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Policy-reality gaps in Africa's walking cities: Contextualizing institutional perspectives and residents' lived experiences in Accra

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ABSTRACT

This paper confronts the current policy landscape and lived experiences of walking in African cities through the lens of policies, plans, institutional, and residents' narratives. The paper builds on qualitative evidence drawn from content analysis and semi-structured interviews with local-level stakeholders across policy sectors concerned directly or indirectly with walking and walkability in the city. Perspectives from local government institutions are first reviewed to ascertain considerations for accessibility, safety, and pleasurability dimensions of walking and, second, contrasted with the lived walking experiences of residents of low-income settlements in Accra. Results indicate limited attention to pleasurability dimensions in both policy and municipal plans and significant incongruities with residents' lived realities of walking. This parallel between the frameworks and plans underpinning the construction of the walking environment and the lived experiences of those affected by such decisions seeks to nuance debates about policy-reality (dis)junctures in African urbanism.

Introduction

Humans, in our most abled physical forms, are walking beings. Walking is intrinsically linked to our physical growth from birth, mobility in local environments, and experience of places. Studies (Domeneghini et al., 2022; Wood, 2022) show that walking offers immense social, economic, and environmental benefits in diverse ways: reduction in the amount of land consumed for roads and parking, increase in employment accessibility and attractiveness of public spaces, generation of revenue for local businesses and reduction in transport costs. Ideally, walking as a form of physical activity can contribute to a healthy life through reductions in the risk of obesity and activate social capital through interactions between people and a sense of attachment to place (Cheng et al., 2020; Yu et al., 2022). Beyond its contributions to physical and mental health and the reduction of carbon emissions, walking holds the (often unrealized) potential as an equalizing mode of transport. In other words, walking can also be democratic, allowing most citizens to roam the urban built environment freely (Zavetoski & Agyeman, 2015), bringing life to the streets and thus contributing to safer communities (Domeneghini et al., 2022). In a highly unequal and polluted world struggling to realize

just and sustainable futures, walking is garnering multidisciplinary attention from geography, planning, public health, and environmental studies.

Utopian visions of walking highlight its positive attributes as the cheapest mode of transport, readily available to all bodily-abled people, and crucial to some of the interconnected challenges of contemporary urban society. African cities are unwalkable walking cities (Okyere et al., 2023; Oviedo et al., 2021) that stand as a glaring counterpoint to romanticized views of walking as perceived in the Global North. While international development agencies and governments across the world have set as a target the increase in the share of trips made by walking, studies suggest that already 50% of all trips in Africa are on foot, with variations such as 70% in Kinshasa, 81% in Dakar and 42% in Ouagadougou (Pendakur, 2005). In the African context, the predominance of walking does not equate to preference, as walking is often the only means of mobility for the deprived majority.

The precarious and unsafe walking conditions in many African cities are arguably driven by the lack of prioritization of walking in the urban transport planning and development tradition that many of these cities have inherited (Oviedo & Nieto-Combariza, 2021; Oviedo et al., 2021). Infrastructure investments are focused on network development and automobility for efficient mobility that enables economic development (Benton et al., 2023). Consequently, most pedestrians are considered "captive walkers"; that is, those with no alternatives besides walking (Dada et al., 2019). Against this backdrop, we argue that to realize the potential benefits of walking and its contributions to equitable and sustainable urban futures in Africa, it is necessary to align policy with the diverse everyday realities of residents in changing walking environments (Oviedo et al., 2021). This connection between policy and everyday experiences calls for understanding heterogeneous practices as a departing point for policy and considering the institutional structure of the agencies responsible for implementation.

According to the Ghana Transport Survey Report, over three-quarters (75.3%) of the national population make up to ten daily trips on foot (Ghana Statistical Services [GSS] 2012). While variations range from 85.6% in the Eastern Region to 64% in the Greater Accra Region, most urban areas are unified by the lack of walking infrastructure and the severe exposure to risks in everyday walking experiences. This warrants transport policy and planning reorientation to residents' walking needs. Fortunately, this has not gone unnoticed in the scholarly literature and policy discourses. Existing research highlights political and economic structures that dictate the prioritization of automobility in urban transport planning (Boateng, 2021), the poor integration and networking of walking amenities (e.g., sidewalks) in areas with high pedestrian traffic (Odame & Amoako-Sakyi, 2020) and travel risks vulnerable groups (e.g., children) face in their everyday walks (Poku-Boansi et al., 2019). In fact, pedestrians account for 42% of all road fatalities in Ghana (Obeng-Atuah et al., 2017). Other studies have also explored the influence of pro-environmental behaviors and social networks on neighborhood walkability practices (Asiamah et al., 2021; Opuni et al., 2022). The Ghana National Transport Policy (GNTP) also emphasizes the relevance of non-motorized transport (NMT), calling for "dedicated, safe, reliable and appropriate facilities for NMT users across all transport modes." However, this important subject of walking often gets subsumed within the broader discourses about NMT, traffic safety, and transport Planning. It thus gradually becomes a "leftover" issue for policy and planning.

