

“A Different Kind of Hot”

Centring the Everyday Extreme Heat Experiences of Young Women in Accra

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Thesis for the fulfilment of the

Master of Science in Environmental Sciences, Policy & Management (MESPOM)
jointly operated by Lund University – University of Manchester -
University of the Aegean – Central European University

Lund, Sweden, June 2026



**Erasmus Mundus Masters Course in
Environmental Sciences, Policy and
Management**



MESPOM

This thesis is submitted in fulfilment of the Master of Science degree awarded as a result of successful completion of the Erasmus Mundus Masters course in Environmental Sciences, Policy and Management (MESPOM) jointly operated by the University of the Aegean (Greece), Central European University (Hungary), Lund University (Sweden) and the University of Manchester (United Kingdom).

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Published in 2026 by IIEE, Lund University, P.O. Box 196, S-221 00 LUND, Sweden,

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ISSN 1401-9191

Acknowledgements

I am a mosaic of everyone I've ever loved. And because of them, I am endlessly unfinished, endlessly becoming.

I came across this quote somewhere along this MESPOM journey and it really resonated with my life in general, but especially of these last two years. I remember opening my acceptance letter and not quite believing it – how could *I* be deserving of such an opportunity? I had no real idea what was coming, only that I craved to be challenged, to keep learning, and to keep growing. This programme gave me all of that and more. Not just through the coursework, but through actual lived experience (wink wink). Vienna, Lesvos, and Lund will each stay a part of me forever, making up the mosaic that is Skye. This thesis, despite its struggles, is one tile in the mosaic. The rest are the people who made it possible, and it is to them I wish to say

Thank you ! / Tack så mycket ! / Ευχαριστώ πολύ ! / Danke schön !

My sincerest gratitude to the eleven young women who participated in this study. Lending your voices, your photographs, and your candour on topics that were not always easy to discuss took real generosity. This thesis exists because of what you shared, and I hope it does you justice.

Thank you to my co-supervisors, Anna-Riikka Kojonsaari for your feedback, and Amanda Odoi for your support in organising and executing the study. To the professors who shaped this thesis in ways large and small: Dr. Laszlo Pinter, for his support during the initial idea development phase and support throughout the programme; Dr. Tamara Stegar, whose course on environmental justice and storytelling was a formative influence on the direction of this work; Dr. Iosif Botetzagias, for his guidance on climate vulnerability; and Dr. Guntra Aistara, for recommending Feminist Political Ecology to me at exactly the right moment. To my academic mentor Orsi Nyárai, thank you for the continuous encouragement and for reminding me, every time the doubt crept in, that I belonged here.

I owe deep gratitude to my amazing family, the people who supported me the most on this journey. Thank you to my mum, whose video calls across the ocean kept me tethered to home, and who held up the camera to our wee Whisky dog when words were not enough. You are the warmest person I know, and every good thing I do has a bit of you in it. To my dad, thank you for your proofreading and advice, you are the original 'sponge' who taught me that curiosity is worth following wherever it leads. Thank you to my sister Teah, for keeping me laughing on every cycle home from uni. You are one of my favourite people, and one of the best ones too. Thank you all for every encouraging message sent across the hours and for always believing in me. I love you all eternally, I am who I am because of you, and I am so grateful for and proud of that.

To my friends back home, thank you for the reminders of love that arrived at exactly the right moments. To my MESPOM friends (shoutout froots and chicas), we will be friends for life. Thank you for the amazing and unforgettable memories across these two years, and during this thesis process specifically - for the group support calls, the late-night jokes that fuelled our writing, and for everything in between. I love you all. To all the wonderful friends I met throughout this journey, including in MESP, IIIIEE B31/B32 and Alte Kamereren (ja!!), thank you for the conversations, the music, the adventures, and the reminder that learning happens everywhere.

And finally, to myself, for trusting the process even when it was hard, and for seeing this through. Look how far you've come! On to the next tile.

Abstract

As climate change continues to intensify, young women are among those most affected, particularly in rapidly urbanising cities across the Global South. In Accra, one of West Africa's fastest-warming cities, young women navigate extreme heat daily, yet heat vulnerability research and policy rarely draw on their lived experiences. Accra's Climate Action Plan (CAP) is currently under revision with stated commitments to gender-sensitive adaptation, but without grounded evidence of how heat is actually lived by those most affected, those commitments cannot translate into meaningful action. This thesis examines how young women in student and early professional life in Accra experience and narrate extreme heat, how gender shapes that experience, and what their situated knowledge can contribute to gender-responsive adaptation planning. Drawing on Feminist Political Ecology and feminist urbanism, data were collected with eleven young women across the Greater Accra Metropolitan Area (GAMA) through semi-structured interviews, supported by a photo elicitation activity. The findings show that heat management is anticipatory, continuous, and gendered. Participants navigate the city through detailed mental maps of shade and safety and bear the costs of inadequate infrastructure in their bodies, routines, and professional lives. New contributions to the literature include the intersection of reproductive physiology and heat vulnerability, the implications of heat for safety in public space, and withdrawal from public life as a form of spatial exclusion. Participants demonstrate situated knowledge of what gender-responsive urban design would require, positioning them as agents of change rather than passive, vulnerable subjects of climate risk. The study concludes that the gap between Accra's climate policy commitments and lived reality is not one of knowledge but of political will and calls on the Accra Metropolitan Assembly (AMA) and the Ministry of Gender to centre the situated knowledge documented here in the revision of Accra's CAP for 2026–2036.

Keywords: Urban Heat Vulnerability, Feminist Political Ecology, Feminist Urbanism, Situated Knowledge, Gender-Responsive Adaptation, Accra

Executive Summary

Urban heat is intensifying across West African cities, and its consequences are not evenly distributed. Young women navigating cities like Accra, Ghana, bear a disproportionate share of those consequences, shaped by the specific combination of gendered social expectations, care responsibilities, reproductive physiology, and spatial conditions that determine both how heat is experienced and what options are available for managing it. Yet the existing research on heat in Accra focuses predominantly on physical measurements and aggregate health outcomes, leaving the social, embodied, and gendered dimensions of heat vulnerability largely unaddressed. Ghana's climate and gender policy commitments are growing, as Accra's Climate Action Plan (CAP) is currently under revision for 2026-2036, with stated commitments to gender-sensitive adaptation and inclusive, human-centred climate governance. However, without grounded evidence of how heat is actually lived by those most affected, those commitments cannot translate into meaningful action.

This thesis examines how young women in student and early professional life in Accra experience and narrate extreme heat in everyday urban life, and what their situated knowledge can contribute to more gender-responsive approaches to urban heat adaptation. Rather than positioning women as victims of climate risk, the study treats their daily practices, spatial knowledge, and coping strategies as forms of expertise that are currently underrepresented in both research and planning. Three research questions guide the study:

RQ1: How do young women in student and early professional life in Accra experience and narrate extreme heat in their everyday urban lives?

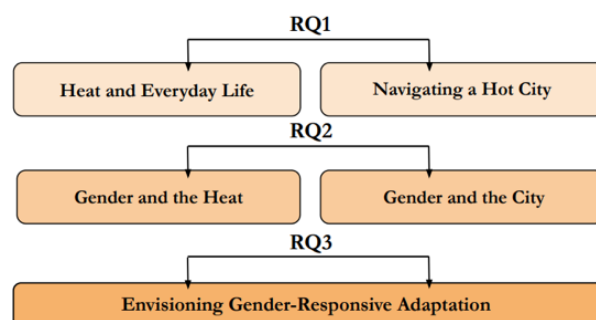
RQ2: How does gender shape the experience of urban heat, through social expectations, care responsibilities, and spatial conditions in Accra?

RQ3: How can the situated knowledge young women have developed through living with urban heat in Accra inform gender-responsive adaptation planning?

Research Design and Methods

To explore these questions, the study used a qualitative research design grounded in Feminist Political Ecology (FPE) and feminist urbanism. FPE provided the analytical vocabulary for understanding why heat vulnerability is unequally distributed through social structures, while feminist urbanism provided the spatial specificity for examining how those inequalities are expressed in the built environment. Data were collected with eleven young women across the Greater Accra Metropolitan Area (GAMA) through semi-structured interviews. This was supported by a photo elicitation activity in which a subset of four participants photographed moments, spaces, and situations representing their experience of heat in Accra and reflected on what they captured. Participants ranged in age from twenty to thirty years of age, and included students at Ghanaian universities, national service personnel, and early-career professionals.

Through thematic qualitative analysis, the findings were organised in line with the research questions to move from participants' general experience of heat and the city to a gendered reading of that same experience and, finally, to how participants envision gender-responsive adaptation in Accra.



Summary of the Findings

The findings reveal that heat in Accra is not an occasional disruption but a structural condition of daily life. The first two themes below describe how heat is experienced and navigated in general terms; the following two then read those same experiences specifically through gender, showing that the cost of managing heat falls unevenly along lines of gender, care responsibilities, reproductive physiology, and access to infrastructure. A final theme turns from experience to recommendation, presenting what participants themselves believe needs to change in Accra.

Heat and Everyday Life

- Heat management is anticipatory rather than reactive, built on detailed, place-specific knowledge that shapes behaviour before participants leave the house
- Heat accumulates in the body across the day in physical traces (rashes, fatigue, disrupted sleep) that are treated as normal rather than as symptoms requiring attention
- Dumsor removes cooling infrastructure precisely when it is most needed, with consequences distributed along lines of class and institutional access

Navigating a Hot City

- Restructuring daily schedules and enduring the trotro's converging infrastructure failures are near-universal adaptive strategies, reflecting consistent infrastructure failure rather than individual resourcefulness
- Nine of eleven participants withdraw from public space altogether during the hottest periods, at measurable cost to professional and social participation, which compounds further in inadequately cooled workspaces

Gender and the Heat

- Colourism rooted in colonial histories compounds sun exposure for women, and gendered norms of public appearance constrain clothing choices that would otherwise ease thermal discomfort
- Reproductive physiology (menstruation, pregnancy, hormonal variation) compounds heat exposure in cyclical and physiologically documented ways not previously studied in West Africa

Gender and the City

- Women's reduced flexibility to reroute, reschedule, or choose alternative transport means the cost of inadequate infrastructure falls most heavily on them
- The safety-heat intersection, where not every cool space is usable for women, extends even into domestic space, and participants could not name a single public space in Accra designed for women to gather or seek relief from heat

Envisioning Gender-Responsive Adaptation

- Participants identified structural causes of intensifying heat and articulated precisely what would need to change, shifting the framing of women as victims of climate risk to agents of change
- Their recommendations, (e.g. shaded infrastructure, reliable cooling in public buildings, and safe female-accessible public space), name a gap that is less one of knowledge and more one of political will

Conclusions and Recommendations

Young women in Accra are navigating a rapidly warming city largely without the infrastructure, planning, or policy attention that their daily reality requires. Ghana's climate and gender commitments are growing, but the gap between what strategy documents promise and what participants encounter on an ordinary hot day remains wide and largely unaddressed.

To address this, three recommendations emerge directly from the findings:

- 1. Centre women's situated knowledge in climate adaptation planning.** Increase the participation and inclusion of women (particularly young women, informal workers, and others currently excluded) in urban climate adaptation planning processes. Their situated knowledge of heat should be treated as primary evidence for informing urban climate adaptation processes such as the 2026-2036 CAP revision.
- 2. Apply gender-responsive urban design principles to heat adaptation infrastructure.** Shaded pedestrian routes, covered bus stops, safe public resting spaces, passive cooling in public buildings, and green corridors in high-density neighbourhoods address the needs of the most constrained users while producing measurable thermal benefits for everyone. Designing from constraint produces better cities for all.
- 3. Close the policy-to-practice gap.** Ghana has climate and gender policy commitments in place, but the translation into specific, funded, and time-bound infrastructure targets is lacking. This requires a gender and climate accountability mechanism, whether a specific working group, a standing committee within the Accra Metropolitan Assembly, or a formal gender-mainstreaming mandate embedded in the Climate Action Plan revision process.

That eleven young women independently arrived at the same strategies is evidence of consistent infrastructure failure. These same women have identified its structural causes, named who bears the greatest burden, and articulated with precision what would need to change. Their knowledge is detailed, accurate, and directly relevant to the planning processes that claim to be integrating it. Accra's CAP for 2026-2036 is under revision and Ghana's National Gender Policy has just been updated. What is required is the will to treat it as evidence, and the planning processes currently underway are a direct and timely opportunity to begin.

Several promising directions for future research follow from the findings. The intersection of reproductive health and urban heat is the most urgent as little existing research in West Africa addresses the relationships between menstrual health, pregnancy outcomes, and thermal stress, and this gap represents both an empirical and a public health priority. Future research should also centre the groups participants themselves identified as most vulnerable (informal workers, market women, hawkers, and migrants), examining how class, occupation, care responsibilities, and disability intersect with gendered heat vulnerability. A third direction is spatial and participatory. Feminist spatial methods should map where the geographies of thermal relief and safety diverge, and test planning interventions in direct collaboration with communities. Finally, the framework developed here with Feminist Political Ecology and feminist urbanism has potential beyond Accra. Comparative research across other cities experiencing rapid urbanisation and intensifying heat would test its transferability and broaden the evidence base for gender-responsive urban climate adaptation.

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Abbreviations

AC - AIR CONDITIONING

AMA - ACCRA METROPOLITAN ASSEMBLY

CAP – CLIMATE ACTION PLAN

FPE - FEMINIST POLITICAL ECOLOGY

FUPE – FEMINIST URBAN POLITICAL ECOLOGY

GAMA - GREATER ACCRA METROPOLITAN AREA

GIZ - GERMAN SOCIETY FOR INTERNATIONAL COOPERATION

IPCC - INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE

IOM - INTERNATIONAL ORGANIZATION FOR MIGRATION

IUCN - INTERNATIONAL UNION FOR CONSERVATION OF NATURE

MIT - MASSACHUSETTS INSTITUTE OF TECHNOLOGY

NbS – NATURE BASED SOLUTIONS

NGO - NON-GOVERNMENTAL ORGANIZATION

PSI - PUBLIC SERVICES INTERNATIONAL

RQ - RESEARCH QUESTION

SPF - SUN PROTECTION FACTOR

UN - UNITED NATIONS

UNFCCC - UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

WHO - WORLD HEALTH ORGANIZATION

Glossary

Key Concepts and Frameworks

Feminist Political Ecology (FPE)

This thesis draws mainly upon the theoretical approach of Rocheleau et al. (1996) that treats ecological, political, social, and economic life as inseparable, and places gender at the centre of how environmental vulnerability, knowledge, and responsibility interact. Rather than treating environmental risk as a neutral biophysical condition, FPE reads it through relations of power, labour, and care, asking whose knowledge counts, who holds rights and responsibilities over resources and space, and who has access to the political processes that shape how environmental problems are addressed.

Feminist Urbanism

A critical tradition within urban planning and geography, integrated into this thesis largely from Kern (2020). It examines how cities are physically designed around gendered assumptions, often built implicitly around the routines and bodies of men, and asks what a more genuinely inclusive city would look like. It draws attention to how the built environment shapes whose movement, safety, and comfort are treated as the design standard, and argues that designing from the perspective of those with the least flexibility tends to produce better conditions for everyone.

Feminist Urban Political Ecology (FUPE)

An emerging analytical tradition from Prouse and Arefin (2024) that brings together Feminist Political Ecology's attention to gender and environmental power relations with urban political ecology's framing of the city as a socio-environmental process. This thesis largely aligns with FUPE but instead pairs Feminist Political Ecology with feminist urbanism to foreground the built environment and planning as specific sites of gendered exclusion and possible change.

Gender Mainstreaming

The systematic integration of gender perspectives into all stages of policy design and implementation, so that the needs and experiences of women shape outcomes rather than being addressed as an afterthought (UN Women, 2022). In this thesis, gender mainstreaming refers to the broader governance process, whereas gender-responsive urban design, below, is its specific application to the built environment.

Gender-Responsive Urban Design

The practical application of feminist urbanism's principles to planning and infrastructure decisions accounting for the differences amongst genders in use and movement through urban space. Ideally developed through direct engagement with those who will use the spaces rather than assumed on their behalf.

Situated Knowledge

Knowledge that is produced from a specific social position and lived experience, rather than claimed as neutral or universal. In this thesis, the term refers to the understanding that participants have developed through navigating heat daily, which is treated as a primary and credible source of evidence for adaptation planning rather than as anecdotal or supplementary.

‘The Everyday’ (as an analytical category)

Following scholars working in human geography and sociology, this thesis treats climate change as something *lived* through the routines, bodily sensations, and small, situated stories of daily life, rather than as an abstract global systems problem. This framing directs attention to the mundane details through which heat is actually encountered and treats these details as a legitimate and necessary source of knowledge about climate impact. **Everyday geographies** in this thesis involves the routines, movements, and constraints through which people navigate urban space in daily life, to give this framing a spatial dimension (Roy 2026). Its use aims to show not only that heat is lived through everyday experience, but that this experience takes shape through where a person can go, how they move, and what they are expected to endure.

Local Terms

Dumsor

A Twi expression meaning 'off and on', used in Ghana to describe the frequent electricity outages in recent years, driven in part by seasonal drops in hydroelectric capacity at the Akosombo dam.

Trotro

An informal shared minibus used for public transport across Ghana.

*'Ghana has always been hot, Accra has always been hot, but in the last five years, it's been
a different kind of hot.'*

Research Participant, Accra, 2026

1 Introduction

Climate change is reshaping everyday life in cities across the world. Once described as a great equaliser, a shared threat that would cut across social divisions, its current impacts have proven otherwise: they are uneven, unequal, and shaped by the same historical structures of inequality that have always determined whom cities serve and whom they leave behind (Bella, 2023; Klein, 2014). Among its most immediate and intensifying impacts, extreme heat has emerged as one of the most serious urban climate risks of the twenty-first century. As global temperatures rise, heatwaves are increasingly becoming more frequent, longer, and more severe, threatening public health, livelihoods, and the basic conditions of daily life (IPCC, 2022; Perkins-Kirkpatrick & Lewis, 2020). In urban environments, the effects are compounded by the urban heat island effect, where densely built infrastructure, reduced vegetation and waste from human activity push city temperatures significantly above those of the surrounding areas, exposing residents to sustained thermal stress that weather records alone do not fully capture (Oke, 1982; Santamouris, 2015).

Extreme heat also falls hardest on those in urban areas with the least capacity to escape it. Marginalised communities in cities, particularly those already living with inadequate housing, limited green space, unreliable electricity, and constrained mobility, face the sharpest and most immediate consequences of a heating world (Bella, 2023; IPCC, 2022). Cities in West Africa face particular exposure to these dynamics. Rapid urbanisation, population growth, and deep inequalities in access to housing, infrastructure, and public services have intensified climate vulnerability across the region (Niang et al., 2014; UN-Habitat, 2020). In Accra, Ghana, rising temperatures interact with existing socio-spatial inequalities such as housing quality, access to shade and green space, electricity reliability, and proximity to cooling infrastructure (Boafo et al., 2025; Codjoe et al., 2020). These are often unevenly distributed and fundamentally shape how residents experience heat (Codjoe et al., 2020; Owusu et al., 2019).

Gender, disability and race are some of the most significant axes through which heat vulnerability is differentiated. Historically, the everyday realities of women, people of colour, low-income communities, and people with disabilities have been consistently overlooked in how cities are built, governed, and maintained (Bella, 2023; Greed, 1994; Kern, 2020). As feminist geographers have argued, unequal gender relations are not merely reflected in the spatial structure of cities but are actively produced by them (Kern, 2020). Under conditions of accelerating climate change, these long-standing spatial inequalities are intensifying. Women's care responsibilities, domestic roles, and mobility patterns shape both their exposure to heat and the options available to them for coping with it (Anjum & Aziz, 2025; Seager, 2014; Sultana, 2014). In Accra specifically, research in informal settlements has found that women report higher climate vulnerability than men despite similar levels of exposure, owing to domestic responsibilities, limited access to resources, and exclusion from decision-making (Owusu et al., 2019).

Despite these heightened vulnerabilities, women are systematically underrepresented in the political leadership and planning processes through which climate responses are designed, meaning that those making decisions about how cities adapt are rarely those most affected by what is being adapted to (Bella, 2023; Nightingale, 2017). Further, research treats gender primarily at the level of structural vulnerability, leaving the everyday, embodied, and narrated experience of heat underexplored. Where social dimensions of heat are examined, gender is often treated as a fixed demographic variable rather than as a set of dynamic roles, responsibilities, and spatial practices that shape how individuals move through and experience

the city (Arora-Jonsson, 2011). This flattening is part of what intersectional climate scholarship has cautioned against, calling instead for attention to the overlapping, context-specific positions, such as age and life stage, that actually shape how climate is experienced (Kaijser & Kronsell, 2014). Scholarship on everyday geographies has begun to answer that call, using the routines, movements, and constraints through which people navigate urban space in daily life to show how heat intersects with mobility, safety, and access to space in ways specific to women's lives (Roy, 2026). Existing research on gender and heat, however, still tends to frame women primarily as a vulnerable group, paying insufficient attention to their knowledge, coping strategies, and the situated expertise they develop through navigating heat daily.

In Ghana, while the physical science of urban warming in Accra is increasingly documented (Gyimah et al., 2023; Wemegah et al., 2025), the everyday realities of living and working in a heating city remain comparatively understudied (Guardaro et al., 2022), and the experiences of those most affected are rarely centred in adaptation planning (Nastar & Armah, 2026). Internationally, climate change adaptation has become a central policy priority. The Paris Agreement commits signatory states to enhancing adaptive capacity and reducing vulnerability, and Accra's own climate planning, including a Resilience Strategy and a Climate Action Plan (CAP) now under revision for 2026-2036, signals growing institutional attention to urban heat (Accra Metropolitan Assembly, 2019; IOM Ghana, 2025). Yet the gap between policy ambition and lived experience remains wide. As Bella (2023) argues, climate action is far from a neutral practice, as adaptation strategies that focus on technical and infrastructural approaches risk reproducing the very inequalities they claim to address. Without an intersectional focus, including a gender-lens, adaptation planning will continue to serve the city's historically more privileged users while leaving others to endure (Bella, 2023).

