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Disruptions and food consumption in Islamabad

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ABSTRACT

This paper investigates the disruptions in everyday routine and the stresses of food sourcing in the urban food environment among middle class residents of Islamabad, Pakistan. It explores the dynamism of urban food environments in developing countries under the influence of various stressors and highlights adaptations taken by urban consumers. It presents a middle class view of urban food security and explores the potential constraints on food acquisition for a section of the population that has normally considered itself food secure. The paper examines how seasonal scarcities of gas and water, artificial cost inflations during the month of fasting, and regional and local disasters such as floods and militant violence influence food decisions within this group. It pays particular attention to the temporal nature of these disruptions, how they impact perceptions and experiences of food sourcing and the subsequent temporal and spatial adaptations adopted. Specifically, it contributes to the literature on food environments and food security by demonstrating how such disruptions contribute to dynamism within food environments, how the middle class responds to these changes in their everyday lives, and how their perceptions on personal food security are threatened. The paper adds to the literature on the role of time, personal routines, and anticipatory logic in the context of food consumption within a developing country using household-level perspectives of urban food environments.

1. Introduction

"Gas crisis, petrol crisis, water crisis, security crisis, price crisis, we still have to eat, don't we?" (Farzana, February 11, 2014)²

For respondents like Farzana, "there is always something new and unforeseen that introduces itself into the repetitive" of daily life (Lefebvre, 2004: 4). Regularity, routine, and predictable cycles like those of the sun during the day, seasons, calendrical festivals, transportation schedules (Sandhu, 2007), opening hours of shops (LaBelle, 2008), and mealtimes give people a "temporal sense of place" (Edensor, 2012: 4). This paper examines the different ways that the regularity associated with food consumption is disrupted for the residents of Islamabad.

Beginning with the importance of rhythms in everyday life in urban areas, this paper brings Lefebvre's concept of 'rhythmanalysis' together with the concept of 'food environments' as discussed in urban design and health (Kelly et al., 2011, Minaker et al., 2013). These concepts let us acknowledge and emphasise the dynamism in urban areas and the significance of temporal rhythms on daily, weekly, and seasonal experiences of urban food environments. Food is a useful lens through

which we can observe the changes in a city over time, especially the seasonality of food production, consumption, and meal times.

This paper is part of a broader research project that examines the food environments and food systems of Islamabad, Pakistan. The research objective of this paper is to examine how the routines and regularity of food consumption are affected by disruptions in food environments. An understanding of the impacts of disruptions to food environments and food systems more broadly is particularly relevant in the context of rapidly changing global food systems, and the food security agendas of countries. The Food and Agricultural Organization defines food security as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (FAO, 2003: 28). This paper demonstrates that food security is threatened by disruptions in energy and fuel supply, and by violence in the individual's environment.

The 'food environment' concept here refers to the collective structures, opportunities, and conditions linked with food choices for an individual and household. It builds on the concept of the community food environments at a neighbourhood scale by Glanz et al. (2005) and considers the food environment as an interface through which

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²This vignette is an extract from the field diary kept during fieldwork in 2013–2014. All the names used in field diary extracts and participant quotations are pseudonyms.

consumers interact with the wider food system (Lartey et al., 2016). This is a useful lens with which to examine disruptions because it allows for the consideration of the everyday conditions that impact how consumers interact with the places connected with their food (i.e. retail shops, kitchens, offices, etc.) and the activities (purchasing, cooking, eating, etc.). See Turner et al. (2018) for a detailed examination of the concept of food environments.

This paper has three main research aims: firstly, to explore how urban residents respond to temporal disruptions in their food-based routines. Secondly, to demonstrate how routine restructuring and anticipatory actions reduce the effects of the disruption of their food environment activities. Thirdly, to show how 'waiting' is employed by the residents in times of disconnect between anticipated results and their realisation. This is accomplished by presenting the theoretical context of the paper, followed by an examination of the study methods, and then the context of disruption in Islamabad and Pakistan. The main body of the paper then presents these concepts with a discussion of the data and analysis.

2. Theoretical context

While the spatial is often privileged in discussions of food, the temporal aspects of engagement with food are often just as critically important. The temporal patterns associated with physical places has been studied in various contexts, such as coffee shops (Laurier, 2008) and mobile spaces (Watts, 2008). Lefebvre acknowledged the significance of rhythms and suggested rhythmanalysis as a tool for studying everyday life (2004). Although he engaged primarily with rhythms in the contexts of space, music, and the human body, urban rhythms too have received considerable attention in recent scholarship, such as Wunderlich's (2013) writing on the aesthetics of place-temporality and urban rhythms, O'Connor's (2014) work on exploring the rhythms connecting and limiting Muslim minorities in Hong Kong with the hajj pilgrimage to Mecca, and Temelova and Novak's (2011) study on the temporalities and transformation of spaces in Prague. Wunderlich (2013) explores the place-rhythms of urban spaces in London, and emphasises how regularity and routine characterise the public places in question, highlighting how the urban experience transforms over time.