Owing to the foregoing and the gap in research that few studies have explored policy and institutional perspectives of walking and the grounded realities of everyday walking experience, the paper attempts to move the literature forward by addressing these research objectives: (i) examine the provisions made for walkability in the national policies and local government development plans and (ii) analyze how the provisions in these policy and planning documents align with residents lived experiences in terms of the gaps or congruities between policies/plans on walkability and local experiences. We situate the analysis of the results within Oviedo et al. (2021) walkability dimensions of accessibility, safety, and pleasurability. In doing so, this paper offers three contributions to scholarship and practice on active transport in African cities. First, it elevates the subject of walking as an important equalizer in the broader discussions of social equity and urban mobilities in the Global South (Uteng & Lucas, 2017), particularly about Africa's walking cities (Massingue & Oviedo, 2021; Oviedo et al., 2021). Second, the paper takes notice of emerging literature on the important role of

walking in Africa's everyday urbanism (Behrens, 2005; Oviedo et al., 2021; Wood, 2022) and takes the discussion forward by situating walking within the policy and institutional regimes and their alignments with everyday local experiences in Accra. Third, it provides an empirically rich context, particularly in matured and intermediate urban settlements, from which research practitioners, policymakers, and planners can align interventions with the core issues in walkability: accessibility, safety, and pleasurability. Indeed, highlighting the local nuances of walkability in Accra also contributes to recent calls to focus on egalitarian modalities of urban transport in Global South cities (Wood, 2022).

The paper proceeds as follows. The next section reviews the literature on walking in African settings, including gaps between policies/plans and existing conditions. The paper then presents the research approach. The analysis of four transport/urban policy documents, two municipalities' medium-term development plans, and the empirical engagement of planners and residents' experiences are presented. The discussion and, finally, the conclusion follow next.

Walkability, transport policy, and planning in African cities

Walkability in recent times has gained much interest from planners, practitioners, and researchers in countries of the Global South. It has been defined as the degree to which walking is promoted in the built environment by giving pedestrians safety and comfort, connecting them to a wide range of destinations in a reasonable time frame and effort, and creating visual appeal in trips around the network (Southworth, 2005). Walkability has also been defined as a qualitative or quantitative measure of how an area invites or uninvites pedestrians (Lotfata, 2020). The benefits of walking for the individual within the built environment lie in promoting social cohesion, encouraging a healthy way of life, and increasing property values (Arup, 2016). The social, economic, and environmental dimensions of urban development are encapsulated in the benefits of walking. The appreciation of these benefits has prompted policymakers to develop urban and transport policies encouraging walking.

In most African cities, the proportion of people walking daily comprises more than 70% of the urban population (UN-Habitat, 2022). To deal with the challenges pedestrians encounter in metropolitan and regional areas, some cities (see Figure 1) have incorporated policies and strategies for walking into their NMT policies. For instance, in Lagos (Nigeria), the Lagos Metropolitan Area Transport Authority (LAMATA) developed the NMT policy to increase walking by creating a safe and pleasant network of footpaths, greenways, and other facilities that can serve everyone within the city (Lagos Metropolitan Area Transport Authority [LAMATA], 2018). In Addis Ababa (Ethiopia), a similar policy was developed, which aimed to increase the share of the number of people who walk by increasing investments in walking facilities and improving connectivity to public transport (Addis Ababa City Administration Road and Transport Bureau (AACARTB), 2019; Domeneghini et al., 2022; Wood, 2022). Further, the city of Nairobi (Kenya) also has a similar policy to improve the walking environment's conditions. For instance, the NMT policy seeks to classify all roads and streets within the city into the desired network (Nairobi City County Government, 2015). The policy also prioritizes pedestrians over private cars and trucks on streets and roads within commercial and residential areas (Nairobi City County Government, 2015). Even though the strategies outlined in these documents are commendable, their implementation has been met with structural challenges such as funding, public perception, and technical capacity (Wood, 2022).

Across several African cities, the success of active transport policy initiatives remains to be seen due to long-standing challenges with adequate physical infrastructure to promote walking and rapidly growing private vehicle ownership motivated both by rising incomes and social and cultural drivers such as perception and status where walking is regarded as a mode of transport for the poor (Massingue & Oviedo, 2021; Wood, 2022). The desire to own a car and use it as a sign of social mobility has increased the risks associated with regular walking and led to a high number of pedestrian fatalities (Obeng-Atuah et al., 2017; Wood, 2022). Walking and informal transport remain a key

component of citizens' travel strategies in the context of mounting pressures linked with rapidly changing urban mobility environments, growing urban areas and distances marked by spatial segregation and access inequalities, and a transport policy deeply rooted in automobility paradigms (Oviedo et al., 2022). Given that for most national and local transport planning bodies, planning for urban mobility is often paralleled with road design (Hanson & Tettey, 2003), it comes as no surprise that infrastructure provision has often treated walkability peripherally and does not reflect walking practices and conditions (Schmitt, 2020; World Bank, 2022). For instance, new road designs in most suburban communities lack essential features such as zebra crossings, pedestrian walkways, rest stops, and traffic lights, critical to making walking safer for urban residents (Frimpong, 2022).

