab urbanism) as, for example, a forest of skyscrapers have shot up as part of a project of ‘dressing up downtown’ (Nagy, 2000). Even when attempts are made to address sustainability concerns within these initiatives, they can be seen as a drop in the ocean compared to the costs of pumping monumental buildings full of conditioned air (Koch, 2018).

Plate 1. Though the city’s architectural transformation has attracted attention, life inside Doha’s monumental buildings has less often been examined (the West Bay Business District, Doha)



The project on which this paper draws was, by contrast, partly motivated by the suggestion that, though critical outsider positions have their place, they do not often provide evidence that could be of immediate use and interest to local

officials aiming to do something other than cynically attaching themselves to sustainability ideals. In this respect, the project sought to learn from changing lifestyles on the ground (Mohammed and Sidaway, 2016) by moving away from a distanced evaluation of the region's 'trophy architecture' and turning to the everyday lives of some of those found inside its buildings (Gardner, 2014). It took this position partly because there was evidence to suggest that officials were interested in ways of managing the Qatari climate that do not require the constant supply of heavily conditioned air. Though it could be dismissed as local 'greenwash' (Koch 2014), the obvious example is the 'Msheireb development' project. Nearing completion in downtown Doha, this development is designed to provide a relatively novel mix of homes, offices and recreational spaces and, in doing so, explicitly draws on local architectural traditions of low rise, densely packed buildings in an attempt to create lifestyles which could be both more personally enjoyable and less energy consumptive for the Qataris and expatriate workers who can afford to live there. It does this partly by encouraging people to spend more time in outdoor spaces through the provision of cooling water features, significant shading and other means of managing the experienced thermal environment (for more on how the Msheireb imagines everyday life, see Melhuish et al., 2016, Degen et al., 2017, and Winter, 2016a, 2016b).

Plate 2. Imagining less air-conditioned lifestyles in downtown Doha – a vision of shading and trees to make outdoor spaces more attractive (representing the Msheireb Heritage district, Doha)



If we were to look for studies that examine everyday climate adaptation and energy use in the region, some work has built on the above arguments about the environmental potential of ‘adaptive’ thermal standards (see, for example, Majid et al. 2014). This takes us closer to how people are currently living with the ambient conditions provided to them in a hot climatic region in the throes of great infrastructural change. The most directly relevant work has tackled this topic by monitoring conditions and surveying occupants inside a sample of commercial and public offices in Doha (Indraganti and Boussaa, 2017, 2018, Indraganti et al., 2018). These studies have revealed how the Qatari and expatriate workers found within them generally prefer to feel cooler than ‘neutral’ in the summer months. They also found that conditions there were colder than we might have expected and speculate that Doha’s office occupants may be adapting to the indoor cold since, despite the significant heat outside, ‘neutral’ temperatures for those who took part in their surveys were lower than in other places with comparable outdoor climates. Yet, this adaptation would also appear, for the moment, to be incomplete since they also found more reports of being ‘too cold’ than ‘too hot’ in these workplaces. Finally, in terms of this paper’s comparative interests, these studies also revealed that the offices more likely to contain Qatari nationals were colder. Could it be that Qataris have more fully adapted to the local life of indoor cold or could it be that culturally

prescribed clothing norms are fueling a particular desire for colder conditions amongst this particular set of occupants (Indraganti and Boussaa, 2017)?

In one survey, a respondent expands on their answers through the following written plea: 'my hands are freezing – please tell them!' (Indraganti and Boussaa, 2017, 34). This response provides a rare glimpse of how air-conditioning is subjectively experienced in Doha when these studies have generally sought to provide a more removed evaluation of the current situation through the statistical examination of quantitative datasets. Elsewhere we can, however, find passing academic discussion of Qatar's cultural relationship with air-conditioning. Fromherz (2017), for example, questions how Qataris now live 'almost perpetually in an air-conditioned bubble'. The students in Koch's (2014) study spoke, in presumably less than positive terms, about 'building glass refrigerators in the desert'. Nagy (2000) suggests that Qataris can oscillate between feelings of pride about how widespread air-conditioning demonstrates their rapid technological advance and concern about the health implications of being so often surrounded by mechanically cooled air. Gardner (2014) suggests that ideas of 'entitlement' have become central to the current Qatari consumption culture, though he stops short of questioning what this means in ambient temperature terms. More broadly, we can speculate about the social processes that led to the high levels of vitamin D deficiency observed amongst Qataris (Badawi et al., 2012). Despite the great abundance of local sunlight, this is presumably because many of them have come to shun the outdoors.