1.1 Problem Definition

Despite growing recognition that urban climate adaptation must account for gendered vulnerability (Alber, 2024), a significant gap remains between the gender-responsive ambitions of climate policy and the evidence available to realise them. In Accra, research has established that women experience greater vulnerability to heat than men (e.g. Owusu et al., 2019), yet the experiences of women are still largely addressed through broad categories of vulnerability rather than through an understanding of how heat is actually experienced and navigated in everyday urban life. This is particularly problematic for young women, whose age and life stage shape how they move through, use, and depend on urban spaces and infrastructure, in ways that differ meaningfully from an older woman or a mother travelling with children, for example. A young woman moving independently through the city for study or work occupies public space on different terms altogether (Kern, 2020), yet these differences remain largely absent from existing research and adaptation planning. Without evidence of how different women experience, respond to, and make decisions around extreme heat, gender-responsive policy risks remaining a broad principle rather than adaptation grounded in the realities of those it seeks to support.

This thesis addresses this need by examining the everyday extreme heat experiences of young women in tertiary institutions and entry-level employment, a group who spend significant time moving through urban space, using public infrastructure, and depending on the functioning of cooling systems for their academic and professional work. Where existing studies establish that gender differentiates heat vulnerability, this study takes an intersectional intra-gender approach to examine young women's experiences specifically. Their position at the intersection of gender, youth and urban life in a rapidly warming city makes their experience both distinctly understudied and directly relevant to the kind of evidence Accra's adaptation planning currently requires.

1.2 Aim and Research Questions

The aim of this thesis is to examine how young women in Accra experience and narrate extreme heat in everyday urban life, and to examine what their situated knowledge can contribute to more gender-responsive approaches to urban heat adaptation. To achieve this aim, the thesis will be guided by three (3) research questions (RQs):

RQ 1: How do young women in university and early professional life in Accra experience and narrate extreme heat in their everyday urban lives?

RQ 2: How does gender shape the experience of urban heat, through social expectations, care responsibilities, and spatial conditions in Accra?

RQ 3: How can the situated knowledge young women have developed through living with urban heat in Accra inform gender-responsive adaptation planning?

The three research questions work together to build from experience toward contribution. RQ1 is primarily descriptive, establishing how heat is lived, navigated, and narrated in daily life. RQ2 is explanatory, examining how gender shapes those experiences through aspects such as care responsibilities, social expectations, and spatial conditions. RQ3 is oriented toward contribution. The situated knowledge held by young women about urban heat is what gender-responsive adaptation planning would need to draw on but which is not yet available. Due to the lack of implemented gender-sensitive heat adaptation in Accra, the thesis leans more to evidence production rather than policy evaluation.

1.3 Scope and Dimensions

This study explores the lived experiences of extreme heat of young women in Ghana's Greater Accra Region (GAMA). It brings together participants who are university students and those in early professional life as a deliberate delimitation that is understudied in Ghana's extreme heat research. While these women's daily structures differ in terms of schedule flexibility and income, they share a set of conditions that make their experiences analytically comparable, such as reliance on public transport, navigation of the same urban spaces during the hottest hours and the obligation to perform academically or professionally regardless of the thermal conditions in which they arrive. It is this combination of mobility, obligation, and exposure, rather than demographic similarity alone, that positions them as a coherent group for examining how heat is lived in Accra. The study does not aim to produce a comprehensive analysis of heat across Accra, to compare experiences across gender groups, or to generalise findings to all women in the city. Its scope is deliberately narrow, offering in-depth, qualitative accounts from a specific group in a specific urban context. This focus reflects both an interest in and a need for understanding heat as it is lived and felt in the body and in daily life, rather than as it is measured or aggregated. The everyday experiences of young women navigating Accra's heat represent a dimension of urban heat vulnerability that remains largely undocumented, and it is the depth of that account, rather than breadth of sample, that this thesis aims to explore. As Flyvbjerg (2006) argues, context-rich case knowledge is itself a contribution to understanding, and findings from one situated case may be analytically transferable to similar urban and climatic contexts even without formal generalisation. Data for the study were collected from young women aged 20 to 30 years in the GAMA. Eleven participants took part in semi-structured interviews, with a subset of four also participating in a photo elicitation exercise. Data collection took place remotely in April and May 2026. The findings reflect experiences of heat during that period.

1.4 Audience

The primary audience for this thesis is urban planners, policymakers, and climate adaptation practitioners in Accra and in comparable rapidly urbanising cities, particularly those engaged in developing gender-sensitive adaptation strategies. The AMA, organisations supporting the 2026-2036 CAP, and Non-Governmental Organisations (NGOs) working on gender and urban resilience in Ghana may find the findings directly relevant to current planning processes. It can also inform researchers working at the intersection of urban climate adaptation, feminist political ecology, and feminist urbanism, particularly those seeking to extend these frameworks into Global South urban contexts where their application remains underdeveloped. Equally, this thesis is written with the young women whose experiences it documents in mind, and for others navigating similar conditions across Accra and beyond. The findings validate what many already know from daily experience and make that knowledge visible in a form that can be used in policy conversations, advocacy spaces, and community organising. Understanding the structural causes of heat vulnerability, knowing that the burden is not personal but produced by planning decisions, and seeing their experiences reflected in research may itself be useful to women in this cohort as they navigate their urban environments and advocate for the conditions they deserve.

1.5 Disposition

Chapter 1 (Introduction) establishes the rationale and direction of the thesis, defining the problem of gendered urban heat vulnerability in Accra, stating the aim and research questions, then outlining the scope, dimensions, and intended audiences of the study.

Chapter 2 (Literature Review) presents the literature review, establishing the current state of knowledge on urban heat vulnerability in Accra, gender and heat in urban space, and the narrative approaches that inform the study's methodology.

Chapter 3 (Conceptual Framework) develops the conceptual framework through which the findings are analysed, bringing together Feminist Political Ecology and feminist urbanism and operationalising them through the research questions that guide the analysis. It concludes with the ontological and epistemological foundations of the research.

Chapter 4 (Research Design, Materials and Methods) introduces the case study context of Accra. It outlines the research design and methods, including the rationale for the qualitative, feminist approach, the data collection methods of semi-structured interviews and photo elicitation, the analytical strategy, and reflections on positionality, reflexivity and ethics.

Chapter 5 (Findings and Analysis) presents the findings, organised thematically around what emerged from the data, analysed through the conceptual framework and situated against existing research. First with participants' general experiences of heat and the city, then through how those experiences are shaped by gender. The chapter concludes by reading the findings against Accra's climate and gender policy frameworks.

Chapter 6 (Discussion) synthesises the key findings in relation to the research questions and the existing literature, examining what the study confirms, extends, and challenges in current knowledge on urban heat and gender. It reflects on the methodology, considers the legitimacy and generalisability of the findings, and discusses the study's contributions to current knowledge.

Chapter 7 (Conclusion) readdresses the aim and research questions, giving an overview of the conclusions drawn from the analysis. A summary of recommendations is made for relevant audiences, closing with limitations of the study and directions for future research.

2 Literature Review

This chapter reviews the existing literature across three interconnected areas that together establish the intellectual context for the study. The first concerns urban heat vulnerability in Accra: what is documented about how heat operates in the city, who is most affected, and what policy responses currently exist. The second concerns gender, heat, and urban space: what is known about how gendered roles, responsibilities, and spatial conditions shape heat exposure and adaptive capacity, and where the gaps in that knowledge lie. The third concerns narrative and everyday approaches to climate experience: why qualitative, participant-centred methods are analytically necessary for understanding what heat vulnerability means at the scale of daily life.

Starting with the physical dimensions of urban heat, there exists a growing body of literature documenting temperature increases, vegetation loss, and heat island effects in Accra and comparable West African cities. Where social dimensions of heat have been examined, the focus has predominantly been on aggregate health outcomes and population-level vulnerability assessments, with gender treated as a demographic variable rather than as a set of dynamic social practices. Research specifically addressing the everyday, embodied, and gendered experience of heat in Accra remains sparse, and qualitative, narrative-based approaches to heat vulnerability in the region are underdeveloped in the academic record. This gap is the starting point for the study.

2.1 Extreme Heat Vulnerability in Ghana

Extreme heat refers to temperatures that significantly exceed the normal range for a given region and time of year, posing risks to human health, wellbeing, and daily functioning (IPCC, 2022; WHO, 2023). In urban contexts, it is shaped not only by ambient air temperature but by the urban heat island effect, humidity, lack of shade and green space, and the reliability of cooling infrastructure, all of which determine how heat is experienced at the level of the body and the neighbourhood rather than at the level of official measurement (Gyimah et al., 2023; Oke, 1982; Wemegah et al., 2025). Long-term analyses show that Accra has one of the fastest urban warming trends in Ghana, with heatwaves becoming more frequent and persistent over recent decades (Wemegah et al., 2025). Rapid, unplanned expansion has reduced vegetation cover across the GAMA and amplified the urban heat island effect, pushing temperatures in built-up areas well above those in greener surroundings (Gyimah et al., 2023). In low-income neighbourhoods, buildings can become up to 6°C hotter at night than official records suggest, due to poor ventilation and the absence of cooling infrastructure (Codjoe et al., 2020). The AMA's own draft Vulnerability Assessment Report shows a mean land surface temperature increase from 35.5°C in 1991 to 40.0°C in 2024 across the metropolitan area, with extreme heat risk zones concentrated in high-density central and industrial areas including Agbogbloshie, Kaneshie market, and Old Fadama (Amfo-Otu, 2025).

The health consequences of extreme heat are direct and widely reported. Residents of Accra commonly describe heavy sweating, persistent headaches, dehydration, fatigue, and disrupted sleep as features of life during hot periods (Codjoe et al., 2020; Gyimah et al., 2023). A multi-city survey including Accra found that heatwaves are associated with low mood, poor concentration, food insecurity, and significant disruptions to education and daily activities, especially among younger and lower-income residents (Bwire et al., 2025). Beyond individual symptoms, heat undermines the basic infrastructure that supports daily life. During peak heat events, electricity demand can outstrip supply, worsen water shortages, and make transport more difficult, constraining common cooling practices such as bathing, drinking, or resting with a fan (Boafo et al., 2025; Kayaga et al., 2020). Research in Accra consistently finds that adaptive

capacity is highly uneven, with income, housing quality, and access to reliable electricity all shaping who can cope and who cannot, while local governance responses to heat often remain fragmented and largely reactive instead of proactive (Boafo et al., 2025; Codjoe et al., 2020). Evidence from other Ghanaian cities reinforces this picture. Studies in Sekondi-Takoradi (Western Ghana) document significant health impacts from extreme indoor temperatures in vulnerable urban communities, with coping strategies concentrated among those with the most limited resources and the fewest alternatives (Amankwaa & Gborie Ampomah, 2024). The AMA's draft vulnerability assessment identifies gender as a specific determinant of this uneven adaptive capacity (Amfo-Otu, 2025). Women working in the informal sector, including market vending and street hawking, face restricted access to cooling, hydration, and rest facilities, and their domestic and caregiving responsibilities expose them to cumulative heat burdens both at work and at home (Amfo-Otu, 2025). These health consequences are not evenly distributed across the population, and for women, carry physiologically specific dimensions that the existing literature has only begun to address. Research has documented associations between heat exposure during pregnancy and adverse maternal and foetal health outcomes, including preterm birth and low birth weight (Bekkar et al., 2020). Hormonal fluctuations across the menstrual cycle raise core body temperature by 0.3 to 0.7 degrees Celsius in the luteal phase, increasing heat sensitivity and affecting thermoregulatory capacity (Charkoudian & Stachenfeld, 2020; Notley et al., 2020), yet the specific interaction between menstrual symptoms and urban heat has largely not been studied in the West African context, representing a significant gap in the evidence base.

A further dimension concerns how heat-related symptoms are recognised and acted upon. Codjoe et al. (2020, p. 4) found that heat-related symptoms in Accra were widely experienced but rarely attributed to heat as a distinct cause, with residents treating them as ordinary features of the season rather than as conditions warranting health or institutional responses. Proxy indicators from the Accra Metro Health Directorate suggest rising heat-related health burdens, including a peak of 6,426 skin disease presentations in 2021, though the absence of dedicated heat-related illness coding in Ghana's health data system means these conditions are systematically undercounted (Amfo-Otu, 2025). This normalisation has significant implications for planning and public health. What is treated as routine is unlikely to be counted in health data, flagged to services, or addressed in policy. The gap between documented health impacts and institutional preparedness extends into the healthcare sector itself. A 2026 investigation by Public Services International (PSI) found that not a single healthcare worker across seven health facilities in Ghana had received formal training on climate-related health challenges, reflecting a broader pattern of institutional absence in addressing heat as a public health and occupational concern (PSI, 2026).

Ghana has a substantial body of national climate and environmental policy that predates the city-level frameworks discussed here, including the National Climate Change Policy (2013), the Ghana National Adaptation Plan (2025), and the Nationally Determined Contributions under the Paris Agreement (2015). These establish climate change as a cross-sectoral governance priority, but they do not address urban heat as a distinct challenge, reflecting how heat has been treated as a symptom of climate change rather than as a specific urban condition requiring dedicated policy attention. At the city level, coordinated responses to urban heat are beginning to emerge. The AMA's Resilience Strategy (2019) and Climate Action Plan (2020) both identify heat as a core urban pressure and the AMA has also announced plans to amend its bye-laws to formally recognise heat as a public health risk and introduce safety provisions where exposure to high temperatures is most prevalent (e.g. across markets, transport terminals, and temporary structures) (Accra Metropolitan Assembly, 2026). A clearly dedicated and funded heat adaptation strategy, however, remains under development (Table 2-1). Regarding gender, it is listed among the CAP's thirty-one prioritised action areas. Most recently, a high-level workshop

to update the CAP for 2026-2036 stated an ambition to integrate gender perspectives and protect the most vulnerable (IOM Ghana, 2025). Ghana's National Gender Policy, revised for 2025–2034, reinforces these commitments at the national level (Ministry of Gender, Children and Social Protection, 2025). Whether these ambitions translate into the kind of action that the evidence base calls for remains to be seen.

Table 2-1 Key climate and gender policy frameworks in Accra relevant to this study. Source: own compilation from Accra Metropolitan Assembly (2019; 2020), IOM Ghana (2025), and Ministry of Gender, Children and Social Protection (2025).

Policy framework	Key commitment	Gender content	Status
Accra Resilience Strategy (2019) <i>AMA, 100 Resilient Cities</i>	Anticipate, mitigate, and respond to heat, flooding, and infrastructure failure	Three pillars do not include gender as an explicit cross-cutting consideration	Active. Implementation gaps documented
Accra Climate Action Plan (2020) <i>AMA</i>	Carbon neutrality by 2050. Mainstream climate across land use, physical planning, and transport	Gender listed among 31 prioritised action areas. Framed in aggregate terms that do not differentiate by social group	Active. Under revision for 2026–2036
CAP Update Workshop (July 2025) <i>AMA, C40 Cities, IOM Ghana</i>	Inclusive, human-centred climate governance. Protect every resident, especially the most vulnerable	Explicit commitment to integrate gender and human mobility perspectives into the revised plan	Active. Revisions in Progress
National Gender Policy 2025–2034 <i>Ministry of Gender, Children and Social Protection</i>	Mainstream gender across all sector plans and performance frameworks nationally	Overarching goal: improve conditions for women and marginalised groups across social, legal, economic, and civic domains	Active. Not yet reached the level of physical infrastructure or spatial planning

What these patterns collectively suggest is that in Accra, extreme heat is not an exceptional event but a condition of daily life, one that structures decisions, shapes routines, and accumulates in ways that official temperature records do not capture (Bennetsen, 2021; Shove, 2010). Yet despite growing evidence of heat's everyday impacts in Accra, the existing literature has not produced a detailed account of how heat is lived at the scale of daily life, or how its costs fall differently across social positions. The physical science of urban warming is well established, and the population-level health consequences are increasingly documented, but the social, spatial, and gendered dimensions of heat experience remain unexamined. Nastar and Armah (2026) take a step toward addressing the policy dimension of this, finding that existing heat-related policies in Accra risk producing maladaptive outcomes through institutional silos and the misalignment between short-term actions and long-term goals, entrenching rather than reducing existing inequalities. Among those most vulnerable to that entrenchment, as the AMA's own vulnerability assessment begins to acknowledge, are women, whose domestic responsibilities, occupational exposure, and reproductive physiology combine to produce heat burdens that existing policy frameworks have not been designed to address. This is explored in the following section.

2.2 Gender, Heat, and Urban Space in Accra

Gender shapes how heat is experienced in Accra, though the research documenting this remains limited. The clearest evidence comes from work in the city's informal settlements. Using an intersectional feminist lens, Owusu et al. (2019) found that women in three Accra settlements reported greater climate vulnerability than men despite similar levels of environmental exposure. The reasons were structural, as women had less access to productive resources and decision-

making, heavier domestic responsibilities, and poorer housing conditions. This translated into more hours spent in overheated domestic environments, less freedom to move to cooler spaces, and less voice in how households or communities responded to climate stress.

Gendered divisions of domestic and care work are also central to this picture. Women's disproportionate responsibility for cooking, childcare, water collection, and care work means more hours in the hottest domestic spaces, with less flexibility to rest or reorganise the day around heat (Anjum & Aziz, 2025; Sultana, 2014). This pattern, what Sultana (2014, p. 374) terms the 'feminisation of environmental burden', is developed further in the Conceptual Framework below.

Women are also disproportionately dependent on public transport, making more frequent, complex, and care-linked trips and are less likely to have access to private vehicles than men (Ng & Acker, 2018; UNFCCC, 2022). In Accra, the primary form of affordable urban mobility is the trotro, a shared minibus and the backbone of the city's informal public transport system. Its conditions are overcrowded, unventilated, and without cooling infrastructure, meaning that women's dependence on public transport translates directly into greater thermal exposure. Social norms around mobility, safety, and appropriate behaviour in public space add further constraint. Which routes feel safe, which spaces feel usable, and at what times a woman can move through the city are questions shaped by gender as much as by geography (Beebeejaun, 2017; Fenster, 2005; Kern, 2020). Gender mainstreaming, understood as the systematic integration of gender perspectives into all stages of policy design and implementation so that the needs and experiences of women shape outcomes rather than being addressed as an afterthought (UN Women, 2022), was developed precisely to address these kinds of structural inequalities in how cities are planned and governed. In Ghanaian urban planning, however, it has largely remained a procedural commitment rather than a design principle, as gender appears in policy language and institutional mandates without translating into the spatial decisions that determine who can use the city, when, and how safely (Jerneck, 2017, p. 62; Owusu et al., 2019). The absence of female-accessible resting spaces, shaded pedestrian infrastructure, and gender-sensitive public transport design in Accra reflects a planning tradition that has not treated women's daily experiences as evidence relevant to infrastructure decisions (Beebeejaun, 2017, p. 613). Those daily experiences function as a form of knowledge about what needs to improve in the built environment, and how they are narrated matters for how urban planning processes can be influenced.

2.3 Narrating Everyday Experiences of Climate

The way climate change is experienced in daily life is often most visible in the stories people tell. Scholars working in human geography and sociology have argued that climate change is not only a global systems problem, but something encountered in daily routines, bodily experience, and the mundane details of ordinary life (Norgaard, 2011; Shove, 2010). Bennetsen (2021), for example, describes these situated accounts as 'small stories': the conversational, situated accounts people give of their everyday encounters with climate. For example, the passing comment about a walk that now begins earlier, a room that becomes unbearable by midday, or a season that feels different. Such stories are not peripheral to understanding climate change, but rather where it actually manifests for most people, producing forms of experiential knowledge that quantitative approaches may struggle to capture (Bennetsen, 2021; Paschen & Ison, 2014). In the policy domain, Paschen and Ison (2014, p. 1084) identify the absence of locally grounded, experiential knowledge as the defining gap in climate adaptation planning processes that claim to be responsive to those they affect. Importantly, these experiences are also spatial, as changes in routines, routes, and the spaces people use or avoid reflect how environmental conditions are negotiated through everyday movement. This can be understood through everyday geographies, which highlight how routines, mobilities, embodied experiences,

and social relations shape how people experience and negotiate urban space (Massey, 1994; Roy, 2026; Schwanen et al., 2008). Together, small stories and everyday geographies offer a way of understanding climate change through the everyday spaces, movements, and practices in which it is lived and negotiated.

Norgaard (2011) develops a related argument about the cognitive and emotional dimensions of living with climate change. Drawing on ethnographic research in Norway, Norgaard describes how the management of everyday climate anxiety involves the low-level, ongoing cognitive work of anticipating and adjusting to environmental conditions that are increasingly difficult to predict or control. This work is largely invisible in formal accounts of climate adaptation, but it shapes how people move through the world, what they prepare for before leaving the house, and what they expect from a day in the city (Norgaard, 2011).

In Accra, heat research has relied primarily on remote sensing, household surveys, and expert-driven risk assessments (Codjoe et al., 2020; Gyimah et al., 2023). Fewer studies centre the self-authored narratives of those most affected as a primary source of knowledge about what heat means for daily life and what more responsive adaptation might require (Boafo et al., 2025; Owusu et al., 2019). For a city now actively updating its CAP with stated ambitions toward gender-sensitive adaptation (IOM Ghana, 2025), there is a clear need for research grounded in the everyday experiences of the people those plans are supposed to serve. This study responds to that need, treating the accounts of young women as its primary source of knowledge about how heat is lived, navigated, and understood. The two theoretical frameworks developed in the following chapter, Feminist Political Ecology and feminist urbanism, provide the analytical structure for making sense of those accounts.

3 The Conceptual Framework

This chapter develops the theoretical foundations of the thesis, introducing Feminist Political Ecology and feminist urbanism as the analytical frameworks and bringing them together into an integrated conceptual framework in Section 3.3. The ontological and epistemological commitments underpinning the study are described in Section 3.4.

This thesis draws on the theory of Feminist Political Ecology and the concept of feminist urbanism, to understand how young women in Accra experience and narrate extreme heat in daily urban life. The choice of both frameworks is motivated by the nature of the research problem. Urban heat in Accra is not simply a physical phenomenon to be measured and mitigated. It is experienced through bodies, shaped by social structures, and reproduced through the design of the built environment. No single framework captures all of these dimensions. As such, Feminist Political Ecology provides the foundational analytical vocabulary for understanding why heat vulnerability is gendered and unequally distributed across social positions. Feminist urbanism then provides the spatial and design-focused tools for understanding how that inequality is expressed and reproduced in the urban environment itself. Used together, they allow the analysis to move between the structural and the spatial, between what shapes who is vulnerable and how the city itself makes that vulnerability felt in daily life.