Although conceptually strong in using of theory from music and urban design, Wunderlich (2013) does not include a discussion of disruptions and their role in shaping urban spaces. Temelova and Novak (2011) further illustrate the value of rhythms in cities in evaluating the regeneration dynamics in particular neighbourhoods in Prague and point out the differences in public-space engagement in post-socialist countries with others. Yet, like Wunderlich (2013) there is no explicit discussion of disruptions in rhythm; Temelova and Novak (2011) discuss the influence of regeneration projects on shaping the locals' experience of space and time. In discussing the rhythms of retail spaces, Kärrholm (2009: 423) details the "heterogeneous temporalities and rhythms set by clock time, working hours, seasons, timetables, bodily functions, etc., leaving places hectic and dense at some times and deserted others". Despite the value of heterogeneity of rhythms in one's environment, studies like Highmore (2004) on social aesthetics and Marshall (2005) on ritual, routine, and convention in food consumption, point to the importance of maintaining routine in everyday life. Any events that seek to disrupt these embedded routines and create uncertainty regarding the future are a cause for significant stress (O'Connor, 2014). These disruptions can not only create disorder in everyday life, but also lend an element of unfamiliarity. Binnie et al. (2007), in writing about everyday mobilities, note that while this unfamiliarity can engender insecurity, it simultaneously carries the potential of developing solutions for dealing with the insecurity. Investigating the temporalities of off-grid Canadian households, Vannini and Taggart (2013) discuss how the seasonal and daily rhythms associated with solar-power dependence and living off-grid in Canada

become an essential part of everyday lives and shape the relationship with time and place. The individuals in this study are shown to have made a concerted effort to separate themselves from the dominant temporalities of the urban lives they have left behind. In their off-grid lives, they have voluntarily opted for a slower temporality of living. These papers reveal that analyses of urban rhythms are crucial in understanding the development of urban areas and the impact of disruptions and unfamiliarity on everyday activities. In the context of food access and everyday risks and uncertainties in urban areas, these solutions become essential for maintaining a preferred routine and potentially safeguarding and improving one's food security.

Widener and Shannon (2014) point out that much of the existing food accessibility research does not take temporal factors such opening hours or changes in location into account (Chen and Clark, 2013). It is important to recognize that the entire make-up of a food environment is subject to change over time. Supermarkets and up-market retailers are still new phenomena for most countries and are discussed often in conjunction with suburbanisation and gentrification (Eisenhauer, 2008). This change particularly rings true in developing countries, where markets in many cities occupy the often-uncomfortable fringe of traditional and modern consumption spaces, where supermarkets selling imported, packaged, and processed goods rub shoulders with vegetable carts brought in from bordering villages (Hasnain, 2019). The contents of these carts are strongly associated with seasons and agricultural temporalities. Similarly, the production and transportation of this produce is also linked with seasons, as shown in recent years, when flooding in various parts of Pakistan has hindered the harvest and distribution of produce from different parts of the country, strongly affecting food security and pricing of different food items (Ashraf et al., 2013).

Such uncertainty in food availability and affordability invites anticipatory action and adaptation from the affected population. Anticipatory actions are also strongly tied to temporality because of the strong focus on pre-empting future outcomes. Anticipatory actions are taken to avoid or reduce the effects of an anticipated future event. They can be observed at numerous scales and across a wide range of contexts, from the level of threats in relation to the war on terror (Gregory, 2004; Anderson, 2010) and to stocking up particular foods in times of scarcity (Melgar-Quinonez et al., 2006). In such situations, all actions are taken as a precaution for events that have not, and hopefully will not, happen.

Anderson (2010) notes that, for the most part, researchers in geography have not engaged with the relationship of the future to the present and the past. Anderson (2010) discusses three types of anticipatory logics that help in dealing with threats to liberal-democracies: precaution, pre-emption, and preparedness. He argues that while these logics can be applied to other situations, they have been formalised in the contemporary world for terrorist threats (Amoore and De Goede, 2008), biological pandemics (Hinchliffe and Bingham, 2008), and ecological disasters like climate change (Hulme, 2008). All three situations require anticipating the future to dictate present action. In response to these imagined futures, pre-emption and precaution are primarily linked to actions that *prevent* the future from happening, while preparedness seeks to prevent the effects of the imagined future from disrupting the patterns of the ideal life. Elmer and Opel (2006) argue that while responding to 'what if?' questions with stable and reliable data is the optimal way of predicting the future, in light of the events following 9/11 and the war on terror, 'what if?' has been recast into 'when, then' i.e. when the event happens, then we will moderate the

A growing body of literature on subaltern populations attends to situations where they have no choice but to wait for the fulfilment of certain events or hopes. For example, literature on mobilities (Bissell, 2007), detainees (Griffiths, 2014), immigrants and asylum seekers (Conlon, 2011; Silverman, 2014), slum dwellers (Antony, 2012), and the unemployed (Mains, 2007), all point to a temporal disconnect between their anticipated results or dreams and their realisation. Griffiths

(2014) explores waiting with three other experiential temporalities categorised as suspended time, frenzied time, and temporal ruptures in the context of the immigration system. Jeffrey (2010) considers two different kinds of waiting: short-term 'timepass' strategies by educated unemployed youth, and the longer term 'investment' waiting strategies adopted by rich farmers in India with the aim of examining the larger social implications of waiting. Waiting can be a productive experience (Gasparini, 1995; Griffiths, 2014), an opportunity to socialise (Jeffrey, 2010; Jeffrey and Young, 2012), eat in public spaces with friends (Cowan, 1991; Nisbett, 2007) learn, and develop particular skills and to prepare for future events that may result in more periods of waiting (Mountz, 2011).

These concepts demonstrate the importance of rhythm and routine in an everyday setting. This is theoretically critical for this paper because it highlights the temporal dynamism of food environments and demonstrates that temporal disruptions and the uncertainty associated with them in expected facilities have a direct impact in how consumers engage with the different activities and places of their food environment. Rhythms show that these food environments are constantly influenced by such drivers of change and show the interdependencies of wider systems like energy and food. Anticipatory actions and adaptations reveal that despite the disruptive effects of these changes, urban residents are able to adapt and adjust in a variety of ways.