The present project sought to shed light on these suggestions through open-ended discussions with three groups of Doha residents. Through these means, it sought to understand how 'thermal relations' (Caprotti and Romanowicz, 2014) are evolving on the ground in a world region that is changing fast (see also Günel, 2018, for insights into how architects and building managers are attempting to reconcile ambitions about sustainable innovation and the local demand for air-conditioning). In this sense, and once again, the aim was to undertake fieldwork in a comparatively agnostic register. Though there may be good reason to question the broader political context that makes the air-conditioned lifestyles

on which this study focused possible, it sought to elide the critical outsider position that was common in the field. Instead the ambition was to explore the complexities of how these three groups spoke of their lives with air-conditioning. Returning to Flyvbjerg (2006), this was, so I figured, an unusual, relatively unexamined, and potentially instructive example of air-conditioned living that deserved to be studied in its own terms as a 'critical case'. Nicol and Roaf (2017) argue that ours is world of rapid cultural and architectural changes that challenge us to think afresh about the effective provision of 'thermal comfort'. Few places better prove their point than Qatar where the issue is further complicated by a climate in which average daily highs exceed 35°C for six months every year. In Doha, as a hot desert city that is both wealthy and full of ongoing infrastructural projects, the rationale for an open-ended study of how different groups were living out these changes was especially strong.

Project sample and design

Fifteen respondents were recruited from each of three social groups, making a total of 45 respondents. Within each group, there was a broadly even split of males and females. The decision to concentrate on these three was partly based on an interest in comparing groups who might speak quite differently about this topic by virtue of their varied biographies of exposure to air-conditioning. The project also chose to focus on groups whose experiences might be of particular interest to local officials in their capacity as those who are provided with significant amounts of air-conditioning based on the potentially misguided assumption that this is what they want. Finally, it should be acknowledged that this sample was also a pragmatic response to a field context that was challenging for me as a lead researcher forced to slot bursts of local interviewing into the gaps that emerged between work commitments elsewhere. I do not therefore claim that the following three accounts represent everyday life more generally in Qatar and comparable studies with other groups would be very welcome.

- The first group was made up of older Qatari nationals. They were all between 50 to 80 years old, with most being in their late fifties. Most of their

lives had been spent in Doha and they had experienced great change in terms of how local heat is lived with. Given a context in which it would have been difficult to arrange interview access, and well aware that this group might be less able in English, Qatari students on a university cultural studies course were enlisted to pose a series of open-ended questions to an older relative who met the sample requirements as part of a broader exercise in learning about effective field research. They were briefed fully in advance about how to encourage and engage with their respondents. We were also hopeful that differences in age and family seniority might help us to deliver on our objective of allowing respondents to talk about the topic in whatever ways made most sense to them. In this way, our interviewers were simply acting to collect the experiences and perspectives of an older relative, which they then translated and transcribed for our subsequent analysis. These interviews lasted roughly thirty minutes.

- The second group was made up of professional expatriate workers and spouses who had accompanied them in coming to Qatar. Their experiences were accordingly very different to other immigrant workers such as those currently laboring outside with much less access to air-conditioning. These were specified as having lived in Qatar for at least two years before the interview. They were recruited through snowball sampling using the contacts of the research team and others in Education City, a large development on the outskirts of Doha made up of individual 'branch campus' buildings affiliated to various European and North American Universities. As a result, those in this second group largely hailed from either North America or India, with many of them currently working in the Education sector. They were individually interviewed by members of the research team for roughly forty minutes, either in their workplace or a public space of the respondent's choosing, such as cafés, canteens or shopping malls.