3.1 Feminist Political Ecology

Feminist Political Ecology (FPE) examines gender as a central factor in the political ecological landscape, arguing that ecological, political, social, and economic life are deeply interconnected and cannot be understood in isolation from one another (Rocheleau et al., 1996, p. 3). FPE emerged from a recognition that political ecology had largely overlooked gender, while feminist scholarship had paid relatively little attention to environmental questions. Rocheleau et al. (1996) brought these two bodies of work together, arguing that environmental change and social inequality are inseparable. Scholars such as Elmhirst (2011) have since extended and refined these commitments across a range of geographic and thematic contexts, and Sultana (2014) has developed them specifically in relation to how environmental burdens are distributed along gendered lines in urban and peri-urban settings.

FPE stresses environmental injustice, seeking the origins and causes of oppression by examining not only economic and political power relations but also ecological ones, with gender as a central analytical lens (Rocheleau et al., 1996, p. 4). At its core, FPE insists that environmental vulnerability cannot be understood as a neutral biophysical condition but must be read through relations of power, labour, knowledge, and care. For the purposes of this study, FPE is applied through three interconnected themes: gendered knowledge, rights and responsibilities, and policy and implementation.

The gendered knowledge theme contends that societal structures shape what knowledge is produced and whose experiences are treated as evidence (Rocheleau et al., 1996). This means there is a risk that only the perspectives of more privileged groups are represented in research, producing a partial view of reality (Haraway, 2004). FPE addresses this directly by questioning who has the power to construct knowledge and how gender shapes what counts as expertise (Wise & Stanley, 1993). In short, ideologies formulated within patriarchal structures create unequal gendered access to and production of knowledge, resources, and technologies (Rocheleau et al., 1996). This theme underpins the central methodological commitment of this thesis: that the young women in this study hold expert knowledge about heat in Accra, whether or not that knowledge is currently recognised as such.

The second theme concerns gendered rights and responsibilities in relation to resources and space. Rocheleau et al. (1996, p. 7) organise this around four categories: control of, access to, use of, and responsibilities to produce and manage resources. Rights and responsibilities are never fixed; they vary over time and across groups and places, shaped by gender, age, class, ethnicity, and locality. Importantly, responsibility does not necessarily come with rights: a person may be expected to manage a resource or space without having the authority to make decisions on its behalf (Rocheleau et al., 1996, p. 8). Sultana (2014, p. 374) captures this asymmetry through the concept of the feminisation of environmental burden: the tendency for the practical, daily work of managing environmental stress to fall on women, absorbed into their existing responsibilities without being recognised as a public health concern or a planning failure. This asymmetry, between who is responsible for managing heat and who has the authority to shape the conditions producing it, runs throughout the findings of this thesis.

The third theme addresses what kinds of policies can address environmental injustice and under what conditions. FPE questions who participates in policy processes and who has access to the political sphere. Those with the power to influence decision-making have far greater opportunity to shape adaptation responses than those who do not (Rocheleau et al., 1996, p. 9). Marginalised groups tend to engage less in formal political processes, often not because of indifference but because of structural exclusion. A key complication is what Jerneck (2017, p. 62) describes as “integrating but not including”: gender may appear in policy language without the perspectives of women shaping what gets decided or implemented. This is the question this thesis keeps returning to when it reads Accra's policy commitments against what participants actually describe, whether gender is genuinely shaping decisions or only appearing in the language surrounding them. A related critique comes from Arora-Jonsson (2011) and Gonda (2019), who argue that gender-climate research has tended to reduce women to passive recipients of environmental risk, framing their vulnerability without equal attention to their agency, expertise, and capacity for action. Gonda (2019) calls for frameworks that centre women as agents of knowledge and change rather than sites of harm. This critique is directly relevant to the orientation of this study, which treats the situated knowledge of participants as active contributions to evidence rather than cases of vulnerability.

FPE enables the analysis of gendered knowledge production, the distribution of rights and responsibilities, and the political processes that shape structural dimensions of heat vulnerability (Rocheleau et al., 1996, p. 3). What it does not provide, however, is a spatially specific account of how those structural dynamics are expressed and reproduced through the physical design of cities. This gap reflects FPE's roots in rural and agricultural contexts, whose application to urban settings has required adapting (Elmhirst, 2011). This study contributes to that adaptation by applying FPE to the specific conditions of a rapidly warming West African city, and it is this spatial gap that feminist urbanism is utilised to fill.

3.2 Feminist Urbanism

Feminist urbanism is not a single unified theory but a broad critical tradition that examines how urban space is organised around gendered assumptions, and what a more just city might look like. Its roots lie in feminist geography, which from the 1980s onwards challenged the discipline's tendency to treat space as neutral and universal, showing instead that the production and experience of urban environments is deeply shaped by gender, race, and class (McDowell, 1999, p. 34). Early feminist urban scholars drew attention to how the separation of home and work in modern city planning, the design of suburban neighbourhoods, and the absence of women from planning and architecture as professions had all contributed to cities that served the lives of men better than the lives of women (Greed, 1994, p. 45).

One of the clearest early demonstrations of what feminist urbanism could produce in practice came from Vienna in the 1990s. When planners began asking women directly about how they moved through and used the city, they found that women were avoiding certain routes, limiting their movements after dark, struggling to navigate public space with prams and shopping, and feeling excluded from areas dominated by men's leisure activities (Clemmensen, 2024). The design changes that followed addressed those specific constraints through wider pavements, better lighting, more green space, additional seating, and improved public transport connections. As Buhl and Saaby note (cited in Clemmensen, 2024), those design interventions produced benefits not only for women but for all users of the city. This Vienna example established a principle that has since shaped feminist planning practice: designing from the perspective of those with the least flexibility and the fewest options produces better environments for everyone.

Building on Lefebvre's (1996) notion of the right to the city, Fenster (2005) developed the concept of the right to the gendered city, arguing that rights to urban space extend beyond formal political or economic entitlements to encompass the everyday: the right to move through, use, and feel a genuine sense of belonging in the city through ordinary daily life. Through research in London and Jerusalem, Fenster showed how safety concerns, social norms, and spatial design restrict women's ability to claim and inhabit urban environments in both public and private space. Beebejaun (2017) extended this argument, noting that the dominant right to the city literature had continued to pay little attention to how rights are gendered, and calling for planning frameworks that draw directly on women's spatial experiences and tactics. Kern (2020) consolidated these arguments under the term feminist urbanism, drawing on intersectional feminist theory developed by Crenshaw (1989) and extended by scholars such as Patricia Hill Collins and bell hooks. It showed how cities consistently reproduce intersecting inequalities through their physical form, such as transport systems designed around paid employment rather than care work, public spaces that feel hostile or unsafe for women, and built environments that, as Kern (2020) puts it, make visible who is being marginalised and how space constructs systems of oppression.

Criado Perez (2019) documents a parallel pattern in research, design, and product development more broadly. She shows that the male body has historically been treated as the default in contexts ranging from office temperature calibration to medical research to car safety testing, with consequences that range from chronic discomfort to preventable death for those whose bodies deviate from that standard. Feminist urbanism connects this argument to the built environment: if urban infrastructure, from buildings to transport to public space, has been designed around an implicitly male norm, then the thermal conditions those designs produce will distribute discomfort unevenly, in predictable directions.

Feminist urbanism's spatial arguments increasingly find practical expression through nature-based solutions: designed interventions to protect, sustainably manage, and restore natural and modified ecosystems, addressing societal challenges while benefiting both people and nature (IUCN, 2020). In urban contexts, interventions such as trees, green roofs, parks, and permeable surfaces reduce ambient temperatures by two to eight degrees Celsius, with the greatest benefits in areas characterised by impermeable surfaces and absent vegetation (Ziter et al., 2019; Bowler et al., 2010). The IUCN's standard for nature-based solutions includes inclusive governance and equity as one of its eight criteria, requiring that such interventions are designed through processes that actively address the needs of the most marginalised groups (IUCN, 2020), which connects directly to the feminist urbanism argument that designing from the most constrained user produces better outcomes for everyone.

In planning research, feminist urbanism has informed gender mainstreaming approaches primarily in European cities, as the Vienna example illustrates, but its application in Global South contexts is growing (Bella, 2023). Rampaul & Magidimisha-Chipungu's (2022) study of Warwick Market in Durban, South Africa demonstrates what this looks like in practice: through participatory engagement with women traders and users of a dense, informal market space, the research identified that women's experiences of navigating and feeling safe in the space were fundamentally different from men's, yet entirely absent from previous planning decisions. The spatial interventions that followed, including improved lighting, shaded rest areas, and reconfigured circulation routes, emerged from community dialogue rather than planner assumptions, concluding that gender-conscious design produces more genuinely inclusive public spaces. More broadly, feminist urban frameworks have been used to examine how women navigate informal settlements, public transport, and street markets, showing that safety, mobility, and access to basic services are experienced very differently depending on gender (Owusu et al., 2019).

Kern (2020) herself acknowledges that the examples in her work are drawn largely from cities in the Global North. Applying feminist urbanism beyond those contexts requires holding its concepts in tension with conditions the framework was not originally designed to address, including urban informality, postcolonial governance, and rapid unplanned growth. This study uses feminist urbanism as a critical orientation rather than a fixed template, drawing on Bella's (2023) argument that feminist cities and intersectional feminist planning practice represent a framework for achieving climate justice in urban contexts. Where the findings reveal dimensions of gendered vulnerability that existing feminist urbanism has not previously documented, they will extend the framework rather than be excluded by it.

3.3 The Developed Conceptual Framework: Everyday Gendered Heat Experience in the City

The combination of Feminist Political Ecology and feminist urbanism in this thesis sits within an emerging analytical tradition that Prouse and Arefin (2024) identify as Feminist Urban Political Ecology (FUPE). As they trace it, FUPE has roots in Rocheleau et al.'s (1996) codification of Feminist Political Ecology, which explicitly added gender to political ecology's existing concerns with how class and ethnicity shape access to and control over natural resources. Urban political ecology then positioned the city as a socio-environmental process in which the powers of nature interact with those of class, gender, and ethnic relations, yet its early iterations largely neglected what feminist theory contributes to understanding those processes, including attention to the patriarchy (Prouse & Arefin, 2024). FUPE emerged from there, starting from how gender and its relationship to the uneven spatialisation of race and class is not just another axis of social difference but a lens that can rethink how nature-society relations are understood in the urban context (Mollett and Faria, 2013, cited in Prouse & Arefin, 2024). Prouse and Arefin (2024) note that many scholars drawing on this have not explicitly identified their work as FUPE until relatively recently, and that the field is only beginning to emerge and incorporate Indigenous, Black, Third World, and queer ecologies (Heynen, 2018, cited in Prouse & Arefin, 2024).

This study sits in conversation with FUPE while slightly departing from it. Rather than urban political ecology, it pairs FPE with feminist urbanism, bringing a spatial and design-specific dimension that foregrounds the built environment as a site of gendered exclusion and planning practice as a tool of change. The starting point is the recognition that climate vulnerability is socially and spatially produced. Heat is not experienced uniformly across a city. Who is exposed, for how long, under what conditions, and with what capacity to respond depends as much on

social structures as on temperature. FPE establishes that these structures are gendered, shaping access to resources, the distribution of responsibilities, and whose knowledge counts in adaptation planning (Rocheleau et al., 1996). Feminist urbanism deepens this by showing how the built environment reflects and reinforces those structures, determining who can seek shade, move freely, and feel entitled to use urban space (Kern, 2020; Fenster, 2005). Together, they both position extreme heat as something lived through gendered power relations and unequal urban design, extending the analytical reach of FUPE into a West African urban heat context where its tools have not yet been tested. The framework is operationalised through the three research questions, each of which draws on both FPE and feminist urbanism simultaneously rather than treating them as separate analytical tools.

RQ1 asks how young women experience and narrate extreme heat in their everyday urban lives. FPE's attention to how environmental conditions are lived and felt in specific bodies and places combines with feminist urbanism's interest in how the built environment shapes bodily experience, together directing attention to how participants describe their daily heat experience in their own terms and through their own analytical framing. This also draws attention to the everyday geographies through which these experiences take shape, including the routines, movements, and constraints that shape how participants navigate and experience urban space (Massey, 1994; Roy, 2026; Schwanen et al., 2008).

RQ2 asks how gender shapes that experience of heat, through social expectations, care responsibilities, and spatial conditions. FPE provides the vocabulary for understanding how gendered structures distribute vulnerability and adaptive capacity unevenly, while feminist urbanism shows how those structures are expressed in the design and use of urban space. The freedom to move through the city, to reroute, to wait, to rest, is itself unequally distributed along lines of gender, class, and race, and those with the least mobility bear the greatest costs of spatial arrangements that do not accommodate them (Massey, 1994).

RQ3 asks what the situated knowledge participants hold can contribute to gender-responsive urban heat adaptation. This is where FPE's argument that women's environmental knowledge is systematically undervalued in formal planning connects with feminist urbanism's argument that cities built without women's input reproduce the conditions of exclusion. Together they frame participants not as research subjects but as knowledge producers. The everyday experience of having to work to appear at ease in spaces not designed for you, of managing the gap between what the city provides and what it demands, is itself a form of knowledge that formal planning has rarely been designed to receive (Ahmed, 2004). Figure 3-1 illustrates how the framework flows through the research questions toward the study's practical aim of contributing to gender-responsive urban climate adaptation in Accra.

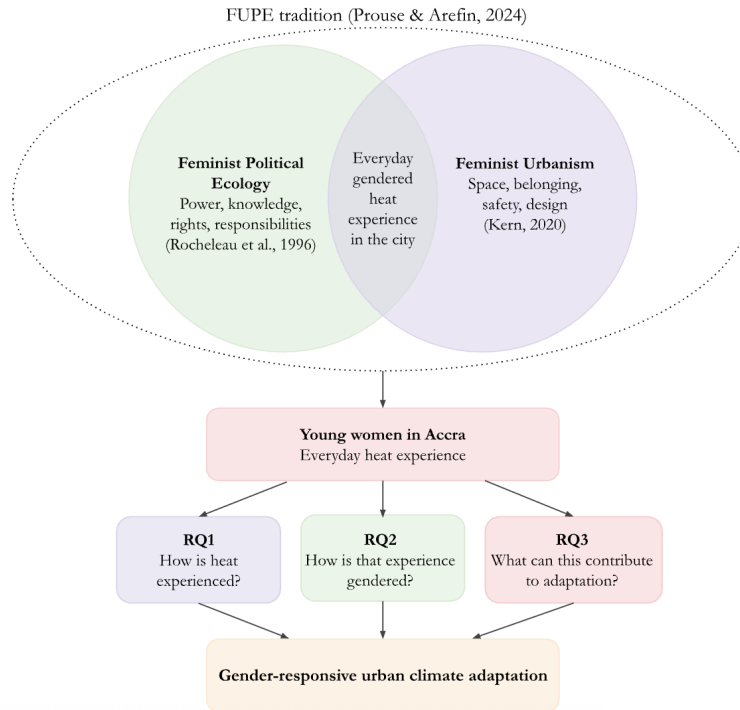


Figure 3-1 Conceptual framework for analysing gendered everyday experiences of urban heat
Source: Own Illustration

The framework also reflects a methodological commitment, building on the case for treating participants' accounts as primary knowledge already established in Chapter 2. The people living with heat daily are experts whose knowledge should inform, rather than illustrate, adaptation responses. This is consistent with FPE's insistence on the value of situated knowledge (Rocheleau et al., 1996, p. 4) and with feminist urbanism's argument that planning processes must draw directly on the spatial experiences of those they are meant to serve (Beebejaun, 2017, p. 613; Bella, 2023). The following section addresses the ontological and epistemological foundations of this framework and terminology of the study as a whole.

3.4 Ontological and Epistemological Considerations

The ontological and epistemological foundations of this thesis draw from feminist and constructivist traditions. Ontologically, social reality is understood as actively constructed through practices, relations, and structures of power rather than as a fixed, neutral given (Alvesson & Sköldberg, 2018, p. 17). Gender is not a pre-given fact but a constructed phenomenon reproduced through practices, policies, and actions (Mehta, 2016, p. 272). Knowledge is situated: what we know is always shaped by where we stand and what we have experienced (Haraway, 2004, p. 83). Epistemologically, the thesis follows a constructivist and interpretive approach, recognising that knowledge is socially produced and shaped by context, experience, and interaction (Creswell & Creswell, 2018). The analytical conclusions of this study are interpretations of participants' accounts, not objective reports of reality.

A note on terminology used in this thesis is warranted. Throughout this thesis, 'lived experience' refers to the first-person, embodied, and meaning-laden way in which people encounter and make sense of their environments (Haraway, 2004, p. 83). This is not simply exposure to an event but how one interprets and acts in response to it (Haraway, 2004, p. 83). Regarding gender and the category 'women', the term 'gendered' refers to the socially produced structures of norms, roles, expectations, and power relations attached to gender that shape how individuals experience and navigate their environments (Butler, 1999; Rocheleau et al., 1996, p. 4). It does

not refer to biological sex differences but to the social conditions that determine what is expected of people, what is available to them, and whose needs are treated as the default. Using 'women' as an analytical category does not imply that all women share the same experiences. It reflects the argument that being perceived and treated as a woman in a specific social context carries particular structures of expectation, constraint, and power (Wise & Stanley, 1993, p. 34). Oppression is more complex than any single category can capture, as aspects such as livelihood, income level, age, race, and other social positions all shape how gender is lived (Wise & Stanley, 1993, p. 34). This thesis also acknowledges that gender is not binary, and that some people who experience phenomena discussed here, including menstruation, do not identify as women. The category 'women' in this thesis refers specifically to the young women navigating urban life in Accra, and the findings should be read in that social context rather than as universal claims.

Further, the term 'Global South' is used to refer to countries that share histories of colonisation and continue to experience structural inequalities in access to wealth, political power, and research representation. Designations like Global South, even when coined without explicit hierarchical intent, can reproduce the very divisions they describe by framing some contexts primarily in relation to what they lack (Khan et al., 2022). At the same time, feminist collectives across these same regions have reclaimed the term as a form of political solidarity, using it not as a descriptor of deficit but as a marker of shared histories of coloniality and a commitment to south-south knowledge production that does not look to the Global North for validation (Salem, 2019). This is the intended use of the term in this thesis, as a south-south orientation by centring on young women in Accra and drawing on feminist frameworks to produce knowledge that challenges the planning norms shaped by Global North contexts. The following chapter describes the research design and the methods used to gather and analyse the study's findings.

4 Research Design, Materials and Methods

This chapter describes how the research was designed and conducted. It begins by outlining the case study context of Accra, before turning to the overall research design and the logic behind the methodological choices, followed by the data collection methods and the materials gathered. It then describes how the data was processed and analysed, and closes with a reflection on the researcher's positionality, research quality, and ethical considerations.

4.1 Case Study Context: Accra, Ghana

Ghana is one of West Africa's fastest-growing economies and most urbanised countries, with over half the population now living in urban areas (Ghana Statistical Service, 2021; UN-Habitat, 2020). Accra, the capital and largest city, is home to an estimated four to five million people in the greater metropolitan area and is the country's political, commercial, and educational centre (Ghana Statistical Service, 2021). Its urban landscape reflects decades of rapid and largely unplanned expansion, comprising formal planned neighbourhoods, colonial-era institutional areas, and densely built informal settlements near one another (African Cities Research Consortium, 2023; Cobbinah & Nyame, 2021). Infrastructure provision is uneven: electricity, water, and transport services are more reliable in higher-income and institutional areas, while over 60% of the city's population lives in poorly planned and overcrowded housing with limited cooling infrastructure (African Cities Research Consortium, 2023; Boafo et al., 2025; Codjoe et al., 2020). The trotro is the primary form of public transport, accounting for an estimated 3.5 million passenger trips across the Greater Accra region on a typical weekday and serving more than 70% of daily commuters (GIZ, 2023; MIT Civic Data Design Lab, 2023). Traffic congestion is persistent, particularly on routes connecting eastern residential areas to the central business district during peak hours (GIZ, 2023).

Accra has two rainy seasons, typically from April to June and September to November, and two dry seasons, the hotter and more intense of which runs from November to March (Wemegah et al., 2025). It is during the dry season that heat stress is most acute, with temperatures regularly exceeding 32°C and humidity levels that amplify thermal discomfort considerably (Wemegah et al., 2025). The universities, national service placements, and early-career workplaces where participants in this study are based are concentrated in the eastern and central parts of the greater metropolitan area, including professional and commercial districts such as Spintex, Cantonments, and the central business district (Figure 4-1). The daily routes of participants are therefore characterised by high pedestrian exposure, limited shade infrastructure, and dependence on the trotro network, directly shaping the spatial conditions analysed in Chapter 5.

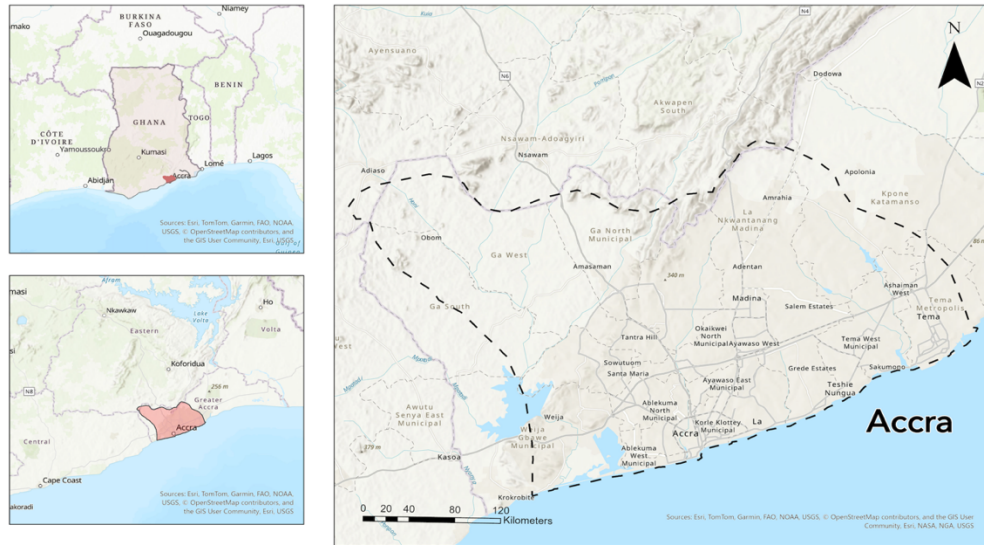


Figure 4-1 A map of Ghana with the Greater Accra Area marked in red.
Source: Own Illustration created using ArcGIS software.