These adaptations become particularly necessary in contexts where disruptions may come in the form of fuel scarcity or violence. Adelekan and Jerome (2006) examine the effects of increasing prices of energy sources on household income for the low and middle-income in Ibadan, Nigeria and discuss the potential for shifting to more environmentally friendly fuel options. These studies and others, such as household electricity use in urban Gauteng, South Africa (Musango, 2014), use of cooking fuel in Hyderabad, India (Nayak et al., 2015), and use of fuel wood by urban residents in Africa (Guta, 2014), overwhelmingly focus on lower-income people in urban areas. While this focus is important considering the high rates of rural-urban migration by poorer populations, it does not consider middle- and higher-income population groups that live in the same energy and fuel-poor locations, and have their own adaptation strategies like cutting trees and burning wood that have major environmental and social consequences.

In addition to energy scarcity, the potential for violent events like terrorist and sectarian attacks adds another layer of disruption and uncertainty to everyday life in Islamabad. Maguen and colleagues (2008: 17) note that fear of a terrorist attack can "lead to maladaptive or unnecessary coping strategies and avoidant behaviour" which can have major repercussions on societal functioning and the economy. Authors like Coward and Martin (2009) also argue that contemporary urbanisation leads to system and infrastructure weaknesses that can be affected by acts of targeted violence. A significant proportion of the literature on terrorist attacks and their effects examines estimations of risk by the civilian population (Small et al., 2006), psychological impacts of terror (Bleich et al., 2003), and resilience to fear (Bonanno, 2004; Moore et al., 2014). Creating and maintaining food security in the context of violent events is proving to a major challenge (Teng et al., 2011). Battersby (2012) in writing about urban food security in an African context, notes that food security research in the global north has mainly focused on food politics and the structural features of the food system. For the most part, this literature has focused on the United States (Small et al., 2006), Israel, and Palestine (Bonanno, 2004; Braun-Lewensohn et al., 2009). A much smaller subset of the literature has evaluated the effect of terrorism on developing countries in Asia and Africa. An exception, Waheed and Ahmad (2012) discuss the socioeconomic dynamics of families affected by terrorism in Lahore, Pakistan and find that with low state support, family breadwinners and educated working-class youth are affected the most. Much of this literature therefore emphasises how ideas of safety shift because of the increased perception of risk.

While this paper is focused on the impacts of disruption on the

middle-class, it is necessary to examine the impact of these disruptions on lower income populations. In a study on food insecurity and vulnerability in Punjab, Pakistan, Azeem and colleagues (2016) demonstrate that of the 90,000 studied households, relatively more households are likely to become food insecure in the future, relative to the current situation. Of these vulnerable households, the majority is located in urban areas, and these households are more vulnerable to shocks that can interrupt food security (household level shocks such as family illness, and greater shocks such as floods). While there are other similar studies on food insecurity and adaptation, and energy poverty in general in Pakistan, such as Hakeem et al. (2003), Hussain and Routray (2012), and Mahmood and Shah (2017), there is a scarcity of academic examinations of the impact of gas rationing and load shedding on food security and food-related behaviour. However, the media reports on the influence of these disruptions in Pakistan and finds that lower income groups have trouble accessing and affording the same alternatives as middle and higher-income groups, and have less flexibility with adapting routines and strategies. For example, switching back to expensive fuel alternatives like petrol for driving, purchasing UPS systems for houses, or buying clean-burning gas tanks instead of collecting firewood. These options then have implications for their indoor air quality and respiratory health (Nasir et al., 2015) and children going hungry (Bacha, 2015).

This paper shows that while the middle-class respondents of this study are in an economically more stable position than the lower socioeconomic classes of the country, their situation is highly vulnerable. Part of this is associated with the increased cost of the amenities needed to reduce the impact of such disruptions, and partly because of the uncertainty around the nature and frequency of future disruptions. These factors are examined in the following sections.

3. Methods

This paper reports on data collected as part of research project focused on transforming food environments in Pakistan. The project on the whole benefited from conducting interviews and participant observation in order to understand and describe the activities and narratives associated with food environments. Data collection was carried out between August 2013-August 2014. The project was focused on developing a detailed picture of the food environments of urban middle-class households in Islamabad, Pakistan. It examined the decision-making behind everyday food purchasing, ideas of 'good food', and anxieties that are increasingly part of the food experience for these residents. With detailed interviews, observations, and photography, the respondents reported on their food decisions and their perceptions about the changes within the food system in Pakistan. Participants were recruited in two stages, firstly through personal acquaintances and convenience sampling. This resulted in 20 households. The second stage of recruitment took place at the wholesale produce market at the city, which created a cohort of 46 households. Six households dropped out of the study over the course of the study because of time constraints. Consent was obtained at the first interview once the respondents had indicated an interest in the study. While the whole household was considered as part of the study (because of the way food purchasing was accomplished), the 'respondents' refer to the individuals who participated the most in the interviews. Although every effort was made to obtain a gender balance, 80% of the respondents were women. An analysis of food and gender is out of the scope of this paper and has been dealt with as part of the larger project. However, all the respondents in the study acknowledged that women in households always had a more active role in food related. Households self-identified as 'middle-class' based on their everyday food security. See Nayab (2011) on the descriptors of the Pakistani middle class, and Hasnain (2018) for an examination of middle-class consumers, identity, and ideas of good

The primary respondents were between 18 and 65 years of age

(median age of 37). Each household was interviewed between 3 and 20 times depending on their availability, with each session of informal interviews and observations lasting between two to three hours (approximately the length of the shopping trip or the meal preparation). These sessions took place in produce markets, and food retail points, and in households during meal preparation and clear up. Notes on the observation and interviews were written in a field notebook and no audio recordings were taken. Respondents supplemented the data by sending photos of their food purchases, plates of food, and locations of shopping with description captions. The data was analysed by reviewing the themes emerging in each session and creating a set of codes identified.