- The third group was made up of Qatari students studying at degree level in various subjects in different parts of Education City. These were also recruited through snowballing techniques through contacts at our host University in Qatar. All were aged between 19 and 25 and all had lived in Doha since the age of sixteen. Most had lived their entire lives there, though many had also enjoyed

significant amounts of overseas travel. These were selected in their capacity as a group who had grown up with air-conditioning, with many of them living with their families in large detached, fully air-conditioned villas. They were interviewed individually for forty minutes in slots between their lectures at various offices and meeting rooms around Education city.

Discussion topics included how their current relationship with air-conditioning had come about, other possible strategies for responding to local heat, different understandings of the appeal of this technology, how and where it was currently experienced by different groups in Doha, and how each group compared their relationship to that of the other two. Issues of sustainable living were explored when they came up but were not explicitly introduced. This was partly because the point was to be open to the many ways in which respondents might consider air-conditioning and partly because we reasoned that doing so might encourage some respondents to become defensive and disinclined to talk more candidly with us. Transcripts were then uploaded into the on-line qualitative analysis package 'dedoose' and coded according to a series of themes taken from the various patterns of respondent talk identified in early transcript analysis.

Being curious about air-conditioning

By conducting fieldwork in this way, the aim was explicitly not to privilege any particular theoretical lens at the outset. Though this was common in relevant culturally focused work on air-conditioning, doing so would, I reasoned, run against a central project ambition, and also a chief benefit of qualitative research, in exploring hitherto unknown ways of thinking about the topic at hand. Neither was it to work towards a broader critique of the situation. Though this ambition was common in academic work on urban change in the region, doing so would, I reasoned, curtail the potential for providing evidence that would be of interest and use to local officials hoping to encourage more sustainable living on the ground. There were times, however, when I felt uneasy about this. The project was, I worried, drifting too far from any of the more familiar conceptual or critical moorings to which many human geographers like myself have, in writing

up the results of their fieldwork at least, often tethered their findings. And this felt like a risk. In response, I looked for, and then took some comfort from, a series of arguments about other ways of defining our disciplinary purpose.

In terms of the tendency to connect fieldwork with theory, human geographers have waxed and waned over the years in terms of the extent to which an explicit theoretical engagement takes centre stage in their empirical analysis. For some, qualitative field research, in particular, has always been about allowing hitherto unacknowledged voices to come to the fore without being prematurely troubled by the imposition of potentially relevant theoretical lenses (Wichester and Rofe, 2000). Others, however, have underscored how different conceptual visions of social life are always inevitably embedded in all our fieldwork engagements, whether we acknowledge them or not (Pryke et al. 2003). Though the truth of the matter in terms of how many of us practically organise our projects is probably somewhere between these two positions, one recent intervention that particularly resonated with the present study was that made by Phillips in his evaluation of geographical curiosity (2010, 2012, 2014). In championing this approach, he is not arguing against theoretical work. But he is nonetheless proposing a way of relating to those who we study that is distinctly different to the committed deployment of concepts. And though the idea of being 'curious' should not pass without critical scrutiny in terms of the how academics and others call upon this idea, he argues there remains a great deal of merit in safeguarding 'spaces for curiosity' in geography research - spaces in which we allow ourselves to adopt an attitude of interested openness more than anything more strategic. Doing so, he contends, might result in a more empathetic relationship with those who we meet in the field (see also Sennett, 2012).