4.2 Research Design

This study explores how young women in Accra experience, narrate, and navigate extreme heat in everyday urban life, and what their situated knowledge can contribute to more gender-responsive urban climate adaptation. A qualitative design is most appropriate for this aim, as qualitative methods are well suited to capturing lived experiences, meanings, and perceptions in context, and are widely used in feminist research on gendered adaptation processes (Creswell & Creswell, 2018; Rao et al., 2019). As explained in Section 4.1, a case study approach is used to situate and access the lived realities of young women whose everyday lives are shaped by increasing heat exposure in Accra, Ghana (Yin, 2017). Findings are not intended to be generalised but to provide situated, in-depth insights that may be analytically transferable to similar urban contexts.

In addition, prior to the data collection, a preliminary informant interview was conducted with the Gender Planning Commissioner at Vienna's Urban Planning Directorate in March 2026. Vienna is widely recognised as a pioneer in gender-responsive urban planning, having institutionalised gender mainstreaming across its planning departments from the early 1990s, predating its formal adoption at European Union level by nearly a decade. This conversation provided initial grounding in gender-responsive urban planning, particularly around the relationships between safety, care work, and heat infrastructure in a city with an established gender mainstreaming mandate. It is not considered part of the primary data collection but rather preliminary informant research, drawn on selectively as supporting context, referred to as 'practitioner informant'. The primary expertise informing this thesis remains that of the eleven participants in Accra.

4.3 Data Collection

Primary data was collected through semi-structured interviews and a complementary photo elicitation exercise, which together capture different dimensions of everyday heat experience (Maxwell, 2022). Table 4-1 provides an overview of the methods and materials.

Table 4-1 Overview of data collection methods and materials

Method	Participants	Format	Data produced
Semi-structured interviews	4	Zoom/WhatsApp, audio-recorded	Transcripts
	3	Asynchronous audio-recorded responses	Transcripts
	4	Asynchronous written responses	Transcripts
Photo elicitation	4	Photographs via WhatsApp or Word doc	Images & photo-elicitation discussion

4.3.1 Semi-Structured Interviews

Semi-structured interviews were the primary method of data collection, chosen for their flexibility and depth. Questions allowed participants to guide the conversation toward aspects of their experience they considered most relevant, while key themes were consistently explored across all interviews (Creswell & Creswell, 2018). The interview guide (Appendix A) included prompts on daily routines, mobility, use of urban space, and perceptions of comfort, access, and safety during periods of extreme heat, alongside storytelling prompts inviting participants to describe specific moments of heat encounter. Interviews began with an introductory question asking participants to introduce themselves and walk through a typical day, serving as a warm-up before more substantive questions (Creswell & Creswell, 2018). Follow-up questions were used throughout to probe meaning and depth. At the end of the interview, participants were asked if they had any more information they would like to share and if they had any suggestions for further contacts.

Four interviews were conducted live via Zoom/Whatsapp in English, each lasting around 30 minutes. Interviews were audio-recorded with consent, and transcribed using Microsoft Word's transcription feature, with all transcripts manually reviewed by the researcher for accuracy. Participants who preferred not to participate in a live interview were invited to respond in writing or via voice recording. These asynchronous responses were analysed in the same way as live transcripts and treated as complementary rather than equivalent, offering more reflective, self-paced accounts with greater participant control over how experiences were articulated (Bartlett & Milligan, 2015).

Participants were recruited through my co-supervisor's professional network, which is connected to a Lund University project on urban heat in Ghana, through personal contacts, and through snowball sampling from initial participants (Neergaard, 2007). Participants were young women primarily aged between 20 and 30 at different stages of early adult life: 5 are currently studying, 1 is completing their mandatory national service placement, and 5 are in the early stages of their professional careers. All individuals who expressed interest received an information sheet and consent form (Appendix C). Participation was voluntary and informed consent was obtained in all cases. Participants were anonymised and assigned codes P1 to P11. A summary of participant characteristics is provided in Table 4-2.

Table 4-2 Characteristics of Participants

Code Name	Life Stage	Age	Living Situation	Typical Commute
P01	Student	26-30	University residence	Short walk on campus
P02	Student	26-30	University residence	Short walk on campus
P03	Student	20-25	Off campus, at home with family	~30 min trotro
P04	Student	20-25	Off campus, at home with family	~30 min trotro
P05	Early Career	26-30	Solo apartment	30-60 min personal car
P06	Student	20-25	Off campus, at home with family	45 min car/trotro ride
P07	National Placement	20-25	At home with family	Walk / trotro
P08	Early Career	26-30	Solo apartment	20-40 min personal car
P09	Early Career	26-30	Own home with family	30-45 min trotro
P10	Early Career	26-30	At home with family	~30 min trotro
P11	Early Career	26-30	Solo apartment	Walk / trotro

4.3.2 Photo Elicitation

A subset of four interview participants also took part in a photo elicitation exercise, inspired by the photovoice method developed by Wang and Burris (1997). Photovoice is widely used in participatory and feminist research to amplify marginalised voices and generate experience-based knowledge, repositioning participants as active contributors to knowledge production rather than passive subjects (Kindon et al., 2007; Rocheleau et al., 1996; Wang, 1999). In this study it was used to capture spatial, embodied, and sensory dimensions of heat experience that are often difficult to articulate verbally (Rose, 2016). This exercise was a methodological choice and commitment to create space for marginalised groups to articulate needs that formal planning processes typically overlook, and to do so on their own terms (Paschen & Ison, 2014; Rigon, 2025). By inviting participants to share images from their everyday environments, the research aimed to have a more collaborative and reciprocal form of engagement between researcher and participant, with participants taking greater agency in determining what to show and how to represent their experiences.

Over three to five days, participants photographed moments, spaces, and situations representing their experience of heat in Accra, then reflected on what they captured: why they took the image, how they felt in that moment, and what it revealed. Photographs were captured on their own devices and shared via WhatsApp or a Word document and discussed either in the interview or in a written or audio-recorded reflection. In practice, the photographs frequently prompted more specific and spatially grounded accounts than the interviews alone had produced. Instructions for the photo elicitation exercise are in Appendix B, and a full photobook of all participant-submitted images, organised thematically and accompanied by participant captions and contextual notes, is included in Appendix E.

4.4 Data Analysis

Data analysis followed a thematic analysis approach, drawing on the iterative and interpretive guidelines described by Braun and Clarke (2006) and Creswell and Creswell (2018). The process involved familiarisation with the data through repeated reading of transcripts, generation of initial codes, identification of recurring themes, and interpretive synthesis. Thematic coding was conducted using NVivo, a computer assisted qualitative data analysis software programme,

which supported systematic organisation and comparison of materials across participants. The coding combined deductive and inductive strategies. Initial codes were informed by analytical dimensions derived through the conceptual framework, including aspects such as exposure and spatial conditions, everyday practices and adaptation, and meaning and narration. At the same time, inductive coding allowed themes to emerge directly from participants' accounts, including dimensions that had not been anticipated in the framework. This iterative approach kept the analysis grounded in participants' own perspectives while maintaining theoretical coherence. Photographs were not analysed as a separate visual dataset but in conjunction with the narratives that accompanied them. As participants explained and reflected on their images in interviews, the photographs functioned as entry points into deeper discussions, evoking aspects of the urban environment that verbal accounts alone may not have reached. The analysis therefore focused on the meanings participants attributed to their images rather than on visual content analysis.

4.5 Considerations regarding Positionality, Reflexivity and Ethics

As a young white woman entering this research from a European context, I came to this research as an outsider to Accra, Ghana, and the everyday realities the participants describe. Studies conducted by outsider researchers who do not share the culture, language, or other traits of participants are often complex, and the guide developed by Joseph et al. (2021) for novice outsider researchers informed how I approached this throughout the study. I therefore maintained awareness of the risk of extracting knowledge from communities without returning value to them, of interpreting experiences through frameworks that do not belong to the context, and of reproducing any dynamics of Global North researchers studying the Global South (Joseph et al., 2021; Sultana, 2007; Tuhiwai Smith, 2012).

Reflexivity was actively practised throughout the research to address this. I remained critically aware of how my background, academic training and position as an external observer may have shaped the framing of research questions, the conduct of interviews, and the interpretation of findings (Creswell & Creswell, 2018). The risk of imposing external interpretations onto the narratives of participants was addressed through open-ended, non-leading interview questions designed to allow participants to define what was meaningful in their own experience (Creswell & Creswell, 2018). Ongoing discussions with my supervisors provided a further check on the framing and interpretation of findings. After each interview, recordings and transcripts were revisited to reflect on how questions were posed and whether responses had been understood in the way participants intended. Offering multiple modes of participation was also a deliberate reflexive choice, accommodating different levels of comfort and different forms of expression rather than assuming a single method would serve all participants equally.

The research design was reviewed against the criteria for ethics board approval at Lund University and was found not to require a formal ethics committee statement. All participation was voluntary. Participants received an information sheet explaining the purpose of the research, how data would be used and stored. Informed consent was obtained in writing prior to data collection (Appendix C). No personally identifiable information appears in the thesis. Participants were informed of their right to withdraw at any time without consequence. To protect confidentiality, all participants were anonymised and assigned participant codes. Audio recordings were stored securely, and transcripts were anonymised before analysis. For the photography component, participants were explicitly asked not to photograph identifiable individuals, and all images were stored securely with access limited to the researcher. As an external researcher working in a context different from my own, I was conscious throughout of the power dynamics inherent in cross-cultural qualitative research, and the reflexive strategies described above were employed in part to address this.

5 Findings and Analysis

This chapter presents and analyses the findings in an intertwined manner: each section introduces a theme emerging from the data, presents participant accounts and quotations, and analyses them through the conceptual framework established in Chapter 3. The findings are organised thematically around what emerged from the data, visualised in Figure 5-1 below. The first two sections address heat and the city in general terms: 'Heat and Everyday Life' addresses bodily exposure to heat, and the meaning participants make of it, while 'Navigating a Hot City' addresses the spatial conditions and everyday practices through which participants move through Accra. The following two sections then turn to the specifically gendered dimensions of these same experiences: 'Gender and the Heat' addresses how care responsibilities, safety concerns, and social expectations shape bodily exposure to heat, while 'Gender and the City' addresses how these same gendered dynamics shape spatial navigation and everyday practice. This structure is an analytical choice rather than a claim that the first two sections are not gendered, since all participants in this study are young women and their accounts are inherently shaped by gender throughout. Organising the findings this way is intended to make the explicitly gendered dimensions of heat experience more visible to the reader. The final section, 'Envisioning Gender-Responsive Adaptation', turns from experience to recommendation, presenting what participants themselves believe can change the city of Accra for the better.

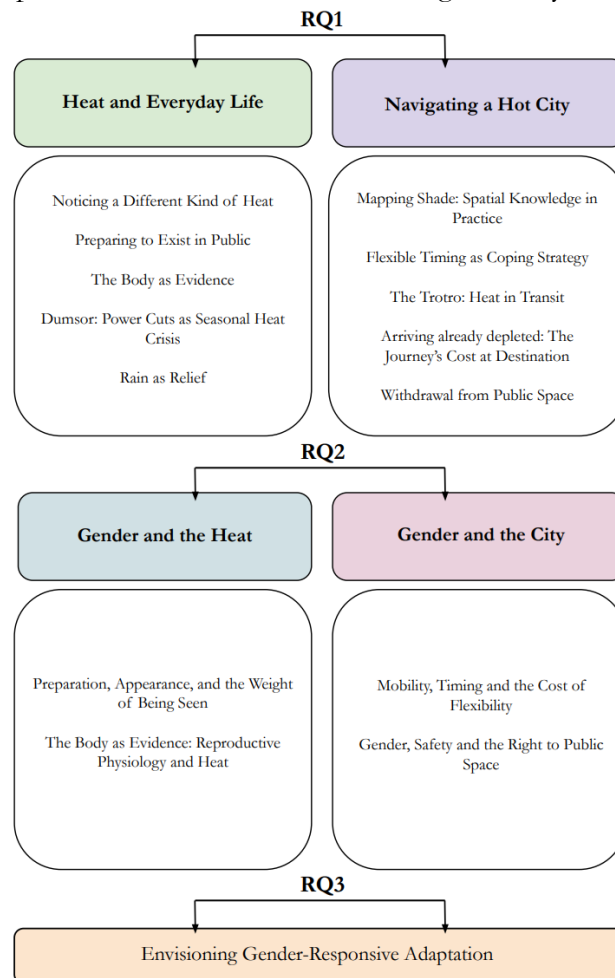


Figure 5-1 Analytical themes and sub-sections of Chapter 5. Source: Own Illustration

5.1 Heat and Everyday Life

This section explores how participants experience heat as an embodied, daily condition and what knowledge they have accumulated in response to it. The findings show that heat management is not reactive but anticipatory, in that participants have developed detailed, place-specific knowledge of heat that shapes their behaviour before they have even left the house. The section examines daily preparation, the physical effects of sustained heat exposure, and a sense that heat has intensified over time. These findings speak to Feminist Political Ecology's broader argument that environmental knowledge is situated, produced through direct, embodied encounter with a specific environment rather than abstracted from it, and that this kind of knowledge is real and specific even where it remains overlooked in formal planning and adaptation processes (Rocheleau et al., 1996). The particular ways this situated knowledge is shaped by gender are taken up in Section 5.3.

The participants in this study are at different stages of young adult life. Some are university students, some are completing national service placements, and some are in early professional roles. Their daily structures vary, for example P1 works and studies on campus, P6 is a student who also babysits her cousin and helps at her family's shop, and P9 is an academic and a mother. Several participants live with family, some with dependants, and none of the eleven live entirely free of domestic or care obligations that shape when and whether they can be at work or study at all. They are young women managing overlapping demands, and heat shapes the conditions under which all those demands must be met, often unevenly.

5.1.1 Noticing a Different Kind of Heat

Several participants described the heat in Accra increasing in intensity in recent years. P7, a national service personnel, put it plainly:

'Ghana has always been hot, Accra has always been hot, but in the last five years it's been a different kind of hot. The hot is something I haven't experienced before. It's just so different. So I think even though we are more or less used to heat, this is just like a different thing that we are all trying to navigate.'

P2, an undergraduate student, captured the same shift through a moment with her professor: 'She was like, "this sun can cook a bowl of rice". Like, these days it has become so much intense. I just give that example, so you know how intense it is.' P9, who works in academia at a Ghanaian university, named another cause of the increased heat directly. She described how ongoing construction and unregulated small-scale mining, known in Ghana as *galamsey*, are contributing to the intensification:

'I believe the constant building projects going on, individuals building houses and commercial buildings, is creating the heat. I also believe that the illegal mining ongoing in Ghana that has become a big deal is contributing to it. Because not only are they destroying water bodies, which are a main source of climate control, they are also being contaminated. So it's destroying the forest vegetation in the process [...] We are facing more of a human-induced climate change than a nature-induced one. At least from my part in Ghana.'

P9's account is more than an observation of change. In naming construction and *galamsey* as causes, and in explicitly framing what she describes as "human-induced" rather than natural, she is already doing the work of political ecology herself. For FPE and feminist geography, this matters because environmental conditions are not neutral phenomena that simply happen. They are produced by power, by economic interests, and by decisions about whose land and whose environment is worth protecting (Rocheleau et al., 1996; McDowell, 1999). The production of

urban space, what gets built, where, and at whose expense, is a political process, and the people who bear its thermal consequences are rarely the people who made the decisions (Massey, 1994; Elmhirst, 2011). P9 arrived at this analysis through years of living in and observing a changing environment, which is situated knowledge as FPE describes.

These accounts also move from noticing that something has changed to analysing why. They are all describing what the evidence confirms, that built-up area expansion has direct relationships to rising land surface temperatures, driven by the decline in GAMA vegetation cover from 35.7% in 2000 to 22.7% in 2020, with a further projected decrease to approximately 10.2% by 2050 (Gyimah et al., 2023). The loss of water bodies to galamsey has been documented as contributing to regional temperature increases, alongside deforestation and the expansion of impermeable surfaces (Gyimah et al., 2023; Wemegah et al., 2025). What the data cannot show, however, is what it feels like to notice this in your own body, over the course of years, to find that something once familiar has become unfamiliar. These accounts exemplify Bennetsen's (2021) small stories framework. That is, the conversational, situated narratives through which climate change is encountered in daily life. The analytical value of these small stories lies in how grounded they are in specific places and moments. Bennetsen (2021) argues that small stories add colour to what quantitative data already shows and access dimensions of climate experience that measurement cannot reach. Together the two forms of knowledge produce a fuller and more honest account of what climate change actually means for the people living through it. The accounts that follow throughout this findings section extend this same small stories approach, moving beyond what aggregate or quantitative data alone can show to add the colour and specificity of daily, embodied experience.

5.1.2 Preparing to Exist in Public

Before leaving the house on a hot day, most interviewees described going through a set of deliberate preparations such as filling water bottles with ice, choosing fabrics carefully, packing handkerchiefs or tissues, and timing their departure to get ahead of the worst of the sun. These practices are not responses to unexpected discomfort, they are adaptations to a condition that is known, anticipated, and managed in advance. P10, a young woman early in her career, captured something the other participants described less explicitly: *'I also mentally prepare myself for delays or discomfort when I know I need to be outside.'* The expectation of difficulty is built into the decision to leave the house at all. P1, a graduate student, described how the handkerchief structures her day: *'I always have to have a handkerchief because I sweat a lot and it's unbearably hot sometimes. Not having a handkerchief means I'm going to have a bad day.'*



Figure 5-2 P1's photograph documenting the water bottle and handkerchief she carries with her every day to manage the heat, Accra, 2026.

The handkerchief here is a threshold object, its presence or absence can be the difference between a manageable and an unmanageable day. P2 described a similar morning logic, as on a hot day, the window between showering and sweating is only a few minutes, a timeframe that shapes everything from what she puts on her skin to when she leaves the house. P9 has built her wardrobe around the climate over years, estimating that around ninety percent of her clothes are cotton, chosen because they absorb sweat without trapping heat. She does not wear jeans as they are simply too hot. She also makes her own frozen juices to have something cold to drink when she leaves the house. Across other participants, similar patterns appeared. P6 carries tissues and washes her face when out in the heat; P3 uses an umbrella against the sun as her primary defence; P5 buys chilled water or frozen yoghurt before getting into a hot vehicle to have something cold to consume. Each of these is a small, repeated act that has become as normalised as getting dressed. These practices demonstrate how climate change is being absorbed into the routines of daily life (Bennetsen, 2021), managed at the level of the body before the day has even begun. The particular ways this preparatory labour is shaped by gender are taken up in Section 5.3. As the following section shows, the consequences of that arrangement manifest in the body.

5.1.3 The Body as Evidence

Participants described heat accumulated across the day in physical traces such as heat rashes, persistent sweating, fatigue, irritated skin, and disrupted sleep. These effects were described as normal features of life during hot periods rather than as symptoms requiring attention.

P8 describes the psychological dimension, recounting her skin that feels constantly irritated affecting her mood:

'I get heat rashes sometimes and I already struggle with acne. So the sweating and the heat makes my skin worse. Just days when my skin just feels really irritated and uncomfortable. And it honestly affects my mood.'

What P8 describes is a pattern rather than a single bad day. The heat compounds a pre-existing skin condition, which affects how she feels about herself, which affects her mood and her capacity to engage with the day. The causal chain runs from temperature through skin to self-perception to functioning, and it repeats. FPE argues that environmental vulnerability is produced not only through acute exposure but through the daily, cumulative wear of living in conditions that offer insufficient relief (Rocheleau et al., 1996; Sultana, 2014). This is a condition rather than a crisis, absorbed into daily life without institutional recognition.

P1 described discovering rashes and bringing them to her mother:

'I had some heat rashes. I was trying to show them to my mom and she just said, yeah, it's the heat. So we had to get some ointments to treat it. That's how bad it gets. And I know I'm not the only one.'

The phrase 'I know I'm not the only one' signals that P1 is not describing an isolated experience but a collectively held and understood reality, where heat rashes are known, expected, and managed within her social world without institutional support. The mother's response of 'yeah, it's the heat', is a form of intergenerational knowledge transmission. The ointment is already familiar, the rashes are expected, and what to do about them has been passed down. FPE identifies this as situated environmental expertise: practical knowledge developed and shared within communities, through sustained engagement with specific environmental conditions (Rocheleau et al., 1996; Elmhirst, 2011). That this knowledge travels from mother to daughter

rather than from health service to patient shows how the practical management of heat-related skin conditions in Accra is happening in homes, through conversation, entirely outside any public health framework.

P4 described the night-time dimension, lying awake after a power cut and fanning herself with a piece of paper:

'I couldn't sleep. This made me take a piece of paper to fan myself but it was stressful because I wanted to sleep but I was also working indirectly so I couldn't sleep. It made me have a severe headache the next day.'

Analytically, this shows heat vulnerability extending through the night and into the next day, compounding across time for those without reliable electricity or cooling. Codjoe et al. (2020) found that heat-related symptoms in Accra were widely experienced but rarely attributed to heat as a distinct cause. P4's account illustrates that pattern as the headache was the symptom she noticed, but the causal chain runs back to a power cut, an inadequately ventilated room, and an electricity infrastructure that consistently fails during the hottest months.

5.1.4 Dumsor: Power Cuts as Seasonal Heat Crisis

Several participants described electricity failure as a compounding form of heat stress, removing the safety net of fans and AC precisely when it is most needed. In Ghana, the phenomenon has a name: dumsor, a Twi expression meaning 'off and on', used to describe the rolling power outages that have characterised electricity supply in recent years (Obeng-Odoom, 2016). P9 explained the seasonal pattern:

'We're having what we call dumsor in Ghana, which means the light goes off and comes on as when the electricity company of Ghana decides to give you power. It happens usually during the very hot time seasons in Ghana, which is in May, in June. That's when the power outages are worse. Maybe because of our over-reliance on the Akosombo dam.'

P9 names Ghana's reliance on the Akosombo hydroelectric dam as the structural cause of dumsor directly. As the dam's water levels fall during the hottest and driest months, electricity capacity drops at exactly the moment demand peaks. The seasonal coincidence of heat and power cuts is therefore a predictable consequence of energy infrastructure choices, made at the level of national policy, that compound the heat experienced at the level of individual bodies.