Food has been researched in several different fields, such as anthropology, geography, medicine, and religion. One of the main problems with studying food, however, is its highly transient nature in everyday living (Mars and Mars, 2004). Despite this apparent transience for consumers, food has a complicated food system that interacts with water, energy, and governance systems before it reaches a plate. One of the main methods employed for this paper was semi-structured interviewing. A common qualitative research method, interviews are usually fluid in nature, consist of a discussion between two or more people, explore a set of topics through a prepared guide and recognize that situated knowledge is produced in the process and is a learning experience for all the participants (Mason, 2002; Rubin and Rubin, 2011; Edwards and Holland, 2013). Therefore, qualitative interviewing can be a powerful tool in food studies research, particularly because of its ability to help explore complex concepts, multiple perspectives about an issue, and the social processes at work. Hubert (2004) further observes that conversations related to food need to be conducted with those responsible for cooking and shopping in order to get a complete picture of the role of food in everyday life.

Participant observation was also employed in order to learn and understand the everyday food-related activities in their natural setting (Kawulich, 2005). Pollock (2004) notably has successfully used participant observation in her study on diets following nuclear testing in the Marshall Islands. The long-term and repeated observation sessions were useful in determining the values connected with food and the relevance of food preparation practices in managing the effects of radiation consumption. The advantages of interviewing in combination with participants observation has also been noted in a study of allotment use by migrants by Gerodetti and Foster (2015). This method allowed the interviewees to discuss the embodied experience of food cultivation, eliciting a level of emotional connection and narrative detail that did not happen when the interviews were conducted away from the cultivating activities.

While photography has had a long association with geography, the way it has been used in the discipline has evolved greatly with time, particularly with technological advancement (Sidaway, 2002; Fraile-Jurado et al., 2019). While a photographic based research method was not a key part of the methodology, the respondents in the project were asked to photograph their plates of food whenever possible. These photographs were then used to discuss ideas of good, healthy, and sustainable foods as parts of interviews (Hasnain, 2018). However, the respondents also took photographs of different aspects of their food environments, as demonstrated further in this paper. Through this, the value of photographic methods to promote active and reflexive engagements with the environment and concepts were highlighted (Sidaway, 2002, Hunt, 2014).

3.1. The Islamabad context

Designed in the 1960s, Islamabad is one of Pakistan's newest cities. It is planned in a grid-iron pattern, with each 'sector' 2 km² in area. Each sector has one large market, and four smaller ones, one each for the sub-sectors. These markets have grocery shops, vegetable and fruit

stalls, and occasionally butchers. However, since the city is also zoned into residential, commercial, and retail areas, a significant proportion of the population depends on personal transportation instead of public transportation for travel. Walking is often not a feasible option for longer distances (because of the lack of pedestrian crossing, and concerns about safety), and cycling is rare – particularly for women, because of the ease and comfort of driving, and a cultural environment that dissuades female cyclists.

Food in Islamabad is brought in through wholesalers, middle-men, and small producers from the rest of country, farms in the peri-urban areas of the city, and through regional and international imports. Residents purchase from traditional 'wet' market style wholesale markets such as the 'Sabzi Mandi' and the Sunday, Tuesday, Friday markets, and smaller grocery stores in the sector markets. In recent years, larger supermarkets and malls have been developing in the city (with more imported produce and processed meals), although residents prefer the wet markets because of convenience and affordability. These markets provide consumers with fresh produce, freshly butchered meat, poultry, and fish, grain, spices, and even clothing and furniture. Prices at these markets is now regulated by the Capital Development Authority (CDA). However, these markets usually suffer from issues around hygiene and sanitation.

Islamabad is strongly affected by the country's economic problems, of which fuel and security crises are currently at the forefront (Masood and Shah, 2012). The fuel crisis resulted in the country wide shortage of petrol and natural gas and led to chronic power cuts, which have severely affected the transport and industrial sector. Urban areas in Pakistan currently face an average of 8 h of electricity load shedding per day, with power generation at 7,500 MW as compared to a demand of 12,000 MW (Aftab, 2014). Rising rates of electricity tariffs in conjunction with increasing power cuts also significantly impacted Pakistani citizens across the country. The crisis was accelerated more recently, in part by former president Pervez Musharraf's choice to encourage the use of compressed natural gas (CNG) in vehicles and public transportation between 1999 and 2001. However, with the increasing number of household consumers, combined with the number of people using the significantly cheaper CNG for their cars, as well as consumption by power plants and industries, the decision ultimately proved to be unsustainable. The country's demands are far outstripping supply (Hussain, 2012), which has led to rationing and plans to eventually phase out CNG for vehicles, leading consumers to turn to more expensive alternatives like petrol and diesel or walking to nearby locations. Although Islamabad had been designed to ensure that every day amenities are located within walking distance, residents are strongly car-dependent, with middle class families owning at least one personal vehicle per household. At the time of the data collection for this project, load shedding and gas rationing was not as severe in urban areas as it is now, and many urban residents were developing their adaptation strategies amid uncertainty on supply and policy from the government. See Hasnain (2019) for a discussion of the urban landscape associated with food in Islamabad.