In terms of those courageous enough to challenge the often unstated centrality of 'critique' in much human geography, Woodyer and Geoghegan (2013) have taken geographers to task for their tendency to adopt this stance instead of travelling to their field sites with a more positive disposition towards what they might feasibly find there. Latham and Layton (2019) have built on this suggestion by making the case for how the prevalence of the critical position can curtail the

potential for urban geographers to identify ideas about useful intervention. This is also something I've briefly considered myself with regard to how qualitative studies of physical exercise most effectively inform public health promotion (Hitchings and Latham, 2017). Koch (2016), in particular, questions how the ubiquity of 'critical' work in contemporary human geography discourages us from fully thinking through the value of this stance. As she explains, the critical position can be attractive because it allows geographers to see themselves as those who have become aware of certain otherwise hidden workings of power. But, as she also points out, such an exercise is not always helpful in positively engaging with those who wield this power, and who may have no choice but to do so. This idea further stiffened my resolve to be straightforwardly curious about what our respondents would say in our interviews instead of working towards a broader critical analysis of how their lives came to be as they are.

What follows are the results of taking such a position in this project. In this discussion, the aim is to weave telling phrases from respondents into a narrative that, within the space constraints of an academic paper such as this, provides a better sense of how each burst of fieldwork progressed. The aim is therefore to tell the story of the study more than to pursue the authority that is commonly taken to come from repeated quotation (Hitchings and Latham, 2019).

Older Qataris –Public pride and personal ambivalence

Interviews with the older Qataris began by remembering their lives before air-conditioning. Many strategies for coping with local heat were recalled. These included sleeping on the roofs of the much simpler housing that predominated then, the skilled pursuit of the coolest sitting areas at home as the day went on, repeatedly wetting clothes to keep the wearer cool, and making varied use of the ice blocks that were sometimes delivered to the home. Daily rhythms were different too, with early morning work being commonplace and long mid-day breaks that sometimes involved lingering in the sea until it was sufficiently cool to get out. The prevailing register in which these techniques were discussed, however, was less one of nostalgia and more typified by surprise at how they

lived before. Spending time together to distract themselves from mid-day heat or playing football outside in summer were commented on with particular wonderment. Everyday life had evidently assumed a very different shape since then and, in discussing these past techniques, though we noted some passing pride on recalling their pragmatism, more often we saw bemusement about how easily and fully these abilities had disappeared from their lives.

Initial experiences with air-conditioning were, by contrast, recounted with some relish. The excitement of its arrival was well remembered as it 'swept across the country' in the seventies. For many, it was universally welcomed as a 'wonderful device' that meant 'everyone was happy with the cold'. As one respondent put it, from the start, 'society was convinced of the urgent need for air-conditioning' (an interesting statement in view of how, moments earlier, he talked without any hint of personal risk about how they lived with heat before). This response bore witness to how soon it was seen as a necessity. Though life previously went on well enough, now they absolutely 'needed it'. The only voiced concern on recalling its initial uptake was about how the resulting energy consumption could sometimes lead to electricity black-outs. Air-conditioning was welcome then and it was with them now for most, if not all, of their daily lives.

Talk then often turned to the cultural registers in which air-conditioning might feasibly be placed. Speaking of it as a luxury produced a range of, sometimes contradictory, responses, even from the same person. On the one hand, they were well aware that they had lived without it and that others (both elsewhere around the world and in the same country too) did not enjoy the same level of access as themselves. Yet, over the course of our discussions, its near constant presence in their lives became increasingly apparent. The suggestion of it being a luxury was therefore difficult to entertain – as one exclaimed, 'everyone should have it!' Yet when the discussion turned to potentially negative impacts, concerns about changing family dynamics and personal temperaments were immediately available and often strongly emphasised. One of the respondents even suggested that families were 'falling apart' because of air-conditioning. His thinking was that, as a consequence of it becoming so ubiquitous for Qataris,

both throughout the house and within the varied indoor social spaces now frequented by them in Doha, families had much less need to congregate. Younger family members today were particularly taken to spend much more time alone in their bedrooms or out with friends elsewhere. And that was taken to erode the family closeness that was particularly prized by this group.