Overall, the extant literature points to increasing attention to walkability in transport policy and urban development planning (see Figure 1). The development of NMT policies and strategies to prioritize walking as an equalizing and affordable mode of transport and for local government institutions to develop concrete interventions appear to be gaining ground (Massingue & Oviedo, 2021; Okyere et al., 2023; Oviedo et al., 2021; Wood, 2022). However, beyond the formulation of NMT strategies and an apparent awareness of un-walkable conditions, the articulation of walkability as a policy and planning objective, as it concerns the majority of Africa's urban population, is not very clear in the transport policy literature. Moreover, how institutional actors tasked with realizing walkability strategies perceive, embrace, and plan for walking remains clouded in walkability discourses.

Figure 1. Walking and cycling policy landscape in Africa (adopted from UN-Habitat and UNEP, 2022).

Analytical framework

For a built environment to be considered walkable or to provide a walkable-friendly environment, conditions such as safe, comfortable, useful, and interesting should be present since they emphasize reducing the risk and vulnerabilities of pedestrians (Speck, 2013). Several studies have investigated the dimensions of walkability in African cities (Anciaes et al., 2017; Oviedo et al., 2021). These dimensions, which are safety, interest, comfort, street or walkway width, tree canopies, imageability, enclosure, and complexity, come as either objective or subjective (Ewing & Handy, 2009). Objective dimensions are concerned with the physical and functional attributes of the built environment. In contrast, the subjective part of walkability considers the preferences and needs of the diversity of people living within a city or settlement (Fancello et al., 2020; Nyunt et al., 2015; Oviedo et al., 2021). Evidence from the literature points to the fact that subjective walkability complements objective walkability, as it provides the comfort and aesthetic dimensions of the objective rationalities of the urban built environment (Oviedo et al., 2021).

For this study, we adapted Oviedo et al. (2021) framework (see Figure 2), which offers a continuum of characteristics from objective to subjective. This framework is particularly suitable in urban contexts where walking is not a choice but is imposed by planning deficiencies, policy ambiguities, and constraints in the design and form of the built environment (Oviedo et al., 2021). According to the framework, walkability conditions can be classified into three categories: accessibility, safety, and pleasurability. Accessibility includes urban built-form characteristics, activities, and distributions of economic and recreational activities. Safety refers to pedestrian security and situations where road users are safe from cars and other road hazards (Oviedo et al., 2021). Pleasurability denotes the enjoyable walking experience one derives (Cohen & Robbins, 2011), including materialities that provide affordances in comfort and aesthetics (e.g., street furniture, trees, shading, etc.). By drawing on this framework, we reason that this categorization allows situating and aligning policy integration and everyday lived experience of walking within a more flexible, simpler, and somewhat non-formalized context of African everyday urbanism.
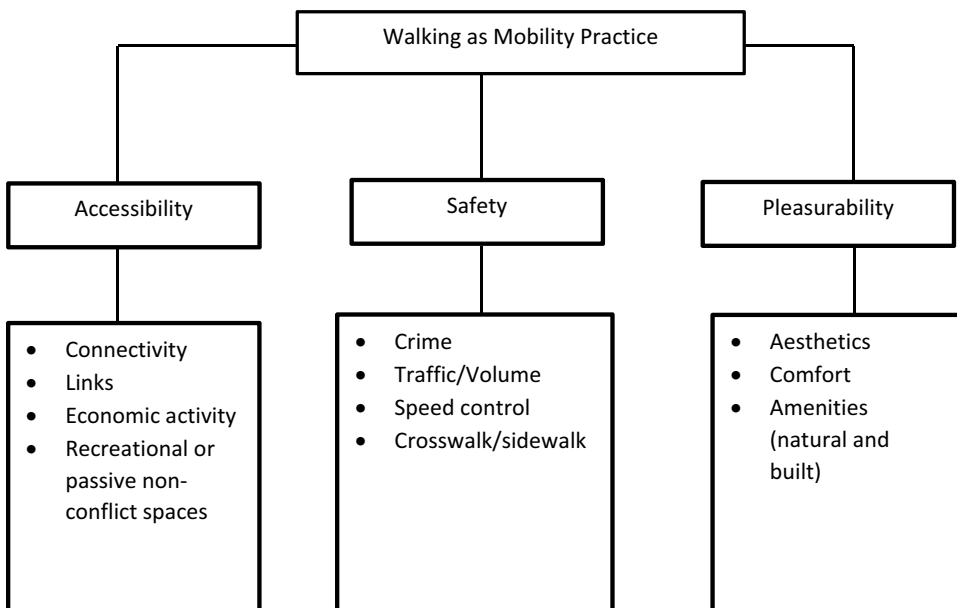

Figure 2. Conceptual framework.

Research materials and methods

Study setting

Ghana, located in West Africa, is the second largest country in the sub-region in terms of population and economic size. The country's population currently stands at 31.73 million, with an annual growth rate of 2.125% (Ghana Statistical Service [GSS], 2021). In terms of governance architecture, the country operates a three-tier governance structure. This includes the ministerial level, the regional level, and the local government level. The ministries formulate national sector policies, including transport and urban development, provide leadership at the national level, and supervise departments and agencies directly under them. The regional level also coordinates development by providing a supervisory role over local governing units, i.e., Metropolitan, Municipal, and District Assemblies (MMDAs). The local government executes development projects of all kinds at the MMDA level. This is done within a development planning framework to align with the national development plan or policy while reflecting local development priorities.