Besides mobility, the energy crisis also impacts home cooking, particularly in the winter months as gas consumption increases for indoor heating (household cooking and heating in urban areas is gas dependent). Combined with the higher fees for government supplied gas, monthly expenditures on food also rise because consumers turn to alternative fuels like kerosene and Liquid Petroleum Gas (LPG), eating out, and purchasing prepared meals. In addition, the crisis has also resulted in long queues outside fuel stations because of gas rationing and recent petrol shortages. As a result, news reports, and social media features 'queue photographs', such as the one in Fig. 1, highlighting the hours spent waiting in line, and the disruptions to transport routes. Crucially, the rise in food costs is also associated with these fuel shortages, water shortages, regional conflict, and global food prices. As such, food security is becoming a problem even for the middle class



Fig. 1. Queue for fuel - photograph by Navid.

(IRIN 2012).3

The frequency of violent and terrorist attacks has declined between the present and the time of data collection. Two bomb explosions took place during fieldwork, which significantly affected the everyday routine of the study respondents: A twin-suicide attack in a local district court located in a popular and crowded sector-market killed 11 people and injured 25 others in 2014, and tightened security in the area for a few days, and a timed explosion in the city's main fruit market killed 23 and injured over a 100 people in 2014 (Saul, 2014). Besides these, the respondents also cited a few other major violent events that changed how they perceive and interact with Islamabad: For example, Islamabad's Marriott hotel is located close to government buildings, the Parliament and several popular markets. An attack at the hotel in 2008 killed 52 people and damaged nearby buildings (Wilkinson, 2014), and a bomb explosion wounded over 50 people during religious celebration in a popular shrine (The News 2014). Therefore, at the time of fieldwork, the respondents were influenced by violent attacks in their city, and with the everyday impacts of fuel rationing, and electricity load shedding. This is examined in the following section.

4. Space and time in Islamabad's food environment

This section discusses the impacts of the temporal disruptions on the residents' food environments and their adjustment strategies. The respondents primarily respond to the disruptions by managing their practices and routines, employing 'what if?' scenarios, and waiting.

4.1. Managing routines

The respondents' routine adaptations are designed towards these anticipated disruptions of expected rhythms. This section demonstrates that because of the interdependency of time and space, these disruptions significantly change the residents' experience with their food environments. In Islamabad, temporal urban rhythms are now increasingly tied to the availability of electricity, water, and gas. Saleema, a 30-year-old housewife with two children, manages her house on her own through most of the year. Her husband works in Europe for ten months of the year, and while he 'stocks up' household essentials for the family during his trips to Pakistan, Saleema does most of the regular food shopping. Never having learnt to drive, she is dependent on neighbours or cabs for transportation:

"Usually I do not notice the trouble, but as soon as it starts to get colder, the cabs and all the food become more expensive! When the gas goes away, that's the worst. There is barely an hour in the

³ This situation has changed in current times, as most cars have switched back to petrol given the continuing uncertainty with gas supply.

morning to cook! Then I try to cook for the whole day. But last year [her husband] finally bought a gas tank for cooking. It's nice, but then I have to worry about where I can get it filled." (Saleema, March 3, 2014)

For Saleema, this restructuring takes the form of changing the times in which she prepares her meals, and then in identifying places from where she can get refills for her LPG tank. I argue that the enforced slowness and disruptions inflicted by external forces on the population of Islamabad results in the residents adopting very particular adaptations. In contrast to Vannini's (2012) Canadian off-gridders who have made the choice to fundamentally alter their daily rhythms and hence change their relationship with time, Islamabadis have their daily rhythms forcibly altered, and do not have the certainty of stability following this alteration. While this also results in a different relationship with time, for the Islamabadis this is an uncomfortable transition that they would not have chosen.

The futures anticipated in relation to food and fuel supply in Islamabad are strongly dictated by the past and the present all in ways to reduce their uncertainty. Although writing in the context of the United Kingdom, Adey (2009) similarly notes that futures in this regard can also be observed through stories told by residents who have experienced such situations before and by the media and research institutions who provide material evidence like reports (Evans, 2010). Adam and Groves (2007) point out that these 'present futures' and 'future presents' are quite common in everyday life, as they are experienced and planned for. These anticipated futures are also observed in 'affects', like fears and anxieties (Kraftl, 2007). For Islamabad, this is directly observed in fears of violent events. In the case of Gull, a young, recently married accountant, these fears have resulted in strong avoidant behaviour of areas that have been targeted in the past by terrorists and which she perceives to be future targets.

"I don't go to F-8⁴ anymore either. The lines at the CNG station make it impossible to go to my favourite grocery store, and then the court shooting has made me very nervous." (Gull, January 5, 2014)

This behaviour is driven by Gull's fear of events that might happen in the future, based on events that have already happened. While she admits that such events may not happen in these places again, or in fact that the new places she goes to may be subject to attacks in the future, changing where she goes is the only way she can deal with the anxiety. In this, she represents over seventy percent of the study's respondents who resort to changing their usual routes to adjust to the disruptions. For Islamabadis, besides protests and injunctions to their political leaders, there is little control over the supply of fuel or electricity or the price and availability of foods. Preparedness aims to limit or stop the effects of an event from disrupting the expected components of life (Collier and Lakoff, 2008). The evidence from Islamabad shows how anticipatory logics themselves can be just as (if not more) disruptive than the disruptions they are meant to limit:

"There is no expected pattern now. Winters: no gas and electricity, summers: no electricity and water, Ramadan: food is too expensive, monsoon: floods, and then food is too expensive, someone blows something up: more police blocks, and I'm too afraid to go anywhere". (Ayah, June 30, 2014)

I have accompanied Ayah, a middle-aged housewife, on her weekly shopping trip that took place a few months after a suicide-attack in the judicial offices on March 3, 2014, located quite close to her house. It is the month of Ramadan, and this is the first of her major grocery trips. She points out the elevated prices of essentials like cooking oil, flour, and sugar:

⁴A residential sector well-known for the clothing shops in its sector market, where a suicide attack on the judicial section was carried out in March 2014.