Air-conditioning was quite commonly thought to have bred a generation unable to live without it. Younger people were, as a consequence, taken by some to be comparatively 'weak' and 'lazy'. They never needed to toughen up through exposure to the harsh realities of the desert summer and the chilled conditions in which they were now generally found encouraged them to linger without purpose for longer than they really should. In this sense, air-conditioning was taken to make them less, rather than more, productive in a neat inversion of one of the original historical rationales for providing it elsewhere in the world. What was also apparent was a degree of resignation about how air-conditioning was shaping the Qatari culture. Qataris were now taken to have an especially 'strong relationship' with it. One respondent spoke of how recent generations had particularly adapted to the 'local climate'. This sentiment seemed inconsistent with the wider pattern seen in our first set of interviews until it eventually became clear that the 'climate' to which he was referring was the indoor one.

How was the future of air-conditioning and everyday life in Qatar imagined by this group and could that be influenced? One immediate response was to take pride in the spread of air-conditioning because giving residents the most 'comfortable' conditions demonstrated national progress. However, despite the ambivalence that came through when they reflected on the 'goods and bads' of the conditioned life, a number stood back from the suggestion that they could influence this future. Some said that Allah will ultimately decide what happens next for Qatari adaption cultures or that 'science' will likely change the situation so 'we should see what they come up with' instead of worrying. This was not a collective project in which they were individually involved. Depending on whether national pride was at the forefront of their minds because of the preceding lines of questioning, they would either present optimistic visions of

outdoor air-conditioning or express resignation about Qataris becoming ever more dependent. So, though adoption was often framed as a matter of appropriate progress, and though they personally enjoyed it, this group also harbored several concerns about air-conditioning's impact on Qatari culture.

Expatriate Professionals –Coping with a situation beyond their control

When those in the expatriate professional group looked back on how they imagined they would handle the Qatari climate before relocation, few recalled giving much thought to this matter - there were other things to think about in terms of job details, visa requirements and career planning. Then, after arrival, the acclimatisation challenges they faced were more about the 'indoor culture'. They took expatriates, such as themselves, to be keen on spending time outside. That was, they figured, 'their culture' – from a beach afternoon to runs along the waterfront, being outside was apparently a more 'natural' experience for expatriates. In Doha, however, except during the mild winters that were keenly anticipated, there were few chances to act on these instincts. Rather they were to 'hunker down' during summer and try to forget about how they were 'hibernating' inside a series of 'sealed buildings' which were frequently 'cold' (rarely were they described as pleasingly 'cool'). Short bursts of extremely unpleasant heat were certainly described, often with great animation, and sometimes even shock, as respondents ran between the car and the workplace or tensely waited for the car to cool after getting inside and immediately turning the conditioning on. But, overall, summer was experienced as a dull time of indoor existence to be 'endured', if you were unable to go away - and that meant coping with the ambient cold that was more often than not provided to them.

This was, however, generally done with good-humored stoicism. Few had attempted to change this situation. Instead, in public buildings and workplaces, they had often developed their own personal adaptive strategies. These included finding extra clothing and other sources of indoor heat. Many had versions of the 'air-conditioned outfit', which meant having extra layers on hand in preparation for the indoor cold. This was a response to an, often hitherto unexamined, sense

that they should be wearing lighter and fewer clothes in summer. And so they did. But the environments they encountered at this time meant they also needed extra layers to avoid shivering. Some regretted not packing more 'woolies' before coming to Doha after being surprised to discover how much they needed them there. Another strategy involved taking plug-in heaters to the office or borrowing them from colleagues. This was because the technologies already working to keep them cool were doing so too well. Here we saw a rather perverse and highly energy consumptive battle between ambient heating and cooling indoors in the desert workplace. But, despite these concerns and challenges, many were eventually drawn to the colder air. As one sighed, 'I've adapted to the unhealthy feeling of always having and needing air-conditioning' – the 'having' came first, but the 'needing' was quite soon to follow.