P1 described the contrast between her campus experience and her brother's situation at home: *'In other places, my brother texted me from home three days ago that the light is off and this place is so hot. So in other places, I'm guessing beyond campus, they are experiencing the frequent lights out.'* The campus generator shields P1 from the worst effects. Her brother, in a residential area without backup infrastructure, cannot access the same protection. This gap tracks institutional affiliation and economic position, as the university has resources to maintain backup power while the household does not. The right to functional cooling infrastructure during the hottest months is distributed along lines of class and institutional access, not along lines of need (Rocheleau et al., 1996). P2's photograph of her hall of residence courtyard (Figure 5-8) makes this visible at the domestic scale. The improvised tarpaulin, rigged by residents over a communal paved area, and the water storage tanks beside it are the accumulated responses of people filling gaps that planning left open.



Figure 5-3 Photograph taken by P2 of the courtyard outside her student hall of residence, showing improvised tarpaulin rigged over the communal area and water storage tank, Accra, 2026.

P4 described what a power cut at night felt like:

'One evening, the lights were out so the AC and fans were all not working so I couldn't sleep. This made me take a piece of paper to fan myself but it was stressful because I wanted to sleep but I was also working indirectly so I couldn't sleep. It made me have a severe headache the next day.'

The headache P4 describes arriving at lectures the following morning is the bodily outcome of a chain of governance decisions: national energy policy, dam infrastructure, seasonal power cuts, a sleepless night in an unventilated room. FPE argues that environmental vulnerability is produced through these chains, in which structural decisions about investment and infrastructure determine the conditions in which individuals live, with costs distributed along lines of class and institutional access rather than of need (Rocheleau et al., 1996; Elmhirst, 2011). P4 was not consulted at any point in that chain, and her experience does not register as a variable in how such decisions are made.

The buildings where participants live, study, and work were not designed to remain habitable when electricity fails during the hottest months: adequate passive ventilation, thermal mass in building materials, and shaded facades are design features that reduce dependence on mechanical cooling and therefore reduce exposure to the effects of dumsor. As dumsor persists, those who can afford it are buying generators, increasing noise and air pollution in residential areas. A smaller number are moving toward solar energy, though adoption remains low due to high upfront costs (Duah & Nkuah, 2025). Those who can afford neither simply must endure.

5.1.5 Rain as Relief

The rain appeared across interviews as the only genuine and unplanned relief from heat. It was often described with a warmth that stood out against the tone of other accounts. P8 described it as such:

'The only time I truly, truly enjoy Accra is when it rains heavily. Because on rainy days, everything suddenly feels calmer and breathable. The air feels lighter, the heat reduces. And then you can actually exist without feeling overheated. And when it rains at night, that's like the best sleep you ever get in a long while.'

P9 said simply: *'When it rains, then you enjoy the weather being not too hot. I feel happy when it rains. I love it when it rains.'* P2 described how even the weather after rain is usually the best, and that it was one of the few moments Accra felt genuinely liveable. Several other participants described rainy nights as the only nights they slept properly.

The pleasure in these accounts reflects the degree to which the city is ordinarily experienced as a thermal burden, one that rain temporarily lifts. Rain is not a strategy here, it cannot be sought, planned for, or used. Its appearance as the most consistently joyful moment across the dataset is analytically significant because it points to what participants are living without the rest of the time. From a feminist urbanism perspective, the city that rain temporarily produces, which is cooler, calmer, breathable, and usable without ongoing physical cost, is the city participants are describing when they name what they would change about Accra (Kern, 2020, p. 63; Bella, 2023). The improvements they call for, such as trees, shade, ventilation, and green space, are the passive design features that would bring the city closer to that condition without waiting for rain. What participants are expressing in these accounts is the recognition, arrived at through contrast, of what adequate urban design would feel like. What participants want is not more innovative individual strategies for surviving a hot city, but a city that does not require surviving in the first place.

Heat, as this section has shown, begins in the body before the day has started and accumulates as it goes on, whether through physical strain, disrupted sleep, or the failures of infrastructure meant to offer relief. The following section examines what happens when participants move through the city itself.

5.2 Navigating a Hot City

This section examines how participants move through Accra in the heat, the strategies they use, the resources those strategies require, and the ways in which the city's physical and social infrastructure shapes what is possible. The findings reveal a consistent gap between what participants need and what the city provides and show that the costs of this gap fall unevenly along lines of class and occupation, with the particular ways this unevenness is shaped by gender taken up in Section 5.4. Running through the section is a central argument from feminist urbanism: cities that fail to serve the most constrained users fail everyone, and designing for those users produces environments that are more liveable for all (Kern, 2020; Bella, 2023; Clemmensen, 2024).

5.2.1 Mapping Shade: Spatial Knowledge in Practice

Shade emerged across all eleven interviews as the most fundamental resource for managing heat while moving through the city. For example, participants described knowing which routes had tree cover, which surfaces radiated heat from the ground, which buildings offered shelter, and which stretches had to be crossed as quickly as possible. This knowledge was built through daily practice and repetition and forms part of participants' everyday geographies: a deeply personalised cognitive map of place, one organised not by distance or destination but by 'thermal experience' (Tuan, 1975). P1 described choosing routes by shade rather than by distance:

'There are different routes I can use. And so I'll find the best one where the sun won't bend me too much. When I get wherever I'm going, I drink water. In the process of walking, I also have to keep wiping my face and hands because I'm sweating.'

She also described the hot surfaces specifically:

'Places that are tarred with coal, those places, it feels like the heat is coming straight from the ground. Those places are unusually hot. So I try to avoid such places. Even if I'm walking around such places, I try to find the coolest side of the tarred area.'

P1's photographs document this contrast visually. One image shows the tree-lined canopy path where she stopped to catch her breath, a wide pedestrian route with tall trees planted on both sides creating continuous overhead cover. The other shows a black asphalt surface by the canteen that is open, flat, and has no vegetation. She described the canopy path: *'The trees are sort of like canopy, and they provide such good shade. This semester, there was a point I had to stand here for a while because I wanted to catch my breath.'* The two images make visible what the thermal geography of a campus actually looks like from the perspective of someone navigating it. It is almost like a patchwork of relief and exposure that participants have learned to map through use, rather than through explicit instruction.



Figure 5-3 P1 photographs documenting the contrast between a shaded canopy path (left) and an exposed tarred surface (right) on campus, Accra, 2026.

P2 described shaded pavements in terms that went well beyond physical comfort:

'There are some pavements that even when the weather becomes extremely hot and you're walking in those shades, it feels so heavenly. It's more of some kind of comfort and warmth. I feel like those are safe spaces. When the weather is very harsh, those are safe spaces.'

P2's use of the phrase 'safe spaces' is significant. She is drawing on the language of psychological belonging to describe thermal relief, suggesting that shade is not merely a physical amenity but a condition for feeling at ease in the city (Massey, 1994; Tuan, 1975). Geographers of place have

argued that attachment to and comfort within environments is bound with bodily experience and the degree to which a space accommodates rather than resists the person within it. For P2, the shaded pavement is one of the few urban spaces that does this. Its absence elsewhere is experienced not just as discomfort but as a form of spatial exclusion.

P11 described the same absence from a different angle, connecting it to deforestation at scale: *'[...] we've really cut a lot of our trees. So it can be very unbearable when the sun is very high. You can't even hide under a tree. You just have to allow yourself to be beaten by the sun.'* The phrase 'allow yourself to be beaten by the sun' describes passive endurance produced by the absence of any alternative. P10's photograph of an unshaded bus stop (Figure 5-5) documents in a single image what participants consistently described as a primary driver of their heat vulnerability.



Figure 5-4 Photograph taken by P10 from a bus stop with no shade infrastructure, Accra, 2026. In her own words: 'Everyday movement in the city becomes difficult under extreme heat. It reflects how heat is not just a feeling, but something that shapes where I go, how long I stay outside, and how I plan my day.'

P9 described the same dynamic at institutional scale, recounting how the colonial-era tree-lined main road of her university campus still functions as thermal infrastructure decades after it was planted, while trees have been cleared to make room for new buildings:

'As the school kept expanding, we cleared some of the trees. So you can find shades at pockets where you're walking, but the sun will beat you a bit. I don't think they are doing the expansions considering that students would walk and should get them shade through the walkways. They're just expanding because they need more buildings.'

The colonial-era trees were planted for aesthetic and institutional reasons but are now providing thermal relief that contemporary planning decisions are not replicating. This is what feminist geographers mean when they say that the production of space is a political process with long-term consequences. The decisions about tree planting or clearance made decades ago are still shaping the daily comfort of people navigating those routes today (McDowell, 1999; Massey, 1994). Campus expansion has proceeded without thermal comfort as a design criterion, demonstrating how institutional development decisions produce heat exposure not through

neglect but through priorities that do not include the people who will move through the spaces being built. This connects to feminist urbanism's argument that the built environment reproduces inequality through its design logic rather than only through explicit exclusion (Kern, 2020; Beebejaun, 2017).

What participants have built through years of navigating these conditions is a form of expertise itself. P1 knows that the asphalt area is hottest on its south-facing side; P2 knows which pavement section to take to catch her breath; P11 knows which of her usual routes has lost its tree cover entirely. This knowledge does not appear in any heat vulnerability assessment or urban planning document. FPE identifies it as situated environmental expertise, produced through sustained engagement with specific environments and is systematically undervalued in formal planning because it does not arrive in the expected institutional form (Rocheleau et al., 1996; Elmhirst, 2011). This expertise extends beyond knowing where to go. As the following section shows, participants have also learned when to go, restructuring their days around the heat itself.

5.2.2 Flexible Timing as Coping Strategy

Restructuring daily schedules around heat emerged across all eleven interviews as one of the most consistent adaptive strategies, deployed in different forms depending on context and occupation. Existing heat research in Accra has focused on measuring thermal exposure rather than the behavioural adaptations people use to manage it, making the consistency of timing adjustment across this study's participants a contribution to understanding how heat is managed at the scale of daily life (Codjoe et al., 2020; Gyimah et al., 2023).

The most common form of doing so was adjusting departure and return times to stay ahead of peak heat. P7 described it as such:

'Sometimes I try to get to work very early because after seven there is a sun. So I'll wake up earlier so that by 6:30 I'll be leaving the house. And then usually I stay till like 6pm. Yesterday it started at 33 degrees Celsius, but by the time it was six, it was about 27. That's vastly different.'

Several other participants described variations of the same logic: P5 leaving before 6am; P11 departing at 5:30am and noting that her close friend does the same; P3, P4, P10 shifting activities to evening where possible; P2 staying in her room between lectures to avoid crossing hot parts of campus. Across all eleven interviews, the practice was consistent even where the specific form varied. The same logic extended into the scheduling of intellectual work. P9 described how she and her colleagues relocate deep thinking to nighttime:

'When we really want to think through an academic paper, you want to work late at night when everyone is calm, quiet, the weather is a bit cooler. I do that. And I realised most of our colleagues do the same because at night it's quiet, it's cooler. During the day it's hot [...] you don't really think better during that time.'

This extends the timing strategy beyond physical comfort. The daytime hours when institutional expectations are concentrated are also the hours when thermal conditions are most difficult. Academic writing and sustained concentration are pushed to cooler nighttime hours, compressing rest and redistributing the working day around temperature rather than around productive capacity. When P9 was asked directly whether she can perform well in the heat, her answer was unambiguous: *'When it's too hot, I don't think you can really work well.'* The cost of heat here is measured not in physical discomfort but in the quality and conditions of intellectual output, moved to hours that were supposed to be available for rest.

P7 also described a longer-distance version of the same calculation, delaying a six-hour bus journey by three hours to avoid standing in an unsheltered afternoon queue at the bus station: *'I had to choose between being comfortable and going on time. And I chose being comfortable. For lack of a better word, it sucks.'* What looks like a personal decision to travel late is a forced negotiation between two inadequate options, produced by the planning issue of no shade at the bus station. The trade-off is, in this way, designed in. Feminist urbanism's response is structural, if the city provided adequate shade at bus stations, along commute routes, and in the spaces where people wait, the burden of timing adjustment would be substantially reduced for everyone (Kern, 2020; Bella, 2023; Clemmensen, 2024). The fact that all eleven participants have independently arrived at the same workaround is not evidence of individual resourcefulness but rather of consistent infrastructure failure. Timing can only do so much, however, when the journey itself is the problem, as the following section regarding the trotro shows.

5.2.3 The Trotro: Heat in Transit

Public transport emerged across nearly all interviews as one of the most consistently difficult heat experiences in daily life. Specifically, the use of the trotro as the most affordable and most widely used form of public transport in Accra. P2 described the experience in a trotro stuck in traffic on a hot afternoon: *'Oh my God. That's just the worst thing you could ever feel. You would be rubbing against each other with all the sweat. Sometimes you get the smell from people's clothes.'* P7 described the structural conditions inside the vehicle itself:

'The space in the trotro is not the right space for people. When the drivers get the car, the owners add more seats than the required or recommended number of seats. If it was supposed to pick four people, now it's picking eight people. You sit in here, everyone is sweating, everyone is stuck together, like they're in a tin of sardines. It's just unbearable.'

P7's photograph of the interior of a trotro taken during her commute makes visible what these descriptions convey verbally: tightly packed bodies, no visible ventilation, and little space.



Figure 5-5 Photograph taken by P7 inside a trotro during her morning commute, Accra, 2026. In her own words: *'This is when I was in the trotro. As you can see how closely packed everyone is, not very comfortable at all.'*

P9 framed the consequence directly: *'When the weather is hot, it means you're sweating in a public bus that is already uncomfortable. So the discomfort is twice what you should get. And this is in the morning before you get to work.'* The conditions in the trotro amplify the thermal experience beyond what ambient temperature alone would produce. P10 described a similar compounding effect, noting that she sometimes feels drained or slightly dizzy specifically when public transport is crowded and not well ventilated. The heat and the crowding intensify each other.

For most participants the trotro is used daily. P1 described calculating whether to take a taxi at twelve Ghanaian cedis rather than walk, noting it was expensive for students but sometimes the only way to avoid too much heat. P2 described sometimes booking *Bolt* or *Uber* to avoid the scorching sun. These alternatives exist, but they require a price that not everyone can afford. P8, who has access to a car with air conditioning, described reflecting on her own position: *'I sometimes wonder how people who work outside all day survive. As someone privileged to work in an office, I sometimes can't survive it.'* Her comment points to a wider spectrum of transport experience in Accra's heat that extends beyond what any single participant in this study faces. Those with the means to book a ride through an app, and those with neither that option nor shelter from direct sun at all. The trotro sits between these two extremes, more thermally tolerable than standing in direct sun but far from adequate, and the only realistic daily option for most participants.

The daily strategies participants have described all carry a cost, and what determines that cost is not only scheduling flexibility but the full combination of social positions each person occupies. Intersectionality shows that heat vulnerability among participants is not produced by gender or class alone but by the specific interaction of economic resources, domestic responsibilities, institutional context, and occupation (Crenshaw, 1989). For those with fewer resources even within this group, endurance becomes the default rather than a strategy. FPE identifies this unequal adaptive capacity as central to understanding climate vulnerability. Not all vulnerability is the same, and not all coping is equally accessible, even among people who appear to occupy similar social positions (Rocheleau et al., 1996; Sultana, 2014).

In addition, the participants did not stop at describing their own experience. All eleven reflected on who else in the city bears the cost of heat. Several named informal workers, market women, and construction workers as carrying the greatest burden, noting limited access to shade or cooling. P1's observation was the most specific, noting that her visually impaired classmates navigate by memorising familiar routes, and that if those routes lack shade, they may be hit directly by the sun without being able to anticipate or avoid it. The consistency of these observations across participants reflects what FPE describes as situated knowledge of differential environmental exposure. In this case, it is an understanding arrived at through daily observation of how class, occupation, care responsibilities, and access to infrastructure combine to determine who endures heat without recourse (Rocheleau et al., 1996; Elmhirst, 2011). The participants know they are not the most vulnerable people in Accra's heat. But even for those with more resources, the trotro or its alternatives are only the first leg of a longer thermal cost. The following section examines what heat does at the destination.

5.2.4 Arriving Depleted: The Journey's Cost at the Destination

For participants who commute by public transport, the journey to work or campus is itself a heat event that happens before the working day starts. The physical and cognitive cost does not end at the door. P7 documented this from her own workplace, photographing the *'scorching'* sun outside her office building on a typical morning after arriving by trotro (Figure 5-7). P7 described needing a few minutes to cool down on arrival before she could concentrate at work:

'Sometimes I had classes at 7:30 in the morning. So I had to wake up extremely early, get to school, sometimes have to deal with the sun before getting to class. In the first few moments, if there was a lecturer in the class, I just had to take some time to cool off before I would be able to fully focus on what was being said.'



Figure 5-6 Photograph taken by P7 from her office building, Accra, 2026.

P9 described the same dynamic from a career perspective: *'That experience alone, sweating in a public bus, makes you very uncomfortable before you get to work. And then you get to work. You're teaching in a public university. There's no air conditioning system.'* P10 also described arriving at a professional meeting:

'By the time I reached my destination, I felt physically tired and needed a few minutes just to cool down and regain energy before continuing with work. That moment made me realise how much heat affects not just comfort, but productivity and focus throughout the day.'

The cost here is cumulative with a few minutes of recovery time, a loss of concentration at the start of a lecture, and the effort required to be fully present when the body is still cooling down. None of these moments appear in records of attendance or academic performance, but they are real and repeated daily. P1 described her boss arriving by car from an air-conditioned home, walking in and remarking on how hot it was outside, unaware that for the people who had just commuted by trotro, his observation was a description of how they had spent the last hour of their lives. The gap between those two experiences is not just a gap in heat exposure. It is more so a gap in who is protected from it. From an FPE perspective, this is one of the ways in which environmental conditions and gendered social structures combine to produce invisible costs. The obligation to arrive and perform, regardless of the journey that preceded it, is not equally distributed (Rocheleau et al., 1996).

That protection, or its absence, does not end once a participant reaches the workspace itself. Access to cooling at the workplace varied significantly across participants, and the differences tracked both sector and economic position. P8 has AC in her car, at her office, and at home. P7's national service placement was in a private sector office with centralised AC. At the other end of the spectrum, P9 teaches in public university classrooms where fans may or may not be

working, and P2 studies in campus spaces whose thermal conditions depend on whether the electricity is on at all. Feminist urbanism's argument about designing for the most constrained user is directly relevant here. A classroom designed to be genuinely functional during Accra's hottest months would require either reliable AC or adequate passive cooling through ventilation and shade. The fact that public university classrooms in Ghana have neither is a product of institutional investment decisions that consistently prioritised building construction over the conditions of use (Kern, 2020; Bella, 2023). Those decisions fall hardest on those who spend the most hours in the buildings and have the least capacity to compensate through private resources.

The cost of inadequate cooling is not only physical but cognitive. P9 and her colleagues had independently arrived at the same pattern: when sustained intellectual work is required, it happens at night, because the daytime hours when institutional expectations are concentrated are also the hours when thermal conditions make thinking most difficult. Deep intellectual work is pushed into the cooler nighttime, compressing rest and redistributing the working day around temperature rather than productive capacity. What that redistribution costs at the level of the individual working day is made visible in P2's account of trying to study after lectures:

'After lectures, I went to my room, I tried to study, but I was sweating and I couldn't concentrate. And I tried to put cold water on my face just so I could focus. I couldn't do anything really. I just had to go and sleep.'

The combination of physical heat and cognitive demand produced a condition in which neither rest nor work was possible. She went to sleep not because the day was done but because the heat had made both alternatives impossible. From an FPE perspective, the demands placed on participants do not diminish because the heat makes them harder to fulfil (Rocheleau et al., 1996). For P9, an adjunct lecturer without the job security or institutional resources of a senior academic, reorganising intellectual work around temperature means the hours meant for rest are now the hours required for work, and the cycle compounds across days and weeks. For some participants, the response to all of this, was not to keep managing it but to stop going out at all. The following section examines that withdrawal.

5.2.5 Withdrawal from Public Space

For nine of the eleven participants, the most significant response to heat was stopping movement through it and avoiding public space altogether. The existing literature on heat in Accra documents withdrawal from public activity as a health outcome, particularly noting disruptions to education and daily activities during heatwaves (Bwire et al., 2025; Codjoe et al., 2020). What it does not document is the cost of withdrawal in terms of social participation, professional engagement, and substantive access to public life, or how that cost is distributed along lines of gender. P2 described what happens on hot days between lectures:

'Normally we spend time in our [dorm] rooms. Right from lectures, you get into your room, you're not going anywhere, just to avoid the scorching sun. We just don't go outside of our halls because of how scorching the sun is. We try to limit movement. And normally we would just book Bolt or an Uber to avoid the scorching sun.'

P4 described the same pattern at home: *'I don't go out during the hot day and most of my routines are placed in the evening or morning time.'* P9 extended the logic into professional life, describing choosing Zoom over in-person meetings specifically because the journey is not worth the thermal cost:

'If I don't have to go, if it's not really necessarily important, I don't go. If I can have the conversation on the phone, a Zoom call, I would suggest that so that I sit in the comfort of my room and have that meeting online.'

P8, who has more material resources than most other participants, made the same choice of staying indoors when working remotely and reducing unnecessary movement during peak hours, before adding: 'But not everyone has that privilege.' Staying indoors as a coping strategy requires a home or room that is tolerable, obligations that can be managed from that space, and the absence of care responsibilities that require going out regardless of heat. These are not conditions that all participants share equally.

The consequences of withdrawal extend beyond thermal comfort. P3 described being unable to attend programmes and events because of the stress and exhaustion caused by heat. For a young woman working in youth development and advocacy, or studying on a campus that hosts its social and intellectual life in outdoor and shared spaces, withdrawal during the hottest parts of the day means missing professional opportunities, social connections, and the kinds of encounters that shape networks and futures. The heat becomes a barrier to participation in public life. Withdrawal from public space under conditions of extreme heat is, in this way, a form of involuntary immobility. It is the reduction of movement and participation not because of preference but because the conditions of public space have become incompatible with daily functioning. Massey (1994) argues that mobility and the freedom to move through space are themselves a form of power, and that this power is unequally distributed along lines of gender, class, and race. For the participants in this study, the home becomes one of the only spaces that can be controlled in terms of thermal comfort, which is not the same as choosing to stay home.