"The food cost is already up because of the petrol and the worldwide costs, but the shopkeepers know this is what we eat the most right now, so they will mark it up knowing we have no other choice. We are middle class, but I don't think we can make it if it continues" (Ayah, June 30, 2014)

She has timed the grocery trip early in the morning, in the hope of avoiding the rush hour:

"I want to keep us out of the heat as much as possible! We still have many hours of load shedding, and the house gets very hot. The fan on the UPS⁵ does nothing to fix the heat." (Ayah, June 30, 2014)

In 2014, Ramadan was during August, with high temperatures and humidity. The city had at least five hours of load shedding in the day. Consumers like Ayah therefore resorted to purchasing UPS units, an example shown in Fig. 2, or diesel generators to provide electricity during load shedding hours.

Ayah purchases enough food to last at least half the month and expresses her exasperation over having to spend twice the money for almost the same food now:

"Even twenty years ago, you could predict your routine through the year. Now? Impossible! There is a new thing to worry about with every change of season." (Ayah, June 30, 2014)

This sentiment is soon repeated by Laila, a middle-aged housewife. She prepares the woodstove, in their backyard for making bread.

"I suppose in principle it is easier to get the bread from the market, but I got this stove a few years ago so we could sometimes make corn bread, so might as well use it now." (Laila, January 9, 2014)

Laila has started storing wood from the plant trimmings from her garden to use in the winter, shown in Fig. 3. "It is very sad that I am in the middle of the capital city of the country, used to the modern life and here I am burning wood for bread, or using a gas tank in my kitchen." She thinks of it as preparation for the future when there is no gas for cooking at all. The use of wood is not a new phenomenon and the city looks increasingly bare in the winter months with most of the trees being stripped clean by bread makers using wood stoves.

Ayah and Laila have adjusted their daily rhythms around past disturbances like terrorist attacks, and increasingly continuous, daily events like gas scarcity in an effort to preserve the overall structure of their routines. There are elements of pre-emption with Ayah avoiding rush hour and the area with the suicide attack in case a similar event might take place again in the same place. For Laila, preparedness is at the forefront of her adaptation, with her acquisition of the wood stove and an LPG tank, and stocking up on wood trimmings from her yard. For these respondents such acquisitions and changes in routines are meant to preserve the fabric of their everyday life and reduce the impact of the future, anticipated scarcities as much as they can.

4.2. Waiting as strategy

The discussion of waiting in this paper is situated alongside the disruptions caused by scarcities and incidences of violence, and is an important part of the adaptation strategies adopted by certain households in Islamabad. In this context, waiting is often analogous to 'patience', and sometimes associated with a respite from the limitations inflicted by electricity and transportation. This paper's treatment of



Fig. 2. UPS and battery - photograph by Ayah.



Fig. 3. Plant trimmings saved for the winter - photograph by Laila.

waiting differs from the existing literature on waiting in that it illustrates the ambiguities of waiting as experienced by individuals not displaced from their homes and waiting for specific results, but displaced in time and from their familiar routines because of influences like scarcities and violent events.

While Jeffrey (2010) discusses the relationship of unstructured time and timepass in relation to students in India, it is significant to note that for households in Islamabad most of the waiting periods usually take place in expected and anticipated periods. Unless there are electrical faults and unannounced maintenance sessions, load shedding follows a defined schedule, and fuel is rationed out on particular days. This particular rhythm is embedded in everyday life, to the point that most people know the electricity schedules of routinely visited shops and time their visits to match them. Similarly, when the country's gas shortage becomes more pronounced, it is rationed for fuel stations and only available during particular hours of the day, two to three days a week. Following this, residents then adjust their weekly or monthly schedules. A section from the field diary presented below presents different experiences of waiting with journalists Sameena and Faiz, and mother and daughter pair, Misbah and Manal.

The line for the gas station is at least forty cars long. It almost circles the sector, and is currently populated mainly by taxi-drivers. I am in the car with Sameena and her colleague Faiz, who are trying to get fuel. 'I was so happy when I had my car fitted with CNG five years ago. It made a huge difference with how much I was spending on fuel in a month. Now of course I regret it all,' says Faiz (June 2, 2014), who owns the car

⁵ An Uninterruptible Power Supply is a rechargeable electrical apparatus that has grown in popularity in the last few years, with the increasing power load-shedding in the country. It is set up to power a number of lights and fans when the electricity goes for at least an hour. It is frequently used to provide some relief from the heat in summer months, and to power smaller devices like Wi-Fi routers and cell-phone chargers.

and occasionally carpools with Sameena. They estimate that we will be in the line for another hour at least:

"It just seems we spend our entire lives waiting, you know? Waiting for the day when the stations have gas, and then waiting for them to have electricity so they can actually pump it, waiting for petrol to be affordable, waiting, waiting, waiting! I will die of old age in a queue!" (Sameena, June 2, 2014)

Sameena leaves to buy drinks from a bakery while we inch forward in line, Faiz switching off the engine with each move. Sameena shows us the prices on the snacks and drinks she bought and then comments on how it is a good thing that it is winter, otherwise they would also charge for refrigeration, instead of just the fuel charge. Faiz worries about how the fuel situation affects his home and work life. He makes an effort to ensure that these 'line waits' draw more from his personal time than work. But this leads to problems at home: as the only person with a car, and with an elderly mother and two younger sisters at home, Faiz does the groceries and errands. Despite his best efforts, most of these errands have to be organised around gas availability. He has adapted by walking to the closest market with his sisters every week. Although this market is more expensive, he thinks it is a better choice than waiting in a fuel queue. For longer trips needing cars, he and his friends have started carpooling to the produce market. He notes that while he can get most of the items on his monthly grocery list from the market near his house, travelling to the main ones further is more sensible because of lower costs and wider variety. He explains that subsector markets often place higher price-points on their items because they have to pay more to their distributors, and have fewer customers.