In terms of how and whether things could change, air-conditioning was, in an abstract sense, deemed an unquestionable good. This was most apparent in how one respondent, immediately after bemoaning the unpleasant cold of certain public spaces, said he was unsure about the idea of living with less. So, whilst he was often uncomfortably cold, the strength of his sense of air-conditioning as a necessity meant that he immediately forgot this discomfort. Some spoke of rumors of how some university buildings were so cold because nearby computer rooms required it for them to function or of failed attempts to get building managers to change the settings. Others looked hopefully forward to offices that allowed more individual control. For the moment, however, they would live with what they were given – as one respondent emphasised, 'you must adapt because you cannot change the climate'. As was found with the older Qataris, the most interesting feature of this response was how the climate to which he was referring was the indoor climate that had already been specified by unknown others, and whose decision to do so was to be left untroubled by him.

Did this group of expatriates see themselves as distinct in their approach to air-conditioning? Though many thought they were becoming 'addicted' or 'adapted', they still saw themselves as different to the other two groups. It was hard to be sure what Qataris felt because air-conditioning had rarely come up as a

conversation topic with them, but tentative explanations were still offered. Partly this was attributed to traditional Qatari clothing requirements in which both men and women were covered by either the thobe or the abayya through the whole year. This meant they might need more cooling. Some also thought that a cultural history of exposure would make Qataris particularly addicted. As such, it was understandable when one talked of another expatriate friend in a public office who turned the air-conditioning up before her Qatari boss arrived, got cold when he was there, and turned it down after he left - he needed it because he was different. Links were also made by this group to norms of self-presentation such that, for example, the perceived fondness of Qatari women for cosmetics might make them particularly recoil from encounters with the outdoor heat. Overseas arrivals, such as themselves, were also taken to prefer spending time outside and to enjoy the sun. This could, however, be hard to do when, if the social precedent for long periods of the year was such that everyone seemed to be sealed inside, you'd soon fall in line with that. But attempts were still made. However, a common way of thinking about their group characteristics was to reframe the question as a matter of personal preference – they were individually 'outdoorsy' and they liked the idea of being outdoors whenever they can. But this was not a wider trait that could be observed in Qatar, irrespective of the group to which they were comparing themselves. Either way, in this respect, many of the expatriate professional group felt they were struggling against a local culture of indoor cold – in effect, coping with a situation beyond their control.

Younger Qataris –Collective love and individual idiosyncrasy

Air-conditioning was, in principle, lovingly spoken of by the young Qataris as a constant companion in their lives. A number took delight in reflecting on the, sometimes surprising, ways in which their reliance had suddenly revealed itself to them – a topic that many of them had evidently discussed previously with others in this group at least. A common anecdote related to times when they had found themselves sleeping in rooms without air-conditioning when holidaying overseas. Doing so could be disconcerting. But this was not because of the uncomfortable heat or lack of temperature control. Rather it was about how the

absence of the reassuring hum which they had come to expect made it difficult for them to sleep. Indeed, one respondent described how, after his home air-conditioning had been upgraded to a comparatively quiet system, he needed to play the radio through the night for that reason. Another joked about how he took pride in how his personal organization skills meant he could spend the entire day without leaving what he dubbed the 'safe spaces' of air-conditioning.

Beyond these anecdotes, however, we once again saw a degree of resignation about their dependence emerge as the interviews went on. Certainly, it was almost impossible for members of our third group to think of life with less. One stated 'I just don't think that anyone could live without air conditioning in Doha'. Another, reflecting on why he had given so little thought to it, said 'well we don't sit and talk about water and so we don't sit and talk about air-conditioning'. The implication here was that, like water, air-conditioning was a fundamental of life – it simply needed to be there so the very idea of discussing it was odd. Certainly, these respondents were happy to recognize their specificity in this regard – both the older Qataris and the expatriate group were thought to cope better with higher temperatures – as one said, 'older people are more immune to the heat, whereas we are not'. Some said they had adapted to the 'desert climate' but, as gradually became clear over the course of the discussions with all three groups, it was incorrect to assume that respondents meant the 'outdoor' climate when they spoke in this way. And this proved to be the case again here. One respondent even floated the idea that University buildings should be extra cold because younger Qataris (who had grown up with air-conditioning) particularly needed it. The implication of following through on this, of course, would be a vicious circle of ever colder environments and ever greater energy demand – the exact opposite, in fact, of the adaptation process that sustainability advocates, and places like the aforementioned Msheireb project, might hope to encourage.