Regarding the administrative structure, the MMDAs have departments overseeing the different sectors of their jurisdictions[1] (e.g., works, social services, spatial planning, etc.). Adding to decentralized administration and local development, unit committees and their elected representatives (Assembly members) are responsible for organizing community mobilization, public hearings, and other local development activities (National Development Planning Commission, 2020). Ideally, national sector policies are expected to provide direction for lower-tier administrative bodies to align their local development priorities (Development Plans) toward a concerted and harmonized national agenda.

This study is situated in two municipal assemblies within the Greater Accra region, one of the sixteen administrative regions in Ghana. Accra serves as the regional and national capital. The two municipalities, Ga East and Ayawaso North, are part of the 29 MMDAs in the region. Development projects undertaken in the various MMDAs in the region are carried out through the various specialized departments in the MMDAs. For instance, road projects in the MMDAs are carried out or supervised by the Urban Roads Department of the Municipality.

Accra New Town (Ayawaso North) and Dome (Ga East) were selected for exploring institutional perspectives of walking and residents' everyday lived experiences of walkability dimensions: accessibility, safety, pleasurability. The two study sites, representing inner-city and suburban areas, provide suitable contexts to uncover residents lived experiences of walking and how institutional perspectives in these contexts align with walking realities and policy rhetoric. Walking is predominant in the two communities, but the conditions are precarious with observable contestations for space with pedestrians, motorists, and traders. From a perspective of the urban trajectory (see Figure 3), Accra Newtown can be considered a matured settlement and dense with several opportunities for economic activities as well as essential social infrastructure such as healthcare and education (UN-Habitat, 2011). The distance between the central business district (CBD) and Accra Newtown is approximately 3.3 km. The community's population as of 2010 was 58,488 (Ghana Statistical Service [GSS], 2014). Although there are people from all ethnic groups in the community, most of them come from the northern part of the country (Ayawaso North Municipal Assembly [ANMA], 2021). Regarding economic activities, most of the working population (71.8%) is engaged in informal trading activities. The Accra Newtown–Circle main road is a major lane that concentrates many commercial activities, including food processing, wooden design, bookmaking, and retail. Accra Newtown is heavily congested with poor and inadequate access roads, high density, and high informality (ANMA, 2021). The entire municipality is about 2.2 km^2, making it the smallest city in the country (ANMA, 2021).

On the other hand, Dome is in the Ga East Municipality. Compared to New Town, Dome, like many several towns in Ga East Municipality, is in the intermediate stage of urban formation (see Figure 4). Some areas manifest peri-urban and suburban characteristics with fast-growing residential developments. The population of Dome is 76,549 (Ga East Municipal Assembly [GEMA], 2021), and it is about 11.3 km from the CBD. Dome is a socially and culturally diverse community with a population background covering the different ethnic

Figure 3. Aerial photograph depicting a Section of Accra Newtown (source: Google Earth, 2022).

Figure 4. Aerial photograph depicting a Section of Dome (source: Google Earth, 2022).

groups in Ghana. The main economic activity in the community is informal trading activities, with the bulk of these activities carried out in the Dome market. The current road infrastructure in Dome is under pressure from growing business activity and significant residential growth in neighboring residential areas such as Kwabenya, Haatso, and Abokobi. As a result, there is high traffic along the main route (Ga East Municipal Assembly [GEMA], 2021), especially during morning and evening rush hours.

Research approach

Research design

This research employed an interpretive qualitative research design and a case study strategy to understand the integration of walking in Ghana's transport policy documents, institutional perspectives, and residents' everyday walking experiences. The selected research design and strategy are appropriate for the study due to their inherent strengths of addressing experiential questions and advancing knowledge without compromising theoretical and methodological integrity, including practical outcomes (Burrell & Morgan, 1979; Lincoln & Guba, 1985; Yin, 2018).

Instruments

To answer the research question, a semi-structured interview was developed to collect data from residents and local government representatives in the case study communities. The semi-structured interview tool was employed in this research because it eliminates the rigid interviewer-interviewee structure and allows informants to share a level of detail they find comfortable (Myadar, 2022). The use of semi-structured interviews in this study allowed the interviewers to probe questions to reveal more information on residents' and institutional perspectives on walking and the walking environment.

In designing the instruments, the research team was divided into two independent groups. Based on the research aim, each group was tasked with designing the semi-structured interview guide. The research team then merged to assess each group's interview guide prepared. Consensus was reached in a scenario where disagreements emerged during the assessment. The draft interview guide was submitted to two transport planning practitioners and one academic for their feedback. The external experts' feedback was considered and integrated. The semi-structured interview guides comprised Section 1, which focused on collecting socio-demographic characteristics of respondents, and Section 2, gathering residents' and institutional perspectives on accessibility, safety, and pleasurability dimensions of walking.

Sampling and participant recruitment

In this research, we employed convenience sampling to collect data from residents. In contrast, the purposive sampling technique was used to gather data from local government representatives in the two municipalities in the Greater Accra region. Residents recruited for the study were based on the following criteria: (i) 18 years and above, (ii) pedestrians who understand English, Ga, or Akan languages and respond to questions in either of the languages, and (iii) willingness to participate in the study.