What none of these strategies - knowing which routes have shade, leaving before sunrise, enduring the trotto, stopping going out altogether - actually change is who has to develop them in the first place. The sections that follow return to everything described so far and ask the question this chapter has been building toward: why does the work of managing a hot city fall so consistently on women, and what does that burden cost them?

5.3 Gender and the Heat

This section returns to the embodied, daily heat experience described in Section 5.1, this time reading it specifically through a gender lens. Where Section 5.1 established how heat is prepared for, absorbed, and carried in the body in general terms, the findings here show that preparation, appearance, and physical vulnerability are not experienced identically by all bodies. Together, these findings extend Feminist Political Ecology's account of situated knowledge to show that the knowledge women hold about managing heat is not only place-specific but body-specific, shaped by expectations and physiological realities that remain largely absent from formal heat vulnerability research in Accra. The section examines how gendered social expectations shape what preparation for heat requires, and how reproductive physiology adds a dimension of embodied heat vulnerability with no equivalent in male experience.

5.3.1 Preparation, Appearance, and the Weight of Being Seen

P11, an early career worker, described an additional preparation that is both specific to the climate and specifically gendered: *'I put SPF on my skin before I step out because the sun can be really hot and it will make me very dark. You don't really catch a lot of people putting SPF on their skin. It's usually the women.'* Later, she described the consequence this preparation guards against: *'It also burns your skin colour when you walk under it for a long time. So your skin tone or your colour tone, like, darkens.'* P11's SPF use reflects an additional layer of preparation against sun exposure and its social and

aesthetic consequences that men in the same environment do not carry. In Ghana, lighter skin complexion has long been associated with higher social and economic status and remains a major determinant of beauty, particularly for women, rooted in colonial histories in which lighter skin conferred class privilege and social mobility (Pierre, 2008). Colourism affects women more strongly than men, owing to Eurocentric beauty standards that continue to operate in post-colonial contexts across West Africa (Pierre, 2008). The fear of darkening through sun exposure is therefore not vanity but a response to a social system in which skin tone carries real professional and personal consequences for a woman. P11's daily SPF routine is a small act with a large structural context. It is an example of intersectionality (Crenshaw, 1989) in which colonial legacies of colourism, gendered beauty standards, and extreme heat converge in the simple decision of going outside.

For participants navigating professional or semi-professional contexts, preparation extends to appearance. P8 described the pressure to arrive looking composed:

'You still have to look presentable for meetings, for work, commuting, running errands, and acting normal even when you feel sticky. Because people don't like it when you look all sweaty and unpresentable at work and other places.'

Ahmed (2004) argues that certain bodies are expected to feel at home in certain spaces, while others must work to appear as though they do. Professional norms that require women to arrive composed and dry place the entire burden of managing the gap between bodily reality and social expectation onto women themselves. The city produces the heat, the trotro produces the sweat, but the responsibility for not appearing as though either happened belongs more often to the woman arriving at work than to her male counterpart, a structural arrangement rather than a personal failing, in which the costs of inadequate infrastructure are redistributed onto bodies already expected to manage more.

Clothing as a constraint extends this picture further. P7 described what happens when she needs to leave the house on a hot weekend:

'When it's hot, you want to wear less clothing. But Ghana is a little bit conservative. So, you know what you wear determines how society treats you. Even when I'm at home feeling very hot and it's the weekend, if I need to run a quick errand, I change, because I have no choice, because I have to conform to what will just make my life go easier. The next guy can just go shirtless in basketball shorts and he's fine.'

The male counterpart here has options that P7 does not, and the difference is social rather than physiological. Read through the feminist urbanist concept of the public/private divide (Kern, 2020; McDowell, 1999), P7 can wear what she likes at home but must adapt her body to enter public space: a man in basketball shorts and no shirt draws no particular attention, whereas a woman in equivalent clothing invites judgment, unwanted attention, or social sanction (Fenster, 2005; Kern, 2020). These norms function as a form of infrastructure in themselves. They appear in no urban planning document, yet they structure access to public space as effectively as a physical barrier, imposing costs on women's presence that men in the same spaces do not bear (Beebejaun, 2017). The extra laundry, the extra minutes changing, the decision to be hotter than necessary rather than attract unwanted attention, are small but cumulative costs, absorbed daily without recognition.

Together, these preparations reveal that heat management for the women in this study begins before they leave the house and involves negotiating not only temperature but also the social conditions of public life. For FPE, this is the feminisation of environmental burden: the

practical, daily work of managing an inadequate environment absorbed individually, without recognition as a health concern or a planning failure (Rocheleau et al., 1996; Sultana, 2014). What should register as a failure of infrastructure registers instead as a personal inconvenience, and the pressure to solve it remains on the individual rather than on the institutions responsible for the conditions producing it. This preparatory labour is only the first layer of what women's bodies absorb. The following section examines a second, physiological layer of gendered heat vulnerability.

5.3.2 The Body as Evidence: Reproductive Physiology and Heat

Section 5.1 described the physical toll heat exacts on the body, from skin irritation and heat rashes to disrupted sleep, as effects absorbed into daily life without institutional recognition. That absorption is not gender-neutral. P8's account of heat compounding her skin condition and affecting her mood is a further instance of the feminisation of environmental burden introduced above. In this case through the daily, cumulative wear of living in inadequate conditions falling more heavily on women, who carry it without recognition as a health concern or a planning failure (Rocheleau et al., 1996; Sultana, 2014). P1's account of showing her heat rashes to her mother, and receiving in return not medical treatment but familiar, practised knowledge of what to do, reflects the same pattern. FPE identifies this as situated environmental expertise, practical knowledge developed and shared within communities, particularly between women, through sustained engagement with specific environmental conditions (Elmhirst, 2011; Rocheleau et al., 1996). That this knowledge travels from mother to daughter, and not from health service to patient, points to a wider pattern in which women's embodied expertise substitutes for institutional care that does not exist.

For some participants, this gendered burden extends beyond skin and into reproductive physiology itself. For instance, P9 described her working day as follows:

'You're dealing with a hot body from maybe 10am, because the sun is up by then, to maybe past 4pm. So it makes you, as a woman, feel uncomfortable. Especially if it's that time of the month, then it's worse. When the weather is not too hot, you definitely can perform better. When it's too hot, you feel either tired or drained halfway through the day. I don't think you can really work well.'

The phrase 'as a woman' followed immediately by a reference to menstruation is not P9 describing a generic experience of heat in a classroom. She is describing a specific, physiologically gendered form of discomfort that compounds the thermal conditions of an inadequately cooled workspace. A classroom without AC is difficult for everyone in it. For someone managing menstrual symptoms in the same space, it is considerably more so. This dimension of heat vulnerability is largely absent from existing assessments of workplace conditions or public health frameworks in Ghana. P6 described what happens during menstruation specifically:

'Especially when we are in our cycle, it's really, really frustrating. Because we sweat and get smelly and it's almost like the blood flow is higher or it increases [...] and also when we have cramps, you have to walk slower to feel more comfortable and that's when the heat also hits you more.'

P9 described the same experience from a different angle:

'If you are in your period, you would either be experiencing heat flashes depending on the hormonal changes you get. Heat flashes because it's too hot. It can actually make you sick. I have experienced that a few times. When you feel sick, it affects your mood and then you feel sick too. It also affects your diet for maybe that week.'

The cascading effects of heat flashes triggered by hormonal changes, nausea, altered mood, disrupted appetite described by P9 can restructure an entire week. P6 adds that cramping slows movement, and slower movement means more time under direct sun, intensifying the heat experienced by a body already under physiological stress. Together, these accounts describe a compounding interaction between heat and reproductive physiology that occurs monthly, across the duration of reproductive life, and has no equivalent in male physiology. FPE argues that the body itself, what it is doing and experiencing on a given day, shapes exposure and adaptive capacity in ways that aggregate vulnerability assessments cannot capture (Rocheleau et al., 1996; Sultana, 2014). Feminist urbanism extends this into the built environment. Kern (2020) argues that cities are designed by and for a body implicitly male, organised around male patterns of movement, work, and public presence. When heat vulnerability research measures exposure without accounting for reproductive physiology, it reproduces the same assumption feminist urban scholars have long identified in planning and design, that the experiences requiring explanation are those that deviate from the male norm, rather than the norm itself being the problem (Criado Perez, 2019).

P9 added that during menstruation, the clothing constraint extends to sanitary products, since non-breathable materials carry higher infection risk in heat, knowledge she holds, acts on, and passes on. That no public health framework in Ghana currently addresses the intersection of heat and menstrual health management reflects the same pattern of how knowledge circulating between women through lived experience does not automatically translate into institutional recognition. This absence reflects whose bodies and whose expertise have historically been positioned as the baseline in health governance.

P9 extended this further to pregnancy. She described sleeping on the floor of her home with a damp towel wrapped around her body:

'I slept on the bare floor. I wanted to feel something cold on my body. So I damp a towel and put it around my body so that I can sleep on the tiled floor so that I can feel cold. [...] So I get it that when it's too hot, as a woman, you would experience it differently, especially depending on what cycle you are on. If you're either pregnant or having a period or something.'

Pregnancy raises core body temperature and reduces thermoregulatory capacity, compounding exactly the kind of heat risk the literature has already identified (Bekkar et al., 2020). For a pregnant woman in Accra without air conditioning, nights that do not cool down represent a health risk that is both predictable and preventable. The floor and the damp towel are the solutions the body finds when infrastructure is absent: private, bodily responses to a public failure, managed in a bedroom in the middle of the night.

That these experiences remain largely unaddressed in Accra's adaptation planning reflects a structural problem in whose knowledge is treated as evidence. Bella (2023) traces this back to the fact that very few women had the opportunity to influence the modern city planning paradigm, or were overlooked entirely for their contributions (MacGregor, 1996). The continued underrepresentation of women in architectural and planning professions means that, as Kern (2020, p. 63) puts it, the needs and wants of girls and young women are almost completely ignored in architecture and planning. Gender disparities in the profession may be narrowing (Sheridan et al., 2018), but Bella (2023) cautions that this alone is insufficient: women-

identifying planners who work within the norms of a field historically shaped by white men can still reproduce those same male-centred ways of place-making. What is required is a structural transformation in whose knowledge counts as evidence and whose needs are treated as the design standard. Without that transformation, gender-sensitive commitments remain as 'integrating but not including' (Jerneck, 2017), where women appear in the process, but their experiences do not shape the outcome.

Across these accounts emerges a picture of bodies absorbing, managing, and bearing the evidence of an environment that offers limited institutional relief. The women in this study describe these symptoms as things they simply manage, not because the effects are minor, but because there is little institutional intervention that treats them otherwise. That same pattern, of managing conditions the city itself produces, extends beyond the body and into the spaces these women move through every day, as the following will discuss.

5.4 Gender and the City

The findings in this section show what happens when the findings of Section 5.2 are read specifically through gender. It is important to reinforce here that the argument of feminist urbanism is not that cities intentionally exclude women, but that cities built without accounting for women's existing constraints produce environments where the costs of heat are distributed unequally (Fenster, 2005; Kern, 2020).

5.4.1 Mobility, Timing and the Cost of Flexibility

The right to move through the city without ongoing physical cost depends on whether the city has been built to accommodate the people moving through it (Fenster, 2005; Kern, 2020). Women's schedules, safety calculations, and care responsibilities tend to give them less flexibility to reroute or extend their journeys to find cover, which means the cost of absent shade falls more heavily on them. P2's description of shaded pavements as "safe spaces" in Section 5.2.1 captures this cost as for a participant with less room to detour or delay, a shaded route is not just more comfortable, it is one of the few options that makes the journey manageable at all. Wider pavements are also an example as historically, prams were used almost exclusively by women, so a street built without room for one was essentially a street built without room for a mother and child to move through it together. As Buhl and Saaby observe (cited in Clemmensen, 2024), interventions like trees, wider pavements, and improved public spaces benefit not only women but all users of the city. The argument is not that shade matters only to women, but that designing from the constraint of the person with least flexibility produces better environments for everyone.

The same unevenness structures time as well as space. Section 5.2 described how restructuring daily schedules around heat, leaving earlier, staying in overnight, shifting intellectual work to nighttime, was a strategy nearly all participants relied on. What that section did not examine is why this strategy is available to some participants far more easily than others. For P6, who manages care responsibilities for a baby cousin alongside her studies and helps at the family shop, the timing strategies available to other participants do not apply in the same way. The child needs feeding, the shop needs to be staffed, and neither can wait until the cool of the evening. P5's account shows a related but distinct constraint through her fixed-hours commute that cannot be delayed or shortened, she instead stretches her working day at both ends, leaving before 6am and returning after 6pm, to minimise exposure within a schedule she has no power to restructure.

This unevenness has a useful parallel in energy research. Powells and Fell (2019) introduced the concept of flexibility capital to describe the capacity to shift energy consumption to times of

lower grid stress, arguing that it is determined by working patterns, household composition, life stage, and wealth. P6 and P5 illustrate two different sources of that same constraint: care obligations in one case, fixed employment hours in the other. Neither has the freedom to simply choose a better time to be outside. Yip et al. (2019) found that low-income households face the greatest barriers to shifting demand because their schedules are driven by necessity rather than discretion. The same logic applies to heat, as the people with the most capacity to shift daily activities away from peak heat hours are those without fixed care, employment, or domestic obligations. FPE adds the gendered dimension that energy research does not supply on its own. Those obligations fall disproportionately on women, which means the burden of managing a system that offers insufficient infrastructure is also disproportionately theirs (Rocheleau et al., 1996; Sultana, 2014).

Transport is where this lack of flexibility becomes quite acute. Section 5.2 described the trotro as the most consistently difficult heat experience in daily commuting, and the price barrier that keeps alternatives like *Uber* or *Bolt* out of reach for many. P7 named who is most affected by that barrier directly:

'I have the opportunity to say, you know what, it's too hot, let me get an Uber. But then a lot of people who walk on the streets don't have that. Usually people who walk on the street are women, usually have babies at their back. Those people do not have the luxury of saying I can get an Uber because that could be the difference between having a meal per day.'

The trotro is a site where multiple failures of urban design converge: vehicles privatised without regulation of passenger welfare, bus stops without shade, and no affordable alternatives for those who cannot access private transport. The conditions inside the trotro do not discriminate by gender, but they interact with established gendered patterns of transport dependence (Ng & Acker, 2018; UNFCCC, 2022) in ways that make their effects uneven. Feminist urbanism would ask not only how to improve these conditions, but who is responsible for the fact that they have been tolerated for so long, given that the majority of those enduring them are women (Beebejaun, 2017; Kern, 2020). The transport and workspace decisions producing this burden do not sit only with individual choices about timing or routing. The spaces P9 and her colleagues reorganise their nights around, such as the public university classroom and the student study room, reflect investment decisions made largely by men in institutional leadership, for buildings whose primary users in Ghana are increasingly women (Mama, 1997; McDowell, 1999). The discomfort those decisions produce is distributed onto the bodies and schedules of the people using the spaces, not necessarily the people who built them.

5.4.2 Gender, Safety and the Right to Public Space

For several participants, heat management in public space was further complicated by safety concerns. The intersection of safety concerns and thermal comfort in women's use of public space does not appear in any existing heat research on Accra. Feminist urbanism anticipates it theoretically: Fenster (2005) argues that the right to the city includes the right to feel at ease in urban space, not merely to access it physically, and Kern (2020) documents how safety concerns consistently constrain women's use of public space. What this study contributes is the specific interaction between these constraints and heat: showing what happens when the geography of thermal relief and the geography of safety do not overlap. P8 described it directly:

'As a young woman, there are certain places you can't just sit comfortably and relax. Even in the same cool. Because sometimes you just want to escape the heat for a while. But if the area feels unsafe or there are too many men around staring, it makes you uncomfortable. And sometimes the comfort is not only about the temperature but also about feeling safe.'

P10 described avoiding certain routes or spaces even when they might be more shaded or convenient because she did not feel comfortable there. When the geography of heat relief and the geography of safety diverge, the choice is between staying in the heat or entering a space that feels threatening, and neither option is adequate. Ahmed (2004) describes how certain bodies are expected to feel at home in certain spaces while others must work to appear as though they do. For P8 and P10, the cooler space is one where that work of appearance is more than they are willing to endure on top of already managing the heat. Analysed through FPE's gendered rights and responsibilities, the right to rest, seek shade, and use public space is formally available to all city residents (Rocheleau et al., 1996). In this case, it is distributed along gendered lines. The usability of a space is not only a thermal question but a social one, and the social conditions of public space in Accra consistently impose additional costs on women that men in the same spaces do not face. This compounding shows that heat vulnerability in women cannot be addressed by simply providing more cool spaces, because not every cool space is usable.

The intersection is not confined to public space. P1 described how on the hottest nights, she and her housemates slept without clothes, with one roommate moving directly to the cool floor tiles under a fan. She then added that their room was on the ground floor with a window, which made sleeping without clothes feel less safe:

'We're on the first floor. So we used to have these thoughts that if someone is coming to do something, if someone is coming to harm us, he or she could just like scale the wall and get to our rooms. Even with that, we still used to sleep without our clothes on a lot of days.'

This account extends the safety-heat intersection into the domestic space that is supposed to be the refuge from the city's heat. That it does not function as such, that even in a private room the decision about how to manage heat is shaped by fear of intrusion, is a finding that extends previous urban public space frameworks in relation to heat. Feminist urbanism's response is to ask what a city would need to provide for this intersection to cease to exist. Better-lit, better-designed, and more genuinely public spaces reduce the safety concerns that make available spaces unusable for women, and in doing so make them more accessible for children, older people, and others who currently avoid them (Clemmensen, 2024; Bella, 2023). Designing from the constraint of the person with the least security in public space produces environments that are more usable for everyone, which the Vienna case in section 3.2 demonstrated directly.

When the topic flowed naturally, participants were also asked whether there are public spaces in Accra designed for or used by women. Similar to other responses, P9's answer was clear: *'None that I know of.'* The parks that exist are used for football. The market is female dominated but is a site of labour in heat, not rest, and even that space is not always one women can afford to use. P4 described wanting to spend time at the market but avoiding it because of the heat. The market in Accra is not only a place of commerce but, for many women, a primary site of economic activity, community, and social connection. Men, who are less likely to be responsible for household provisioning and who have more flexibility in when and whether to go at all, bear a smaller share of that cost. Heat does not create this inequality, but it intensifies structures that already exist (Rocheleau et al., 1996; Sultana, 2014). For men, extreme heat makes being outside uncomfortable. For the women in this study, it compounds a set of pre-existing restrictions on public space that were already making it more costly for them to be there: safety concerns that already limit movement, care responsibilities that structure when women can and cannot be outside, and the absence of female-centred public spaces where women can rest.

There is no space in any participant's account that is specifically designed for women to gather, rest, or be comfortable in the heat. Kern (2020) and Greed (1994) document how this reflects

a planning tradition that has historically built cities around the needs and activities of men, a tradition whose consequences extend beyond women to all those whose lives and rhythms do not match the model around which the city was designed. Figure 5-8 offers the closest participants came to naming such a space, though even this is telling. It is a shaded campus forecourt that happens to offer both shade and a sense of safety, not because it was designed with women's comfort in mind, but as an incidental byproduct of institutional shade and security infrastructure. That a genuinely usable cool space exists at all only within institutional campuses, and only by accident rather than by design, is itself a finding, as it shows what deliberate, gender-responsive design could achieve if it existed anywhere else in the city's public infrastructure.



Figure 5-7 Shaded forecourt on campus, Accra, 2026. Photograph by P1. In her own words: 'I sit on the slabs or stand with my course mates sometimes. People sit here too as it offers shade.'

Fenster (2005) argues that the right to the gendered city is not only a right to formal access but a right to belonging. It is the right to inhabit urban space without ongoing cost, without threat, and without the labour of making oneself acceptable to an environment not built for you. What this section has shown is that this right is not available to many of the women in this study in any consistent or reliable form. They cannot rest in parks because the parks are not theirs, cannot sit in shaded areas because the shaded areas do not feel safe, cannot cool down in their own room without calculating the risk of exposure, and cannot use the market as a space of rest and connection without absorbing an additional cost that men in the same city do not carry. Beebejaun (2017) argues that the right to the city requires planning frameworks that draw directly on women's experiences and spatial tactics. The response, again, is not to design a separate city for women but to ask what a city would look like if these constraints, on safety, on time, on which spaces feel like they belong to you, were taken seriously (Kern, 2020). Initiatives like shaded resting spaces, cooled public buildings, adequate tree coverage along pedestrian routes, and public transport that does not cause thermal suffering. These are not women-specific amenities, they are the conditions under which public space becomes genuinely accessible during the hottest hours for everyone who currently withdraws from it. As the Vienna case demonstrated (Section 3.2), planners who began by asking whose needs the city was failing to meet produced design changes that improved the city for all its users.

5.5 Envisioning Gender-Responsive Adaptation

Participants did not only describe their experience of heat and the city they move through, they also articulated what they believe needs to change. This section presents those accounts directly, offering an early view of what participants' situated knowledge, in relation to RQ3, might contribute to more gender-responsive adaptation planning in Accra, a contribution examined in full in Chapter 6. When asked what they would change about how their city manages heat, participants gave consistent, practical answers, set out in full in Table 5-1. Several also went further, naming not just what was missing but why. P9 named the deeper problem directly:

'Ghana is not oblivious of what gender means and its usefulness. But applying it where it will suit the government's interest is where the problem is. If they don't even care about the basic need of protecting the water bodies, how would they even care about the gender-responsive nature of it?'

Most participants stated that their needs as young women are not considered in how spaces are designed or managed. According to P4: 'people don't think about our needs in construction but only think of their profit.' Across these accounts, participants did not only describe what is missing from the city they navigate every day. They articulated what would need to change and why, as Table 5-1 documents in full. These are not passive accounts of suffering but grounded, structural analyses of urban failure, produced by the people living closest to its consequences. What this means for Ghana's climate and gender policy commitments is taken up in Chapter 6.