From this account, in which, at an abstract level, air-conditioning was a non-negotiable necessity, it might be taken that the younger Qataris would have nothing negative to say about it. Not so. Though there were several instances when respondents took pleasure in telling us how they collectively 'loved the

cold', most readily recalled times when they were personally cold. Some talked about taking extra clothing to University or other spaces outside the home in the summer, just as the expatriates did. But, for them, this was also about coping with cultural dress codes that dictated that, though still fully covered, they also wore lighter forms of traditional dress in during the summer months. So, unlike the suspicions of some expatriates, their cultural clothing rules meant that they too needed extra layers to handle the summer indoor cold. Other mentioned strategies included going outside for brief hits of heat before returning indoors or sitting on their hands to keep them warm at University. There were also accounts that echoed the expatriates in seeing summer as a dull time of seemingly interminable indoor living. Then, when we turned to the pleasures of experiencing ambient heat, it was interesting how those respondents who acknowledged them tended to present that as a matter of individual idiosyncrasy – the enjoyment of heat was taken to be personal, whereas their attraction to cold was cultural. One was assumed to be shared; the other was not.

This led to a broader discussion of other ways of living with the local climate. Because outdoor environments were infrequently experienced, this topic could be hard to handle conversationally. For one, when we talked of adapting to summer, he immediately turned to holidays overseas and coping with European climates – for him, summer was experienced elsewhere, whereas Doha life was indoors. Another straightforwardly said, 'we Qataris are not used to going outside.' Opening windows at home was volunteered by some as an action that they could barely remember in their lifetimes. One said that the idea of a closer relationship with outdoor spaces was something that had been 'deleted from the culture' and, though they understood why expatriates were keen to be outside, the idea rarely presented itself to them. Though winter was, once again, keenly anticipated and these respondents agreed, on reflection, that time outside could be beneficial (though often no obvious reason came to mind) the convention of staying indoors was so strong amongst young Qataris that a 'psychological barrier' was stopping them from going there. One was quite clear in talking with us that there were 'other ways' (than air-conditioning) for living with local heat, before tellingly adding 'I just can't think of them now'. Though indoor cold had

been collectively embraced by this group, many were individually more intrigued than affronted by the idea of living otherwise.

Two audiences for this study

And those are the results of a study which sought to engage as fully as possible with the accounts and experiences of our respondents. It did so partly because, whilst outsider commentators can sometimes decry the energy consumptive ways in which local heat is lived with in both Qatar and the wider region, the complexities of how people are responding to the reality of a desert climate deserved a more careful examination than that. After all, if we hope for our studies to be of value and impact on the ground, condemnation from afar is unlikely to be especially effective. Instead, an attempt at revealing the tensions and ambiguities currently associated with air-conditioning in everyday Doha life was taken to hold more promise. In this respect, the aim was to follow our noses analytically through a commitment to exploring how exactly our respondents spoke about this technology. In truth, this approach was also partly adopted because these were hitherto unfamiliar social groups and, as such, wedding ourselves to any more prescribed ambitions in advance seemed unwise. How could we presume to know how they would want to talk about the topic? In actuality, all three groups proved quite forthcoming in our interviews. The Qataris were eager to repay our interest by fully engaging with the task at hand and the expatriates had evidently already given the topic some thought. But we didn't know this beforehand and, in that sense, being curious was a sensible fieldwork strategy as much as a considered position on research practice.