The data collection process was preceded by two reconnaissance visits to the municipalities to map out the boundaries of the study area and establish rapport with traditional authorities and custodians of the respective communities. The community visits helped the research team to build the trust of community leaders and members, which was envisaged in the number of participants who availed themselves to participate in the study. On recommendations of the assembly members, three native graduate research assistants were recruited and trained to assist with data collection. To commence the data collection, the local leaders in one community gathering invited the research team to debrief residents and local government representatives on the purpose of the study, benefits to participants and municipalities, and contribution to local and national policy-making. The day, venue, and time were collectively agreed upon for the data collection. On the data collection day, while the research team was positioned at the community center to interview community leaders, the three native research assistants went around the communities to conveniently select willing residents. In relation to the local government representatives, they were interviewed in their offices.

Ethical consideration

The research team commenced the overall data collection process involving community leaders and sought their permission when appropriate. The research team also met the community members and,

in a presentation, explained to them the research purpose, data collection process, and voluntariness in participation. All the study participants read, understood, and signed the participant information and consent form. The researchers also assured the participants of confidentiality, informing them that data would be de-identified and study results aggregated.

Data collection

Data were obtained from both primary and secondary sources. Five key documents inform the policy and plan review: the GNTP, Ghana Non-Motorized Transport Strategy (GNMTS), Ghana Urban Policy Framework (GUPF), the Ga East Municipal Medium-Term Development Plan and the Ayawaso North Municipal Medium-Term Development Plan. Semi-structured interviews were used to solicit institutional perspectives and residents' lived experiences of walking. In explorative contexts such as this study, semi-structured interviews overcome the rigid interviewer-interviewee structure and thus allow respondents the freedom to share a level of detail they find comfortable (Myadar, 2022). First, the semi-structured interviews involved 10 institutional and local elected representatives from the two municipalities. Second, 60 residents were selected through convenience sampling, considering the exploratory nature of this study. The saturation principle in qualitative studies informed the selection of the 70 respondents (Ando et al., 2014). In this paper, saturation does not imply data redundancy, as is often misunderstood in thematic content analysis (Guest et al., 2006). Rather, the selection of the sample was informed by the participants developing accounts of their lived experiences and our situated thematic questions, time, and resource constraints rather than a pre-defined inter-view sample (for a more detailed discussion, see Braun & Clarke, 2021; Sim et al., 2018). The breakdown of the respondents is presented in Table 1.

Data processing, preparation, and analysis

Primary and secondary data were analyzed using thematic content analysis. Thematic content analysis provides the strengths of inherent stability, exactness, and coverage of a wide range of documents (Bowen, 2009). It also analyses textual data by searching for patterns within a given textual or transcribed dataset (Braun & Clarke, 2006). All authors read through the transcriptions during this process to familiarize themselves with the dataset. First, the policy documents were analyzed for objectives and strategies for walking, while district plans focused on programs and projects on walking in the two municipalities. Important and relevant texts from the policy documents were coded as GNTP, GNMTS, GUPF, GEMMTDP, and ANMMTDP, respectively as National Transport Policy, Ghana Non-Motorized Transport Strategy, Ghana Urban Policy Framework, the Ga East Municipal Medium-Term Development Plan and the Ayawaso North Municipal Medium-Term Development Plan. The qualitative interviews were manually coded to explore institutional (GEM1, GEM2.GEM5 and ANM1, ANM2...ANM5) and residents' (ANT1, ANT2, ANT3......ANT30 and DOM1, DOM2,

Table 1. Details of study informants interviewed and documents reviewed.

Interviewees/Documents	Number Interviewed/Obtained
Institutional and local representatives	
Ayawaso North Municipal Assembly (AYMA)	5
Ga East Municipal Assembly (GEMA)	5
Total	**10**
Community members	
Accra Newtown	30
Dome	30
Total	**60**
Documents Reviewed	
The National Transport Policy (NTP) (Year)	1
Ghana NMT Strategy 2019–2028	1
The National urban policy framework (NUPF) (Year)	1
District/Municipal Medium Term Development Plans (DMMTDPs), 2022–2025	2
Total	**5**

DOM3….DOM30) perspectives on the framing, benefits, and challenges of the everyday walking environment in the two study communities (see Table 2). We performed the thematic content analysis of the data by following the six-step process described by Braun and Clarke (2006). The first stage involves familiarization with the data. Each research team member re-read the interview questions and noted initial concepts and ideas. Codes were assigned to the data, and consensus was reached during the collation into similar codes. The coding process commenced with open coding to reduce the transcribed data to thoughts (Fassinger, 2005). This was followed by axial coding to group the codes based on relationships to form larger categories (sub-themes). The sub-themes were reconsidered by

Table 2. Codebook excerpts and their link with the accessibility, safety, and pleasurability dimensions of walking.