Table 5-1 How Participants Envision Future Gender-Responsive Urban Climate Adaptation in Accra

Theme	What they envision	Participant quote(s)
Shade and green infrastructure	Trees along pedestrian routes, shaded walkways, covered bus stops, and public resting areas to make daily movement through the city bearable	"Provision of shades and also encouraging the practicing of afforestation." (P3) "If I could redesign one space, I would prioritise more trees and shade structures along walkways and bus stops. I would also include more public resting points with seating access, especially in busy transport areas." (P8)
Ventilation and cooling in public buildings	Reliable AC or adequate passive ventilation in classrooms, workplaces, and public buildings so that academic and professional functioning is not compromised by heat	"I will like for every design to be well planned for good ventilation and if possible, fix ACs. People don't think about our needs in construction but only think of their profit." (P4) "When it's too hot, I don't think you can really work well." (P9)
Safe, female-accessible public space	Public spaces designed for women to rest, gather, and seek relief from heat, where they feel safe and at ease rather than having to 'belong' to use them	"None that I know of [public spaces for women]." (P9) "Something I could change would be to add more trees, shaded walkways and resting areas where people can just relax and go about their day. Because comfort is really needed to make you more efficient." (P10)
Better-designed markets and informal spaces	Market areas redesigned with shade, ventilation, and rest points so that economic and social life does not require enduring extreme heat	"I would love to spend much time at the marketplace, but I don't because of the heat, noise, dust, pollution, people's sweat and a whole lot." (P4) "I would like retraction of market areas to make it more comfortable to walk around because it's crowded in market areas." (P6)
Participatory and gender-responsive planning	Planning processes that genuinely consult the people they affect, and recognise that women's situated knowledge of the city is a planning resource rather than anecdotal evidence	"Most decisions are taken by leaders on our behalf." (P3) "Ghana is not oblivious of what gender means and its usefulness. But applying it where that will suit the government's interest is where the problem is." (P9)

6 Discussion

This chapter discusses and interprets the significance of the findings in relation to the RQs. To re-iterate, the RQs investigate 1) how young women in student and early professional life in Accra experience and narrate extreme heat in their everyday urban lives 2) how gender shapes heat vulnerability through spatial conditions, social expectations, and care responsibilities across different urban contexts and 3) how the situated knowledge young women have developed through living with urban heat in Accra can inform gender-responsive adaptation planning. In many cases, the findings addressing RQ1 and RQ2 were able to inform each other, as understanding how heat is experienced required understanding of the gendered conditions shaping that experience, and *vice versa*. These questions are therefore discussed in an integrated manner in the first section (6.1.1) below. RQ3 is addressed separately in Section 6.1.2. Each section moves from what the findings confirm in the existing literature through what they extend and challenge. Section 6.2 then reflects on what the methods revealed and where they fell short.

6.1 Interpretation and Significance of Findings

In the words of one participant, *'Ghana has always been hot, Accra has always been hot, but in the last five years it's been a different kind of hot.'* That observation, echoed in different forms across all eleven interviews, captures something that temperature records confirm but cannot fully convey: that the heat these women are managing has changed, and that managing it has become a more demanding, continuous, and specifically gendered undertaking. The findings show a consistent picture across participants navigating the city of Accra. Heat in the city is not an occasional disruption but a structural condition of daily life, and the cost of managing it falls unevenly along lines of gender, class, care responsibilities, and reproductive physiology in ways the existing literature has not yet shown in the detail that daily life requires.

6.1.1 Heat as a Gendered Daily Condition

In relation to RQ1, the findings confirm that heat operates as a structural, daily condition rather than an occasional disruption. In relation to RQ2, they show that the cost of managing that condition is often distributed unevenly by gender.

The findings confirm what the existing literature documents about heat in Accra and adds how heat operates at the scale of daily life. Gyimah et al. (2023) and Wemegah et al. (2025) establish that the city is warming and that urban expansion has amplified the heat island effect. Bwire et al. (2025) and Codjoe et al. (2020) document the population-level consequences through symptoms such as fatigue, disrupted sleep, and reduced concentration. This thesis confirms those outcomes and shows how they are produced, through the sleepless night after a power cut, the intellectual work relocated to midnight, and the professional morning that begins with a recovery period after a commute. The structural argument is also consistent with Owusu et al., (2019), whose work in informal settlements identified gendered risk factors including domestic responsibilities and limited mobility. This study extends that argument across students, national service personnel, and early-career professionals, confirming that gendered heat vulnerability in Accra is not confined to informal housing, as the existing literature has focused on, but is a condition of urban daily life more broadly, regardless of housing type or occupation.

One finding stood out as unexpected, where nine of eleven participants described withdrawing from public space altogether during the hottest periods as a consistent and deliberate strategy. The existing literature documents withdrawal as a health outcome of heatwaves (Bwire et al., 2025; Codjoe et al., 2020), but this study reveals its cost in terms of missed professional opportunities, reduced social participation, and diminished access to public life. That this was

so consistent across participants with different occupations, schedules, and living situations suggests it is less an individual response than a structural feature of life in a city that has not been built to remain usable during its hottest hours. It is also one that RQ2's gendered lens helps explain, as withdrawal was described almost exclusively in terms of obligations and risks that fall more heavily on women.

Two findings also constitute empirical contributions that are new to the heat literature on Ghana and West Africa. The first is the safety-heat intersection. The finding that not every thermally available space is a usable space for women, including in the domestic space of a ground-floor room at night, connects the heat and feminist urbanism literatures in a way that adds empirical grounding to what Fenster (2005) and Kern (2020) predict theoretically but which had not previously been documented in relation to heat specifically. This matters for RQ2 because it shows that gendered heat vulnerability cannot be resolved by thermal infrastructure alone, as a shaded cool space that does not also feel safe is not, in practice, an accessible space.

The second is reproductive physiology as a dimension of heat vulnerability. That menstruation, pregnancy, and hormonal variation compound heat exposure in specific, cyclical, and physiologically documented ways (Bekkar et al., 2020; Charkoudian & Stachenfeld, 2020; Notley et al., 2020) has not previously been studied in the West African urban context. It was surprising was how readily participants discussed this unprompted. In a social context where Ghana is widely described as conservative and these topics can be considered taboo, multiple participants described their menstrual experiences with heat with detail and candour. Similarly, the number of participants who described sleeping on cold tiled floors with damp towels to manage heat at night produced a brutally honest picture of bodily vulnerability that a dataset could not. This openness is itself analytically significant as it suggests that the reason this dimension of heat vulnerability is absent from existing research is not that women are reluctant to discuss it, but that this topic has not been engaged with as deeply as it should. For RQ2, this means gender-responsive adaptation planning has been working with an incomplete account of what "gendered" heat vulnerability fully includes.

The findings also extend the existing literature on the political ecology of heat production. One participant's analysis of *galamsey* and unregulated construction as drivers of intensifying heat is accurate and consistent with what Gyimah et al. (2023) and Wemegah et al. (2025) document. FPE adds the political dimension, where *galamsey* is both a natural phenomenon and a governance failure, one in which economic interests override environmental commitments (Obeng-Odoom, 2016). Dumsor is similarly not only an infrastructure problem but a political ecological one, as Ghana's reliance on the Akosombo dam means electricity capacity falls precisely when demand peaks, making it a predictable consequence of energy governance decisions that compound heat exposure for those without backup power. Both *galamsey* and dumsor represent structural chains of decisions that produce heat stress at the level of individual bodies, a reminder that gendered heat vulnerability is produced alongside, and compounded by, vulnerability structured by class and infrastructure access.

Where the findings most directly challenge the existing literature is in how women's own accounts position them, not as victims of environmental risk, as critiqued by Arora-Jonsson (2011) and Gonda (2019) but as analysts of their own conditions. Participants identify the structural causes of intensifying heat, name who bears the greatest burden and why, and articulate what would need to change. When all eleven participants independently arrive at the same workarounds, the consistency reflects a shared response to shared infrastructure failure, not individual ingenuity. Framing this as resilience shifts the burden of that failure onto those navigating it rather than the institutions responsible for it (Kern, 2020, p. 63; Bella, 2023). As seen through these participants, and following Gonda (2019) and Udo et al. (2024), the

knowledge needed to design better cities already exists in the daily routines of the people most affected. The gap is therefore not in the knowledge but in whether planning processes are designed to incorporate it. What these findings collectively produce is a body of situated knowledge about heat in Accra that has had no formal pathway into the planning processes meant to address it. The following section examines what that means for policy.

6.1.2 Situated Knowledge and the Policy Gap

In relation to RQ3, the findings show what the situated knowledge of young women can contribute to gender-responsive adaptation planning in Accra. As with 6.1.1, what follows first confirms and extends the existing literature on the gap between policy and implementation in Ghana, before turning to where the findings challenge how that gap has been understood.

The findings confirm what existing policy analysis in Ghana has already established. Ghana's climate and gender policy frameworks contain the right commitments, but those commitments have not yet sufficiently reached the physical infrastructure of the city. The AMA's Resilience Strategy is organised around three pillars: thriving residents, a prosperous city, and sustainable infrastructure, none of which include gender as an explicit cross-cutting consideration. Its framing of resilience also does not differentiate between residents by gender, care responsibilities, or differential vulnerability to heat (Accra Metropolitan Assembly, 2019, p. 6). There are some steps forward, as the National Gender Policy does commit to mainstreaming gender across all institutions and sector plans, with a stated goal of improving the conditions of women and marginalised groups across social, legal, economic, and civic domains (Ministry of Gender, Children and Social Protection, 2015, 2025). The Climate Action Plan also lists gender among its thirty-one prioritised action areas (Accra Metropolitan Assembly, 2020) indicating formal recognition of the intersection between climate and gender. However, the plan's primary focus is on emissions reduction and carbon neutrality by 2050, and its adaptation measures are framed in aggregate terms rather than differentiated by social group or experience. Implementation also consistently stalls where it requires challenging economic interests, entrenching a gap between policy ambition and lived reality (Boafo et al., 2025; Cobbinah & Nyame 2021), which risks producing maladaptive outcomes when short-term action and long-term goals remain misaligned (Nastar & Armah, 2026).

Where the findings extend this existing picture is in showing what that gap costs at the level of daily life, and in showing that the gap is one of process, not only of content. As P9 observes, Ghana is not oblivious of what gender means. The problem then is not only that current policies do not reflect the needs of women, but that the planning processes producing them have not been designed to surface or respond to women's experiences of the city. This study adds the gendered cost of that failure. The thirty minutes P7 spends in an overcrowded trotro before she can begin her working day, the classroom without AC where P9 tries to teach through the hottest hours, and the shaded pavement that P2 describes as a safe space in a city that has no public spaces designed for women. Jerneck's (2017, p. 62) "integrating but not including" is, in this study, not only a theoretical description but an observable condition, and one that extends beyond Accra. Research on gender and urban planning in sub-Saharan Africa consistently finds this same pattern, where women's participation in planning processes remains low and gender-sensitive policies rarely translate into the design of public infrastructure (Beebejaun, 2017; Owusu et al., 2019). A policy environment that names gender in its documents but not in its infrastructure risks deepening the very inequality it claims to address.

Practitioner experience from cities with established gender mainstreaming mandates points to two reasons why this pattern persists. First, gender-responsive interventions that begin as pilot projects frequently remain as such, never mainstreamed into standard planning practice, because

the institutional processes to roll them out do not yet exist (Practitioner informant, personal communication, March 2026). Second, where they do begin to scale, they often face resistance, both from institutions where gender commitments conflict with economic interests, and from the public, where explicitly women-centred framing can attract ridicule or dismissal before the benefits become visible. Vienna's own gender mainstreaming programme faced exactly this response in its early stages, and Ghana's context, as these participants and the literature (Cobbinah & Nyame, 2021) suggest, presents comparable challenges. This pattern is still ongoing, but with the Climate Action Plan and the National Gender Policy both currently under revision, there is a window of opportunity. Together, these two active revisions create an opening for the kind of evidence this study produces, the kind Paschen and Ison (2014, p. 1084) identify as missing from planning processes that claim to be responsive to the people they affect.

The findings most directly challenge the existing literature through what they contribute empirically. The participants in this study have collectively produced a detailed and practically grounded account of what gender-responsive climate adaptation in Accra would need to address, extending the analytical clarity established in Section 6.1.1 specifically to policy. Rigon (2025) argues that participatory, narrative approaches to climate research produce knowledge that formal planning processes typically lack, that being place-specific accounts of what conditions cost the people living with them. The accounts in this study, set out in Table 5-1, are exactly this kind of knowledge, and have had no formal pathway into the processes meant to close the policy gap examined here. Section 5.3 raised a related point about who has historically shaped city planning, as simply adding women to planning institutions does not transform practice if those women still work within norms shaped by men (Bella, 2023). The same is true here. Closing the policy gap requires more than including women in the process, it requires transforming whose knowledge is treated as evidence in the first place.

What that transformation would actually require, in practical terms, is set out by participants themselves in Table 5-1. Shaded infrastructure at bus stops and along pedestrian routes is one clear need, since the absence of shade produces heat exposure that shapes when and whether women can move through the city (Gyimah et al., 2023), an intervention well supported by the nature-based solutions literature on urban tree canopy and green corridors (Bowler et al., 2010; IUCN, 2020; Ziter et al., 2019). Reliable cooling or adequate ventilation in public educational and institutional buildings is another, since the absence of AC distributes the cognitive and physical costs of heat disproportionately (Bwire et al., 2025), a consequence of designing around an implicitly male norm that feminist design scholarship has long identified (Criado Perez, 2019). A third is safe, female-accessible public space, since not every cool space is a usable one when heat and safety intersect (Fenster, 2005, p. 243; Kern, 2020, p. 63). Vienna offers a transferable model for what such a space can look like in practice: existing community spaces made available during heatwaves as shaded, cooled gathering points, addressing thermal stress and social isolation simultaneously (Practitioner informant, personal communication, March 2026). Delivering interventions like this also requires attention to how they are proposed, not only what is built. Practitioner experience suggests that framing gender-responsive interventions around families rather than women specifically can reduce institutional and public resistance (Practitioner informant, personal communication, March 2026). This is not the ideal approach, since advocating for women's needs should not require such reframing, but in contexts where resistance is real and the implementation gap is urgent, making progress and showing that it works for everyone may be the more effective path toward the acceptance that should have existed from the start.

This gender-responsive climate adaptation would need to be developed with the participation of the people it is meant to serve, drawing on the kind of situated knowledge those living with these conditions already hold (Rampaul & Magidimisha-Chipungu, 2022). What is missing, in

other words, is not the technical knowledge of what to build, but the institutional accountability to build it.

6.2 Reflecting on Methodological and Analytical Choices

The combination of semi-structured interviews and photo elicitation proved productive in ways that any single method would not have. The small stories approach (Bennetsen, 2021) surfaced dimensions of heat experience that structured methods cannot reach as deeply. Several of the study's most significant findings emerged because participants were given space to describe their experiences in their own terms, namely the menstruation dimension, the safety and heat intersection, and intersectional analyses of who bears the heat most. This is what FPE means by situated knowledge (Rocheleau et al., 1996, p. 4), validating the methodological choice.

Conducting the research remotely limited the spatial and sensory dimensions of the data in ways worth acknowledging. Bennetsen's (2021) methodology included walking with participants through the environments they described, what she calls heat walks, a method that would have grounded the spatial accounts more directly in the physical environments participants navigated. Future research with the time and resources for in-person fieldwork should incorporate this approach. It was also revealing how rarely participants named gender spontaneously. The gendered dimensions of experience were often visible in what participants described rather than how they named it, and many found it difficult to think critically about urban design and who it serves, a framing not yet mainstream in Ghanaian public discourse.

The application of feminist urbanism to a Global South context required holding the framework in tension with conditions it was not designed to address. Urban informality, the political ecology of *galamsey* and *dumsor*, and the postcolonial dynamics of Ghanaian urban governance all pushed beyond what the framework had previously been asked to explain, and that friction is itself a contribution to how it can be applied elsewhere. FPE has a well-established presence in Global South research contexts and its application to Accra built on a substantial existing literature (Rocheleau et al., 1996; Elmhirst, 2011; Sultana, 2014). Feminist urbanism, by contrast, has been applied far more extensively in Global North cities, and bringing the two frameworks together in a West African urban heat context was a deliberate attempt to follow Bella's (2023) call for extending feminist urbanism beyond its existing geographic boundaries. Future research would benefit from incorporating additional frameworks Bella (2023) identifies as relevant to intersectional feminist climate planning, including care ethics and climate justice, to further develop the analytical vocabulary available for this kind of work.

On legitimacy and generalisability, this study does not claim to speak for all young women in Accra. The eleven participants are educated, formally employed or in study, and do not represent the most economically marginalised people in the city. The conditions these participants describe are less severe than those faced by women in more economically marginalised positions, including informal workers and migrants, whose daily realities this study could not reach. Within the population this study did reach, the findings have a degree of internal consistency that lends them credibility. The same dynamics appear across eleven participants, through two different methods. That consistency supports that these findings reflect patterns rather than individual experiences, and their convergence with what the literature already documents about Accra strengthens the case that they are capturing something significant.

Personally, this study has deepened my understanding of what it means to centre voices that are often not heard. As cities across the world continue to warm, the need for this kind of work only grows, and there are more voices to be uplifted. The everyday experiences of women navigating these conditions deserve to be heard, taken seriously, and acted upon, and this thesis is one small contribution to a much larger conversation.

7 Conclusion

Young women in Accra are navigating a rapidly warming city largely without the infrastructure, planning, or policy attention that meet the needs of their daily reality. While Ghana's climate and gender policy commitments are growing, the gap between what is written in strategy documents and what participants encounter on an ordinary hot day remains wide.

This thesis aimed to understand how young women in student and early professional life in Accra experience and narrate extreme heat in everyday urban life, how gender shapes that experience through spatial conditions and social expectations, and what their situated knowledge can contribute to more gender-responsive approaches to urban heat adaptation. These questions were approached through the combined lens of Feminist Political Ecology and feminist urbanism, frameworks that proved productive for understanding why heat vulnerability is unequally distributed and how those inequalities are expressed in the physical design of the city.

The findings show that heat in Accra is not occasionally uncomfortable but structurally present in daily life, demanding active, ongoing, and largely unrecognised management. Heat management begins before participants leave the house, in fabric choices, timing, and mental preparation, and continues through the commute, the workplace, and the night. The physical toll, including heat rashes, disrupted sleep, and menstrual and pregnancy-related heat sensitivity, is described as something women simply deal with, reflecting the absence of any institutional framework that treats it otherwise. Navigating the city in the heat carries its own costs and participants have built detailed spatial knowledge of shade and safe routes through years of daily practice. Yet when shade is absent, they adjust their timing, and when timing is exhausted they stop going out altogether. The safety and heat intersection, where the geography of thermal relief and the geography of safety for women do not reliably overlap, is a finding with no precedent in existing heat research in Accra. Heat follows participants through the door, arriving at work and study depleted, with intellectual output shifted to nighttime and rest lost to seasonal power cuts. Across the findings, every adaptive strategy documented is a private solution to a condition that should be addressed publicly. That eleven young women have independently arrived at the same workarounds is evidence of consistent and largely unaddressed failure. Yet these same women are not passive recipients of that failure. They have identified the structural causes of intensifying heat, named who bears the greatest burden and why, and articulated with precision what would need to change. Their knowledge is detailed, accurate, and directly relevant to the adaptation planning processes that claim to want it.

Embedded in these findings, there is also immense opportunity. Accra's Climate Action Plan for 2026-2036 is actively under revision, and Ghana's National Gender Policy has just been updated with calls for cross-sector gender integration. Both processes claim to want the kind of grounded, experiential evidence this study produces. The situated knowledge these women hold about their thermal environments, the shade that is missing, the bus stop that needs a roof, the classroom that cannot be taught in after ten in the morning, is not anecdotal. It is an actionable account of what gender-responsive adaptation in Accra would need to address. The gap between policy commitment and lived reality is not a knowledge gap, as the knowledge exists. What is needed is a structural transformation in whose knowledge is treated as evidence and whose needs are treated as the design standard, and the planning processes currently underway represent a direct and timely opportunity to begin that transformation.

7.1 Practical Implications and Recommendations

Several recommendations can be drawn from the analysis and discussion of the findings:

- **Increase the participation and inclusion** of women, particularly young women, informal workers, and others currently excluded, in urban climate adaptation planning processes, treating their situated knowledge of heat as important, primary evidence
- **Apply gender-responsive urban design principles** to heat adaptation infrastructure, which ultimately benefits all city users: shaded pedestrian routes, covered bus stops, safe public resting spaces, passive cooling in public buildings, and green corridors in high-density neighbourhoods all address the needs of the most constrained users while producing measurable thermal benefits for everyone
- **Close the policy-to-practice gap** by both strengthening existing gender and climate commitments and creating a dedicated mechanism to hold institutions accountable to them. Options include a cross-ministerial working group, a standing committee within the Accra Metropolitan Assembly, or a formal gender-mainstreaming mandate embedded in the Climate Action Plan revision process. Without that structural accountability, gender-sensitive commitments will continue to appear in policy language without shaping what is built, funded, or maintained.

These recommendations address four distinct audiences. Academically, for climate adaptation researchers and practitioners, closing the evidence gap requires qualitative gender-responsive methods as a necessity rather than a complement. The framework developed in this thesis, combining Feminist Political Ecology, feminist urbanism, and a small stories approach, offers a starting point for comparable research in other rapidly warming Global South cities, where the gendered dimensions of urban heat remain largely undocumented. At the level of institutional policy, for the Ministry of Gender, Children and Social Protection, closing the gap requires that the National Gender Policy is actively coordinated with the Climate Action Plan revision rather than running in parallel to it, and that gender-sensitive commitments come with specific, funded targets. The intersection of reproductive health and urban heat, currently absent from all public health frameworks in Ghana, represents a priority area that the Ministry of Gender and the Ghana Health Service are well placed to address jointly. At the most operational level, for the Accra Metropolitan Assembly and urban planners, closing the policy-to-practice gap begins with the infrastructure that participants consistently identify as missing: shade along pedestrian routes, covered bus stops, passive cooling in public buildings, and safe public resting spaces. All of these produce benefits for everyone who uses the city, including people with disabilities and older residents. The evidence base for these interventions already exists, and the precedents for what participatory, gender-responsive design can deliver have already been set. What remains is the decision and will to apply them.

And finally, for the young women in this study, and the millions navigating similar conditions across rapidly warming cities in the Global South, the situated knowledge they hold about their thermal environments is real, accurate, and worth documenting. Sharing experiences within community networks, and finding collective ways to name what the city lacks, are meaningful forms of participation that can feed into the planning processes that claim to want this evidence. Community groups, student organisations, social media, and informal networks are spaces where this knowledge can be gathered, shared, and made visible, without requiring institutional access to begin. Every account shared, every pattern named, and every conversation started is a step toward the city that should already exist, and toward a more just urban future for all.