Based on that exercise, the above results serve as a record of how three groups of Doha residents currently relate to the provision of ambient cold around the city in which they live. In that respect, they depict one moment in the thermal history of Qatar as a country that has experienced, and continues to experience, great change in the infrastructures of everyday life. And contained within them are various ideas and observations that could usefully inform debate about the future of air-conditioning in Qatar and elsewhere. But, to be more specific, I want

to end by addressing two audiences: local officials hoping to encourage more sustainable living and geographers interested in how they approach the field:

Some suggestions about local sustainability

What does this study tell us about the likely success of initiatives like the Msheireb and other related attempts to encourage less fully air-conditioned lifestyles amongst these admittedly privileged groups of Doha residents? Framed in terms of the broad idea of escaping the air-conditioned existence, this study offers relatively little hope. Certainly, during the summer, spending significant time without its presence was both very rare and unwanted for all three groups. However, in view of how all three were also more likely to feel too cold than too hot at this time, a better strategy might begin with a more restrained approach to air-conditioning in workplaces and public spaces. This study suggests this would be well received and it might also eventually make more time outside less of an alien prospect. In this regard, it might be worth repositioning developments such as the Msheireb as part of a broader project of fostering cultures of less ambient cooling across the entire city and country, instead of spatially bounded attempts at engendering new norms of local living. In so doing, this study would also argue for more ambient cooling conversations between those who currently inhabit Doha's buildings and those who design and manage them. Though it is only in recent decades that air-conditioning has become so ubiquitous in this city, discussion between groups about this situation seemed infrequent in the above analysis. In terms of public spaces, for instance, the general view of our interviewees was that they were in no position to influence what was provided. This was even though the current experience was often less than ideal.

In terms of generating further evidence to nourish such a conversation, and moving to how some of the above findings could inform studies with larger sample sizes, this project sees potential in asking Doha residents about the typicality of their feelings. What was noted within it was a sense that individuals often felt themselves to be relatively exceptional in being attracted to a closer relationship with the outdoor climate. They felt this partly because the broader

culture was believed to have already taken an indoor path. But if these attractions are actually more widespread than they think, the argument for continuing down such a path is significantly weakened. This suggestion is, however, just one example. The broader point is that, if the ambition is to really think through climate control and cultural change, there are intriguing questions to pose to people that go beyond physiological comfort alone. And doing so could inform future initiatives that mark Qatar out as distinct, even enticing, in its original approach to desert dwelling and sustainable consumption.

Some encouragement about fieldwork curiosity

Returning finally to the broader issue of how societies tackle the massive energy consumption linked to the global rise of air-conditioning, this paper points to the value of further work on climate adaptation cultures. And, within that work, exploring how identified groups see their specificity seems to hold particular promise. Such explorations could lead to original ideas about promoting a certain kind of sustainable 'thermal localism' in which people are proud of their distinctive ways of living with their climates and less energy consuming at the same time. Future researchers in this field should therefore be especially wary of the inclination to stress the academic value of individual studies by reaching beyond the case to highlight how they are advancing social theory or assembling a broader critical argument. Whilst these moves have their merits, they can also curtail our engagement with the locally specific feelings and practices that we may very well want to work with. This is partly why some of the geographers discussed earlier have pushed back against the spread of certain research practices and why I turned to some of their arguments in the present project.

The above account therefore serves an example of what fieldwork curiosity can provide when it is allowed to be relatively unencumbered by the two rival Cs that were identified in this paper (a focus on concepts or an interest in critique) - a fuller sense of place-specific sensibilities and a set of comparatively engaging findings for local audiences who are likely indifferent to both social theory and critical outsiders. So, when faced with the growing pull of certain strategies for

making individual studies more academically impactful, let's not forget the continued value of staying curious about the specifics of the people and the places that we study. This paper has sought to substantiate this claim with regard to everyday climate adaptation amongst three social groups currently found living on the Arabian Peninsula. But it is also one that is more generally worth remembering at the moment. I therefore hope that this paper encourages my colleagues to engage as fully as they wish with the specifics of their field sites. Sometimes we can benefit from guarding against the temptation to see them as either a testbed for concepts being discussed by our peers or an expression of broader political processes on which we should probably take a critical position.

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