Policy/Plan	Overall Objective/Vision	References to Walking	Sub-themes	Walkability Dimensions (Themes)
National Transport Policy (2020) GNTP	"Provide safe and reliable transport services to the population. The policy is designed to help reduce transport costs for internal distribution of goods and services and keep the nation's exports competitive in the world market"	Yes (explicit)	Quality of walking environment (safety and risk) Ease of access to economic and social facilities and services	Accessibility Safety Pleasurability
Ghana Non-Motorised Trasnport Strategy (GNMTS) (2019)	Promote universal access to safe and effective transport infrastructure and services	Yes (explicit)	Interventions/Strategies for accessibility Precarious walking conditions	Pleasurability Safety Accessibility
National Urban Policy Framework (2012)	"To promote a sustainable, spatially integrated and orderly development of urban settlements with adequate housing, infrastructure and services, efficient institutions, and a sound living and working environment for all people to support the rapid socioeconomic development of Ghana"	No	Investments in transport infrastructure Promoting intra and inter-city transport development	-
Ga East District Development Plan (2021)	To become a highly professional socio-economic services provider that creates opportunities for human resources development	Yes (implicit)	Road transport infrastructure conditions and strategies Road user behavior	Accessibility Safety
Ayawaso North Municipal Development Plan (2021)	To champion good governance through effective public participation, integrated service delivery and vibrant local economy.	Yes (implicit)	Road transport infrastructure conditions Road User behavior Interventions/ Strategic responses	Accessibility Safety
Institutional Perspectives and Residents lived experiences (Excerpts)				
Dome				
Residents' Experiences	When you are in walking with your phone, if you are not smart, they can take your phone anytime from you. So, it's very scary, so when it comes to that, it will be good if the government focus on that area because children also walk there		Institutional responsibility Walking Conditions and impacts	Safety
Institutional Perspectives	We need to improve our road condition and consider the pedestrians. It is not everyone who owns a car, and therefore they have to use these roads		Captive walkers Active and alternative transport modalities	Accessibility, Pleasurability
New Town				
Residents' Experiences	We don't have a place to walk. It's very bad for especially school children. We don't have walkways, zebra crossing and others, making walking difficult and unsafe.		Walking features and conditions	Safety, Accessibility
Institutional Perspectives	Also, if you look at the agency responsible for mounting these walking features on our roads, it is the department of urban roads. Still, mostly they also depend on what has been allocated for them before they can also carry out any activity"		Financing and institutional challenges around walking interventions	Accessibility

comparing the codes to form larger themes. Identified themes were also refined and further classified along the lines of the study's research question. The research themes were finalized based on Oviedo et al. (2021) walkability dimensions-accessibility, safety, and pleasurability, and the results were discussed.

Result validity and reliability

In this study, we ensured credibility and trustworthiness in our findings by employing five strategies. First, data collection was undertaken by some of the researchers and the three research assistants who were natives of the study communities to minimize bias. Secondly, the research team divided into two groups and cross-checked the data to ensure biases were eliminated and erroneous information rectified with follow-ups where necessary. Thirdly, the data analyses were conducted independently by the research team members (those who collected the data versus those who did not participate in the data collection). Results from the independent analyses were then compared for coherence. Fourthly, we combined multiple data sources (documentary review) and respondents (residents and local government representatives) to triangulate the study results. The combination of various data sources from interviews and policy documents enhanced the reliability and validity of this research (Yin, 2018). Finally, we validated the findings of the study in two phases. The findings were initially presented to the data collection team (research assistants and researchers involved in the data collection) for validation. This was followed by a stakeholder reliability and validity workshop comprising residents and local government representatives to share and validate the study findings.

Results

Accessibility dimensions

The policy documents show some attention by policymakers to accessibility issues. The GNTP mentions "(i) providing dedicated, safe, reliable, and appropriate facilities for NMT users across all transport modes" (Ministry of Transport [MoT], 2020). This is reflected in the GNMTS 2019–2028 and the Municipal Development Plans. They all seek to facilitate access to services and livelihoods, especially for most low-income earners whose daily routines are inextricably linked with walking. For example, the GNTP (MoT, 2020, p. 86) aims at "maintaining and free-up all existing NMT facilities from encroachment." According to the GNTP, the policy quest to improve the walking environment through the improvement of roads and pedestrian walking infrastructure can reduce encroachment of other land use along the road and enhance walking and other forms of active transport in the streets.

A careful reading of the results shows congruities and disjuncture between provisions on accessibility in the policy documents and responses provided by institutional representatives interviewed. Regarding the congruities, there were clear admissions of the urgent need for walking infrastructure in the two municipalities. For instance, the discussions revealed that available walking infrastructure needs improvement and maintenance, while investment must be made to provide new facilities. The quote below from institutional representatives is reflective:

> The current roads that we have in the neighborhood are in poor condition, and many of them lack sidewalks and footbridges to allow people to cross the streets. We need to pay attention to these problems and prioritize road infrastructure, especially the pedestrian facilities on these roads. (ANM 4)

> We need to improve our road condition and consider the pedestrians. It is not everyone who owns a car, and therefore they have to use these roads. (GEM 2)

Another area where there was congruity between institutional response and the policy document was the increasing conflict among users on the road. All the institutional representatives indicated that the absence of sidewalks, the erection of unauthorized structures on the walkways, and illegal parking on the shoulders of the road led to conflict between motorists and pedestrians on the one hand. At the

same time, the unauthorized occupation of market traders also brought pedestrians in direct conflict with these traders.