7.2 Challenges and Limitations

Several challenges and limitations shaped the research process and should be acknowledged alongside the findings. Recruiting participants proved more difficult than anticipated. Initial outreach through existing networks generated a slow response, and it was only once snowball sampling took hold that momentum built. The combination of network-based and direct recruitment helped broaden the sample beyond immediate connections, though it still means the composition was shaped in part by who was reachable through these channels, and may have excluded women outside them. Not all participants were willing to engage with the photo elicitation component. One participant questioned directly how photographs would contribute to a research study, a response that reflects the broader point this thesis makes about the undervaluation of experiential and visual knowledge in formal research contexts, and about the need for methods like small stories to make that knowledge legible (Bennetsen, 2021). Future research might invest more time in explaining the analytical purpose of photo elicitation to participants before data collection begins. All interviews took place online via Zoom or WhatsApp, which limited the depth of contextual understanding that an onsite field visit could provide and reduced the ability to capture the full spatial and sensory dimensions of heat experiences from participants. In-person fieldwork would have enabled richer engagement with the physical environments participants described. Asynchronous interviews also lacked opportunities for real-time clarification, and photographs could not be discussed in the same immediate and collaborative way that face-to-face photo elicitation typically enables. It is also possible that conducting interviews only in English constrained what some participants were able to articulate, as participants were found occasionally searching for words or phrases that felt inadequate to what they wanted to convey. so future studies should offer options in local languages like Akan, Ewe, Ga, or Dagbani, with translation support provided.

Finally, the limited availability of implemented gender-responsive climate policies in Accra meant there was relatively little formal policy practice to engage with analytically. The policy analysis in this study therefore focused on commitments and frameworks rather than implemented measures, which is itself a finding. The gap between stated ambition and current action is part of what this thesis helps to document.

7.3 Avenues for Future Research

This study opens several directions for future inquiry, each grounded in what the findings revealed and, in several cases, in what the participants themselves identified. The intersection of reproductive health and urban heat has little to no established presence in the existing literature. Future research should investigate the relationships between menstrual health, pregnancy outcomes, and thermal stress in West African urban contexts, using methods capable of capturing both physiological and social dimensions. The PSI (2026) finding that not a single healthcare worker in Ghana had received formal climate health training underlines how significant this gap is at the institutional level.

Intersectionality is the second direction, and one that participants brought up themselves. They named informal workers, hawkers, market women, and migrants as bearing the greatest heat burden with a consistency that reflects their own situated knowledge of differential exposure. One participant's observation described how visually impaired students on her campus navigate by memorising familiar routes and may be directly exposed to the sun without warning if those routes lack shade. The feminist urbanism and FPE framework developed here could be extended to examine disability alongside gender as an axis of heat vulnerability, drawing on disability justice and urban planning scholarship that argues design built around the needs of the most constrained users benefits those excluded by planning norms built around an 'able' body (Stafford et al., 2022). Future research should centre those groups directly to examine how

class, occupation, care responsibilities, and ability intersect with gendered heat vulnerability across the city. Research with younger age groups, including children and adolescents, would also extend the inquiry in a direction this study's ethical and practical constraints did not permit. The safety and heat intersection also would benefit from dedicated future research using feminist spatial methods to map where the geographies of thermal relief and safety diverge, and to test planning interventions in collaboration with communities.

The frameworks developed in this thesis are ultimately an invitation. The participants in this study arrived at their own analysis of what was needed with their city and what it would take to improve it, not through any formal training but through the daily experience of navigating conditions that were not built with them in mind. Future research should ask not only how heat is experienced and by whom, but how the women navigating these cities today might influence the cities that come after. In line with Kern's (2020) thinking, the feminist city is a practical project of living more justly in the urban world we already inhabit. The vision is within reach, it requires only the will to centre those in need, and to build accordingly.

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APPENDIX A – INTERVIEW GUIDE

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2026

Everyday Experiences of Heat – Interview Guide

You are invited to reflect on your everyday experiences of heat. There is no right or wrong way to do this. The focus is on how you experience and move through urban spaces during hot weather.



Self-introduction	Could you tell me a bit about yourself and your everyday life? • Your age, what you do, and where you live • What does a typical day look like for you? • What kinds of responsibilities or tasks take up most of your day? (e.g. studying, working, helping at home, caring for others)
Everyday Life	Can you walk me through a very hot day from morning to evening? • What does the heat feel like in those moments? Were there moments where you had to continue what you were doing, even though it was very hot? • Did anyone else depend on you during that day (family, work, responsibilities)?
Space, Access & Movement	How does heat shape the way you move through the city? • What kinds of places do you usually find more comfortable or more difficult to be in when it's very hot? • Can you describe a route you take regularly — to work, campus, the shops — and tell me what it feels like on a hot day? • Are there places you used to go but have stopped going because of the heat? • How does who is around (men, groups, strangers) affect where you choose to go? • When you arrive somewhere after being out in the heat, how long does it take you to feel okay again? What do you do in those first few minutes?
Story of Heat	Can you tell me about a specific moment when the heat really affected you? Please try to tell a story here. You might include: • where you were • what you were doing • how the heat affected you • what you did in response
Coping / Everyday Strategies	What do you usually do to cope with or manage the heat? How do you adjust your routines during very hot weather? Do you ever change what you wear because of the heat, in ways you would not otherwise want to?
Inequality	When you look around your city, who do you think is most affected by the

	heat? • What makes it easier or harder for some people to deal with heat?
Gendered Experience	Thinking about your daily life, do you feel that your experience of heat is shaped by being a young woman? • Are there things you need to consider that others might not (e.g. clothing, makeup, menstruation, etc.)? • Do you think men around you experience the heat differently? What makes you say that? • Do expectations from family or society affect how you move or spend time during hot days?
Urban Design	Have you noticed any changes to your neighbourhood or the city in recent years that have made it hotter or cooler? If a city planner asked you to show them the worst and the best places in your daily route in terms of heat, where would you take them? • Do you feel like your needs (as a young woman/student) are considered in how spaces are designed or managed? • If you could redesign one space in your city to make it better during heat, what would you change?
Optional: Photo Reflection <i>See next page for more specific guidelines!</i>	If you have photos from your time in Accra, or greater Ghana, that reflect an experience with extreme heat, please feel free to paste them below and reflect on these questions: • What does the photo show? • Why did you take it? • What does it say about your experience of heat?

APPENDIX B – PHOTO ELICITATION GUIDE

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PHOTO ELICITATION ACTIVITY

Experiencing Heat in the City

Please take photos that represent your experience of heat in your everyday life in the city. There is no right or wrong way to do this. You can photograph anything that feels relevant to you. The focus is on how you experience and move through urban spaces during hot weather. You might consider photographing:

Hot Spaces	Cooler or Comfortable Spaces	Movement & Routes
• A street with no shade • A bus stop in direct sun • Surfaces that feel very hot (concrete, metal, pavements) <i>What makes this place feel hot or uncomfortable?</i>	• A shaded bench, tree, or park • Indoor spaces (shops, libraries, cafés) • Places with wind, water, or airflow <i>Why does this place feel better?</i>	• A path you choose because it has shade • A longer route you take to avoid heat • A place where you stop or wait <i>How does heat change the way you move?</i>
Spaces You Avoid	Moments of Pause	Everyday Adaptations
• Places that feel unsafe, uncomfortable, or inaccessible • Areas you pass through quickly instead of staying • Spaces you would like to use but don't <i>Why do you avoid this space?</i>	• Sitting, waiting, resting • Looking for shade or relief • Taking a break from movement <i>What makes you stop here?</i>	• Things you carry (water, fan, etc.) • Clothing choices • Adjusting your timing (early/late movement) <i>How do you adapt to the heat?</i>

A few guidelines:

- You don't need to take many photos, around 5-10 is enough
- You do not need any photography skills, the focus is on your experience
- Please avoid photographing identifiable people
- If something feels important to you, it is worth capturing
- Please include some text to explain the photo.

What happens next?

Please send Skye your filled out activity, and a consent form, to ensure she can use your anonymized reflections in her research. Thank you once again for your time and effort!

Appendix C – Interview Consent Form

MESPOM Thesis | Skye Jamieson

PARTICIPANT INFORMATION & CONSENT FORM

This form is to ensure that you have been given information about the Skye Jamieson's MESPOM thesis project and to give you an opportunity to confirm that you are willing to take part in this research.

What Participation Involves

To consent, please **check** if you agree to take part in:

- ☐ A short photography activity (3–5 days), documenting your experiences of heat in everyday life
- ☐ Participate in an interview to discuss your personal heat experiences (~30 minutes)

I invite you to first refer to the Information Sheet (pages 2-3) to familiarise yourself with the details of the project. Once you have done this, please indicate which of the following statements apply to you:

☐	As a research participant, I am aware of my right to withdraw participation at any time
☐	I give my consent to my anonymised quotes and/or images being used in the thesis
☐	I give my consent that the interview can be audio- or video- recorded, transcribed using a third-party speech-to-text transcription application, translated and analysed
☐	I understand that the results of the research will be presented so that no information can be traced to me personally / I understand that pseudonymity of participants will be ensured
☐	I give my consent that a record of my interview can be safely stored for future reference
☐	I have been informed who will benefit from the participation
☐	I have been informed how data will be either destroyed or reused at the end of the research

Note: Your participation is voluntary. As an interviewee, you do not have to answer all the questions that are asked; you reserve the right to refuse or cease participation in the interview process without stating your reason and may request to keep certain materials confidential. In addition, you have the right to review any summary or synthesis of the interview at any time up until the data is published. There will be no monetary payment for participating in the research, but you will have contributed to a thesis researching climate change, urban planning, and gender, with the goal of supporting more inclusive and responsive approaches to urban climate adaptation.

Please, sign below to confirm your consent – digital signatures are possible:

	Participant(s)	Researcher
Name		
Signature		
Date		

MESPOM Thesis | Skye Jamieson

INFORMATION SHEET

This thesis is being written to fulfil the Master of Science degree awarded upon successful completion of the Erasmus Mundus Master's course in Environmental Sciences, Policy and Management (MESPOM) jointly operated by the University of the Aegean (Greece), Central European University (Hungary), Lund University (Sweden) and the University of Manchester (United Kingdom). Further information about the Master's programme can be found at the [MESPOM website](#).

Aims & Objectives

This thesis explores how young women in climate-stressed neighbourhoods of Accra experience and narrate extreme heat in everyday urban life. Drawing on Feminist Political Ecology and a Feminist Urbanism perspective, the study uses participatory storytelling to examine both gendered vulnerabilities and adaptive capacities during heatwaves. By centring women's narratives, the research highlights their knowledge, needs, and strategies for coping, emphasizing how these voices can inform future gender-responsive urban heat adaptation strategies and policies, even in contexts where such policies are currently absent/limited. Through this approach, the study also seeks to aid in shifting gender equality narratives from vulnerability to empowerment, recognizing women not merely as those at risk, but as holders of important local knowledge and expertise that can guide more inclusive urban planning and climate adaptation.

Ethics Statement

Participation is entirely voluntary and interviews will be conducted in line with ethical research standards. You may refuse to answer any question or stop the interview at any time without giving a reason and without any adverse consequences. The research is independent and will not be supported or funded by any external organisation that would influence the conclusions made. The information you provide will be used for academic research purposes only. The analysis and reporting of findings are not intended to harm the reputation, dignity, or privacy of any individual or organisation. All data will be handled with care to minimise the risk of identification or any negative impact on you or your organisation.

With your permission, the interview will be audio-recorded and transcribed. All information you provide will be treated as confidential. Your name and any information that could directly identify you will be removed or replaced with a pseudonym in any publications or presentations. Audio recordings and transcripts will be stored securely on password-protected devices/servers accessible only to the researcher. Your data will be processed only for research purposes and stored securely in accordance with Lund University's guidelines.

Appendix D – Interview Coding Framework

Cross-Cutting Codes	T1 Embodied Knowledge and Daily Preparation	T2 Navigating a Hot City	T3 Heat and Everyday Working Life
CC.1 Explicitly gendered	T1. 9 Menstruation and Heat	T2.1 Shade-mapping	T3.1 Arriving already depleted
CC.10 Policy or planning gap named	T1.1 Preparation rituals	T2.10 Overcrowding as compounded heat	T3.2 Heat affecting concentration
CC.11 Critique of planning power	T1.2 Bodily experience of heat	T2.11 Market as feminised heat space	T3.3 Differential access to cooled workspaces
CC.12 Ventilation and passive cooling	T1.3 Self-presentation constraints	T2.12 Observations of differential vulnerability	T3.4 Power cuts and productivity
CC.13 Changing climate felt in the body	T1.4 Heat beyond working hours	T2.13 Withdrawal from public space	T3.5 Scheduling work around heat
CC.14 Pushing through - obligation over discomfort	T1.5 Domestic coping strategies	T2.2 Timing as coping	T3.6 Campus versus city as thermal environments
CC.2 Implicitly gendered	T1.6 Sensing change over time	T2.3 Rescheduling to evening or night	T3.7 Shared community and social organisation
CC.3 Class and financial access	T1.7 Normalisation of heat	T2.4 Public transport as heat exposure	
CC.4 Intersectionality	T1.8 Timing of heat	T2.5 Financial cost of coping	
CC.5 Agency and improvisation		T2.6 Dress and gender norms	
CC.6 Constraint and lack of choice		T2.7 Safety and movement	
CC.7 Small story		T2.8 The umbrella as coping object	
CC.8 Comparison to men		T2.9 Heat and social participation	
CC.9 Reflection on relative privilege			

Appendix E – Participant Photobook

Photographs are organised thematically to correspond with the three analytical themes of Chapter 5. Participant captions are reproduced in full where provided, either synchronously or asynchronously.

THEME 1: LEARNING TO LIVE WITH THE HEAT



P1 - Water bottle and handkerchief

Written Caption: *‘Any day I leave my residence, I carry my bottle, a thermos flask and a cotton handkerchief or this towel of mine.’*

Verbal Explanation: *‘I put a bit of ice in the bottle as well to keep the water cool during the day. And I always have to have a handkerchief because I sweat a lot and it's unbearably hot sometimes. So, I always have to have a handkerchief. Not having a handkerchief means I'm going to have a bad day.’*



P2 - Water storage tank and informal shade structure

THEME 2: NAVIGATING A HOT CITY



P1 – Tree-lined Shaded Route

Written Caption: *‘During my commute, I prefer this route because the wide lined up trees provide shade.’*

Verbal Explanation: *‘I really like this space on campus because the trees are sort of like canopy and they provide like such good shade. This semester, there was a point I had to stand here for a while because I wanted to catch my breath. The trees here, they are lined up in a way that is quite comfortable, in a way that they are joined and provide shade. So it's quite comfortable. And there are even about two women who sell here during the day and they sit under the trees. So that shows you how comfortable it is. And during certain times of the day, especially when classes in session, this place is usually quite busy because a lot of students like to use the site. And I'm guessing it's for the same reason.’*



Written Caption: *‘I stand under the trees for shade sometimes, as they are on my regular route (the 2nd one is close to the [omitted for anonymity], my department)’*



P1 – Areas of Increased Heat Exposure

Written Caption: *‘These places are hot - the first photo is behind the [omitted for anonymity], and the second is the car park leading to one of the main canteens on campus [omitted for anonymity], I walk quickly when I get to these places.’*

Verbal Explanation: *“I wish you could feel the heat in these two photos, but the first photo is a bit, I mean, the heat here is a bit unbearable because there are no trees lined up, but there's nothing, the building is not, the roof of the building is not extending in any way to provide shade. So you're just going and you're just like experiencing the heat as you go. But the second photo, which is also like tarred, with coal. It's super hot. This particular place is super, super hot. And this is where I used to go get to the canteen to buy food. It's super hot. Like last week, there was a point I was walking there and it felt like the heat was not only coming from the sun, but it was coming from the ground as well. Super, super hot. And I remember there was a time I was standing here with two of my coursemates and we're talking and one of them told me, I think we should just leave this space and find somewhere else because it's too hot. So it's super hot.”*



P10 – Unshaded bus stop

Written Caption: *'If I were to include a photo, it would likely be of a bus stop or street with no shade. The photo would show how exposed the space is, especially during midday. I would have taken it to capture how everyday movement in the city becomes difficult under extreme heat. It reflects how heat is not just a feeling, but something that shapes where I go, how long I stay outside, and how I plan my day.'*



P7 – Inside the trotro

Verbal Explanation: *'This is when I was in the trotro, as you can see how closely packed everyone is. Not very comfortable at all.'*



P2 - Areas of Shade

Written Caption: *I think I would really, really commend the architects of our campus, especially those people who planted trees alongside our pavements, because there are some pavements that even when the weather becomes extremely hot and then you're walking in those shades, like it feels, it feels so heavenly. It's more of some kind of comfort and warmth. Yeah. So I feel like those are safe spaces here, when the weather is very mature, those are safe spaces'*



P2 - Areas of Sun

Written Caption: *“There are other pavements too that have no trees along. So, I don't like to walk in those places.”*

THEME 3: HEAT AND EVERYDAY WORKING LIFE



P7 – Arriving at the office, sweating. Urban Accra view from her office building rooftop. Workplace AC unit.

Verbal Explanation: *'I was sweating. That was immediately when I entered my office. Sweating obviously. I had to just sit down for some time. I turned on the AC and in about ten minutes I was fine.'*



P7 – View of the sun from workplace rooftop.

Verbal Explanation: *'The sun was going down, around almost five. I took this picture from the rooftop where we eat. If you compare this picture to the first one when I was going to work, you realise that it seems quite shady, even though there is no shade, because the sun was almost gone.'*



P7 – Route from workplace to arrange a car ride home.

Verbal Explanation: *‘This was when I was leaving work to get a car home.’*



P1 – Residence Route

Written Caption: *‘An alternative route from/ to my residence (at the far end with the black windows), the ground here is very hot.’*

Verbal Explanation: *‘the black pavement here in the photo too is super hot. Really, really hot, like super, super hot. And because I’m facing the sun when I’m walking, leaving my residence, it makes it extra uncomfortable on most mornings.’*



P1 – Resting Place

Written Caption: *‘At the forecourt of the [omitted for anonymity], I sit on the slabs or stand with my course-mates sometimes. People sit here too as it offers shade.’*

Verbal Explanation: *‘I like the last photo as well because that’s, I’ve sat here with so many of my coursemates to chit chat. It’s the forecourt of the Institute of African Studies and so many other people sit here as well. You meet so many people, so many students and even non-students sit here when they get to the side of campus. I’m guessing to rest. They sit on the slabs. And it’s also, even though the building doesn’t extend to the side and there are no big trees to provide shade, I don’t know why, but it’s quite cool on most days. But there are days I’ve noticed the sun directly hits the space and it can also be a bit uncomfortable.’*



P7 – Commute to work

Verbal Explanation: *‘This is me, yesterday morning, walking to the bus stop to get a trotro. It was quite hot but I had no choice, I had to walk to the bus stop.’*

Appendix F – Declaration of Use of Generative AI (GAI) Tools

IRD 2025/2026
IIIIEE, LU

Declaration of Use of Generative AI (GAI) Tools

1) Permitted Uses in This Course

Students may use GAI tools for:

- Brainstorming and idea generation
- Planning and outlining
- Language support (grammar, clarity, tone)
- Translation of non-personal, non-sensitive content
- Drafting outlines (not full assignments)

Requirements:

- You must critically review, fact-check, and edit all AI outputs.
- Do not submit unedited AI-generated work.
- Do not input personal, sensitive, or confidential data into GAI tools.

2) Student Declaration (to be completed)

Project/Assignment title: “A Different Kind of Hot”: Centring the Everyday Extreme Heat Experiences of Young Women in Accra, Ghana

Did you use GAI tools for this work? ☒ Yes ☐ No

If Yes, complete the items below.

a) Tools used

List the tools and versions (e.g., “ChatGPT, Claude, DeepL”):

ChatGPT, Claude, NotebookLM

b) What you used them for (check all that apply)

- ☒ Brainstorming / idea generation
☒ Planning / structuring
☒ Language editing (grammar/clarity)
☐ Translation (non-sensitive content)
☐ Outline drafting
☐ Other (specify): _____

c) How you used the tools (be specific)

IRD 2025/2026

IIIEE, LU

Describe prompts, steps taken, and how you revised the outputs:

ChatGPT and Claude were used to help support my writing and brainstorm throughout the initial development of my thesis topic, and when writing the final paper.

Uses included:

- Brainstorming ideas - I prompted the AI with questions such as, *"Suggest 10 research angles linking feminist political ecology, urban climate vulnerability, and gendered resilience."* Also the interview planning phase, it was prompted to generate various question ideas based on the research aims, research questions, and intended outcomes, with output questions then adapted to better fit my research. I reviewed the outputs, selected the ideas most aligned with my research interests, discarded others, and rewrote the selected ideas in my own words to ensure originality. As I have never written a thesis before, and we were not allocated a supervisor until very late in this process, it was helpful to have this 'sounding board' to bounce ideas off of.
- Planning / Structuring - for sections such as the literature review and theoretical frameworks, I used NotebookLM to help gather supplementary relevant sources in my desired fields. I particularly enjoy using their podcast feature to summarize articles, as I learn well through auditory delivery methods. I made sure to critically evaluate the article suggestions, check citations for accuracy and then integrate the information gathered within my own argument.
- Language Support – As recommended by my supervisor as a form of proof-reading, I used prompts to improve aspects of clarity and structure by pasting draft sentences and requesting suggestions for rephrasing or simplification. For example: *"Please suggest ways to improve clarity and flow of this sentence without changing the meaning or adding new material."* I carefully reviewed each suggestion, accepted only what I liked the suggestions of which I liked the sound and flow, and edited further to reflect my own voice.

d) Your own contributions

What parts are entirely your original work?

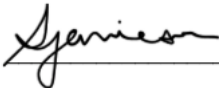
GAI tools were not used during the planning or execution of qualitative coding of empirical data, or drafting of the actual thesis outputs. Although tools were used for grammatical editing as mentioned in section c), the ideas at the core of the thesis are entirely my own work.

e) Verification and editing

How did you verify accuracy and edit AI output?

To ensure accuracy, I cross-checked all information, claims, and citations provided by AI against verified primary sources. Any statistics, dates, or references suggested by the AI were verified manually before inclusion.

For editing, I treated AI-generated text as a draft or suggestion. I carefully reviewed the language and structure, making clear revisions to reflect my own voice and the specific focus of my thesis.

Student signature:  Date: 06/01/2026