On the other end of the city, Misbah and her family wait for the electricity to return. For them, the most worrisome aspect of the load shedding is the delays in meal times. But when electricity and gas shortages impinge on meal times, they consume snack foods, fruits and dried fruits until the time food can be prepared. "I just tell everyone to relax. After all, the fruit of patience is sweet! I wonder though when we will get it......" (Misbah, June 17, 2014)

Her daughter Manal is more impatient. She spends most of the time using her laptop and mobile phone. Her consumption of packaged and fast foods has gone up in recent months and she mostly eats crisps, cookies, chocolates, and ramen noodles at home: "I associate them now with when there is no electricity. This is easier while you're waiting for electricity so you can get back to work". (Manal, June 17, 2014).

When not with her friends, she meets her friends at cafés, and her mother may mirror this activity by catching up with some of her neighbourhood friends. Following on Cowan (1991) and Nisbett (2007), 'hanging out' in cafes was also observed among some of the youth in Islamabad, even as they decried the limitations placed on them because of the gas and petrol crisis. Similarly, women of different households adopted practices like getting together for tea to see out power outages. This was particularly common in neighbourhoods and streets where families had lived together for years, and quick trips for tea and conversation were common. Besides inter-household socialising being galvanised and routinised over the mutual woes of electricity, tea and snack breaks during load shedding within the house were also common. Sameena, Faiz, Misbah, and Manal spend a significant amount of their time waiting. For them, waiting is performed in queues at gas stations and at home waiting for load shedding sessions to end. However, unlike the 'investment' focused waiting experienced by those involved in higher education, these residents are waiting for the causes of these daily disruptions to end, so they can either return to the rhythm of life they have become accustomed to, or for alternative solutions that may lead to a better tomorrow.

4.3. 'What if?'

One of the major effects of power-outages and limited gas and water supply is on the beginning and endpoints of everyday activities. The water supply system is also dependent on electricity, and some residential areas do not receive their allocated water supplies during load-shedding hours. For people who do not have personal wells, load-shedding has a significant impact on their water supply as well. At a very basic level, a family has to move cooking times, meal times, showers, and things like starting the water pump to fill the tanks.

Having invited me to lunch, Husna apologises for the load shedding and hands me a manual fan to deal with the heat. I help her set the table as she rushes to heat food over the stove. This takes a long time because of low gas pressure and she cannot use the microwave because of the power-cut. By the time the food is ready, it is already an hour past their scheduled lunch time. It has upset the course of the rest of the day for Husna and her husband Jamil:

"We have a few luxuries in life, and one of them knows the routine of the day. I know we should be used to the electricity at least, since they change the schedule so often, but it's frustrating." (Jamil, December 12, 2013)

Husna keeps bottles and pans of water filled in the kitchen for when water is available, to use for cooking and boiling for drinking water. Filling the water containers in the kitchen and bathrooms is their first activity once water supply starts. To deal with these disruptions to their daily life, they try to prepare in advance as much as they can. Husna's cook comes for two hours a day, four days a week, and in that time they both try to prepare and cook as many meals they can. His efforts are mainly focused on peeling and slicing the produce, preparing the meats, and making packets of foods for freezing. This is to ensure that when Husna does have to cook, she can do so as quickly as possible, in time for the family's schedule.

"Before, he [the cook] would help me with the groceries and cook the food for the day. Then we didn't have to worry about the time. But now we must account for things like, what if there is no electricity? What if there was no gas? What if there's another explosion somewhere?" (Husna, December 12, 2013)

For Islamabadis, preparedness actions have largely been driven by the 'worst case scenario' options of 'what if?' questions.

Residents in Islamabad reflect this when the actions they take are very much in line with 'when' and 'then', where the worst case 'when' scenario is naturally assumed will happen, instead of preparing for an event which might not happen. This willingness to change routine to ensure that meal times are on time can be observed in families with children as well. Batul owns a small business, and is mother to three school-going children. For her, the electricity and gas crisis affects the times at which she wakes up. The gas pressure in her neighbourhood falls around seven in the morning during the winter. She has a live-in maid, who helps her with cooking and cleaning.

"Tasneem [the maid] and I wake up half an hour before the time of the morning-prayer and then just stay awake. We cook for the entire day then. There is no choice. The gas is not there the rest of the day." (Batul, March, 4, 2014)

In Batul's words, this adjustment helps her ensure that everything else in the day proceeds as planned. This way, everyone can have breakfast before they leave for work and school, have a homemade meal for lunch and then can reheat the dinner when they are back. As she notes, "Reheating is not that bad. You don't need a lot of gas pressure for it, and if there's electricity, we can use the microwave".