Regarding the disjuncture, the interviews with institutional representatives showed that though plans are always made to improve the walking conditions, local governments are not in a position to provide this infrastructure. For instance, the interview with representatives from the Ga East revealed that the assembly depends on the central government for big infrastructure projects. It appears that planning and interventions for walkability are considered "a big infrastructure project" (GEM 5), which is beyond the financial capacity of the assembly. One major concern was that although the municipality proposes infrastructure amenities in their MTDP, the design and implementation decisions are taken at the central level between ministries and international consultants, and assemblies can only coordinate at the local level when implementation commences.

> Yeah, the only thing is that we in the assembly depend on the central government for big infrastructure developments, which is very expensive and beyond the capacity of the assembly. We plan where there should be a road, but implementing accessibility amenities depends on the central government because the assembly doesn't have that means. Also, if you look at the agency responsible for mounting these walking features on our roads, it is the Department of Urban Roads. Still, they mostly depend on what has been allocated for them before they can carry out any activity. (GEM 5)

Responses from residents affirmed many of the challenges of walking that the institutional representatives mentioned. For instance, the issue of conflict over the use of space along the roads came up strongly, and the absence of pedestrian-friendly infrastructure to enhance access to facilities and services by walking (see Figures 5 and 6).

> In this community, accessing goods by walking is very difficult. We can hardly walk from home to the market or work without experiencing interruptions with street vendors or contestations with reckless motorists. Walking was supposed to be smoother and easier than heavy traffic that never moves, but it is looking like walking now offers no ease of movement. (ANT 21)

Figure 5. A section of the main road shows the lack of walking space in Newtown (source: field data, 2022).

Figure 6. A section of the main road depicting contestation of street usage in Dome (source: field data, 2022).

> There are no amenities for walking to make the roads more accessible and easier to navigate. The motorist, the cyclist, the traders, and the pedestrians are all competing for space in our everyday movement. Honestly, I think the motorists have it better than those of us who walk, making our experience highly inaccessible. (DOM 17)

Safety dimensions

The document review revealed that the GNTP and the GNMTS emphasized safety dimensions regarding walking (Table 2). Particularly, the GNTP highlights the precarity and risks in the walking environment, noting that pedestrians are most severely impacted by transportation-related fatalities— 39.5% of all road fatalities. For safety, the policy and development plan narratives attribute the underlying causes to noncompliance and informal activities such as street vending.

> The spontaneous encroachment of pedestrian walkways by traders selling all forms of trade items and the physical development of buildings. A major consequence of this behavior is a tremendous overspill of trade items into major roads in many instances, unbearable congestion, and delayed traffic. (GNTP, p. 37)

> . . . unauthorised parking of vehicles on roads. (GEMMTDP, p. 49)

The above policy and development plan narratives were echoed by municipal representatives who lamented the inability of the municipality to enforce the by-laws that regulate activities on the roads and pedestrian pathways, as well as some residents' disregard for the use of specific walking spaces. For them, the unsafe conditions of the walking environment were due to the authorities "not being strict enough" and "not enforcing the rules," thus giving the false impression to citizens "to do what they want" (ANM 3).

Municipal representatives concurred that walking at night has become unsafe for residents due to the increasing criminal victimization that has been witnessed in recent times. They attributed this situation to the inadequate streetlights, which seems to be the norm in both municipalities. On top of

this, assembly members for both Dome and Accra Newtown shared that poorly lit streets have promoted criminal activities by unruly youth and, therefore, create a safety risk for walking at night. Similarly, interviewed residents in both Dome and Accra Newtown raised concerns about the precarious walking environment and conditions. Residents complained about sidewalks, illegal parking on walkways, traffic markings, poor street lighting, and reckless driving, which together posed severe safety risks to vulnerable groups such as school children and people with disabilities. Field observations (Figure 6) show that in cases where there are walkways, they are taken over by traders, amplifying existing exposure to risks. The following remark is illustrative:

> Here, we virtually use the street with cars and those selling. You can see that all the gutters are covered with people's stalls and items, and we don't have a place to walk. It's very bad for especially school children. We don't have walkways, zebra crossing, and others, making walking difficult and unsafe. The activities of the motorbikes are very frustrating. They drive anyhow, and if you are not careful, they will hit you. Some ride on the shoulders of the road where pedestrians are walking. (ANT 7)

Criminal victimization along the roads in both communities was also highlighted as a safety concern by residents. For instance, snatching of phones and knife attacks during the night were among the victimization mentioned by residents. They attributed this situation to the absence of streetlights and the presence of rowdy youths. A resident from Dome had this to say:

> When you are walking with your phone, if you are not smart, they can take your phone anytime. So, it's very scary, so when it comes to that, it will be good if the government focuses on that area because children also walk there. (DOM 12)

Although the policy, institutional, and local perspectives are aligned on safety dimensions, a major contention during the interviews concerned who takes responsibility for current unsafe walking conditions. Here, local elected representatives (assembly members) in both Dome and New Town sharply criticized municipal planning authorities for "victim blaming" (assembly member, New Town) and "poor physical planning and design" (assembly member, Dome) of the built environment to make walking safer. It needs emphasizing that some municipal representatives appeared to agree "that lack of essential features and poor integration of walkability into the urban planning" (Physical Planner, GEMA) partly created severe risks for pedestrians, but "pedestrian indiscipline" holds the "larger weight for unsafe conditions" (ANM 1).