On the other hand, Nureen has a UPS system, LPG tank, and a generator installed at her house. Nureen and her husband Asif mainly work from home. Unlike Batul, who still manages most of the house's functioning despite having a maid, Nureen has a cook and a maid to take care of grocery shopping, cooking, and cleaning. Her family's routine is more relaxed as compared to Batul's and Husna's. For them, the 'endpoint' disruption management is focused on their work:

"If Asif has a conference call, he'll want to have his food just before that and have a constant supply of tea during it. It is the same with me if I'm working overnight to meet a project deadline. Then, I'd rather have food and tea as soon as I ask for it." (Nureen, February 21, 2014)

When I visit her, the scheduled power outage is in effect for her sector, something I do not notice until I leave, as the UPS system and generator had been on the entire time. Her cook and maid, as compared to many other 'house help' individuals, have a lot of control over the house. Kareem, the cook, is in charge of grocery shopping. He gets a certain amount of money from Asif for the monthly groceries and makes one major trip a month by cab to the produce market for everyday cooking essentials. For fresh vegetables and fruits, he walks to the local sector market

For residents like Husna and Nureen, preparedness actions are completely reactive to the electricity and gas situation in the city. Nureen ensures that the disruptions do not interrupt their everyday routine, and Husna confirms that she is not caught off guard in case of unexpected outages. Their efforts are in line with Elmer and Opel's (2006) point on how answering 'what if?' questions put's one in the 'driver's seat' of the situation. Preparing for the worst case option of 'what if?' scenarios allows them the power, control, and the ability to position themselves in a favourable manner against the foreseen future outcome.

5. Conclusion

This article began by noting the relationship between a city's rhythms and its food environments. In Islamabad these rhythms are strongly influenced by energy and security crises, and the ways in which the residents adapt to the disruptions caused. This paper contributes to the literature on food environments and urban food security by emphasising the influence of temporal changes. It has argued for an alternative perspective on urban food security, from the point of view of the self-defined middle class, a section of the population that often experiences food stress because of regional and national scarcities of fuel and cost inflation and has to depend on particular strategies to stay ahead of the oncoming stressors. This has significant implications for research, particularly in Pakistan where the focus has historically been on the resource-poor members of society, and where social safety nets for food insecurity are not available for most of the population. If the economic and security conditions were to worsen, a larger proportion of the society is set to suffer because of their difficulties with adaptation, and having to adapt in a context not suited for most other socioeconomic classes.

The case of Islamabad therefore demonstrates how food environments are dynamic, cross-cut by temporalities and disruptions of rhythms. The paper has shown how factors creating change in food environments are place-specific and have consequences for everyday food security for middle class populations of urban areas. The disruptions of electricity, gas, and water have significant effects on residents' food, work, social life, and mobility. Throughout this paper, I have argued that these temporal disruptions are one of the main targets of everyday adaptations. Families face an increasing struggle to maintain some semblance of temporal balance to their life. There is a common narrative to life in Islamabad now, often prefaced by questions on how one is faring for the supply of gas, water and electricity. These are then followed by discussions on how one chooses to deal with these issues. Food is a constant variable in these conversations, with discussions on cost, where to source particular food items, convenience of access, and how to adjust to the different times of gas and water supply.

It is important to note that while temporal disruptions and the notions of 'waiting', 'patience', and 'routine', are interlinked with most aspects of everyday life, food can provide a useful lens in studying these phenomena. In the short term, from the point of view of food, people

use tea, snack foods or fruit, or negotiate meal times while waiting for electricity or gas to return, and in the long term may depend on amenities like alternate stoves or generators to bypass future waiting periods completely, or socialising with friends and family to make waiting more pleasurable. The results of this research thus speak back to the literature on waiting by giving perspectives on the use of waiting periods incited by scarcity episodes. The results emphasise the fact that timepass is far more than a passive, temporally driven activity, but is in fact a powerful component of everyday adaptation strategies.

Increasingly, adaptations like carpooling with friends, walking to nearby stores instead of using a car and purchasing items like kerosene or wood-burning stoves are seen in households to cope with the changes. Viewed in light of Anderson's anticipatory logics (2010) these activities are examples of preparedness, motivated either by an effort to preserve routines, or as an answer to 'what if?' questions. These anticipatory logics are particularly stressful for the middle-class portion of the population, as often they have not had to deal with these problems in Islamabad before the problems with electricity and fuel shortages started. For some, these disruptions signal a potentially dangerous shift of food security for them in the future. This is particularly critical because 'vulnerable' middle-class households, have fewer assets and resources to adjust and adapt to food security related disruptions, and might potentially slide into lower socio-economic of food insecure classes. Food environment focused framings, and using food systems thinking in the context of food geography can help in broadening the discussion of the dynamics affecting household food security, systemlevel disruptions in food and energy systems, and the various conditions and aspects that influence responses and adaptations. While these have been examined elsewhere (see Hasnain, forthcoming), the interconnections of food security, food environment, and disruption-focused responses can help in adding a temporal value to policies and regulations and ensuring that existing safety nets in countries account for the vulnerability of certain socio-economic classes (Navak et al., 2015).

The paper's focus on the middle class is not meant to detract from the problems of the lower socio-economic class of the country that face their own severe challenges with food security, or to suggest that they are in some ways better prepared to respond to food security shocks, but is meant to direct attention to a population class with significant purchasing power. This group is exceedingly worried about stable food access in an area of the country that for all appearances is doing better than other cities and villages. Their worries and experiences in the city in responding to these food/fuel stressors result in a particular set of adaptation logics that can be evaluated from a temporal perspective as well, to provide a richer narrative of their everyday experience. Few in developed countries have experienced the kind of urban stresses that the people in Islamabad are increasingly used to. However, their experience can be used more widely to investigate the possibilities of a global future where fuel is rationed, uncertain, expensive, and tightly interwoven with our food supply.

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