> So if you look at the roads or the walking environment in Dome, most roads are not tarred, and even those which are tarred, there are no proper walking paths for people to use, so literally, vehicles and human beings use the same routes. So, walking in Dome is very unsafe. But this does not deny the fact that the residents here encroach the street, and they need to get rid of those activities. (GEM 1)

What emerges from these contestations, then, is what form of actions and strategies are enacted to reduce walking precarity and improve the comfortability of the walking environment. This leads us to the issue of pleasurability.

Pleasurability

Unlike accessibility and safety, provisions in the policy documents and municipal development plans that speak to issues on pleasurability were very scarce. The GNMTS, as an exception, seemed to reference the aesthetics aspects of pleasurability: "to build a greenway network on encouraging a beautiful walking environment" (GNMTS, p. 3). The absence of facilities and infrastructure that offers comfort, aesthetics, and other affordances that can improve the everyday walking experience of pedestrians provides a clear indication of the limited attention to pleasurability dimensions of the walking environment.

The above observations were corroborated by interviews with institutional representatives in the two communities. For instance, assembly members of the two communities mentioned that the presence of piles of uncollected garbage on the roads and the offensive odor emanating from the

garbage's putrification was a challenge to pedestrians. For this, assembly members blamed municipal authorities, as one member from Ayawaso North Municipal (ANM 3) put it: "collecting waste is the responsibility of the Assembly, and if there is solid waste and bad smell on the roads, then they can't escape any blame." The issue of floods as a source of walking discomfort also emerged in institutional interviews. However, an official from the municipal assembly alluded to both lags in institutional responsibilities and residents' poor attitudes to waste management that culminates in odor from clogged waste during and after floods.

> Flooding and sanitation create an unpleasant walking environment for residents. Clogged waste, poor drains, and rubbish along streets and alleyways are a problem. Yes, if the Assembly were to provide a bin, people wouldn't put the refuse in the gutter when it rains. However, the attitude of the people cannot also be overlooked. There are some residents who will intentionally put the refuse in the gutters even if there are empty containers, all in the bid to avoid paying just 50 pesewas or 1 cedi. (ANM 2)

Residents shared similar views about the unpleasantness of the walking environment (see Figure 7), alluding to bad smells, irritating noise, dirt, and flooded streets. For these residents, there was little pleasure and comfort gained from walking, given the difficulties they experienced. Yet, residents insisted that they had to cope and improve with the situation given that their livelihoods and socio-cultural life depended on daily walking trips or combining walking with other modalities, as narrated below:

> For me, I will say walking is stressful and tiring, given the smell, the dust, and the annoying noise on the way to the market. If I had many options, I would take okada, but that one too is expensive. So you have to manage it and make sure you get as much from the market as possible so that you don't always spend your time walking. (DOM 27)

Figure 7. Dirt and odour at Accra New Town (source: field data, 2022).

There is nothing comfortable or pleasant about walking. There are no trees for shade in the heat, no good rest stops, and no open gutters. It is just stressful to walk every day. (ANT 18)

Despite the above, residents were not disorganized or defeatist to their walking realities. According to interviewed residents in the two communities, the frustrations with the everyday walking conditions have undergirded community initiatives to improve walking experiences. These included "periodic street clean-up exercises on weekdays to remove dirt" (resident, Accra New Town) and "desilting open gutters to reduce odor from clogged waste" (resident, Dome). In Dome, some residents mentioned that they "poured dirty water on the untarred roads to reduce the dust." Although these improvisations (see Figure 8) have not completely addressed the unpleasant conditions, residents mentioned it has helped to make the walking environment relatively conducive and safer.

We have periodic cleanup exercises, led by the assembly member, to clear up the streets and big gutters to allow free flow of the water and also reduce the odor and the dusty roads. (ANT 6)

Discussion

Accra and many cities in Africa are walking cities. Walking represents an important social-economic and cultural aspect of African urbanism. As the cheapest and predominant mode of transport, walking holds enormous potential to foster equalitarian modes of transportation and to realize social equity as targeted in the Sustainable Development Goals. Policy and institutional alignments with and a nuanced appreciation of residents' lived realities of walking are central to harnessing the benefits of walking for people and the environment. Drawing on our analytical framework (see Figure 2), this

Figure 8. A self-constructed streetlight at Newtown (source: field data, 2022).

study offers a nuanced understanding of how the accessibility, safety, and pleasurability dimensions of walking are considered at the policy/institutional level and their alignments with residents' everyday lived realities.

Our findings demonstrate that reviewed national policy and municipal development plans show awareness of and appreciation of accessibility issues in everyday walking, such as ease of movement, road user conflicts, and reach of socio-economic facilities essential for everyday urban life. Except for the GUPF, all reviewed policies and plans referenced highlighted accessibility issues in walking, although with some variations. For example, the GNTP and the GNMTS were explicit (see Table 2) in their framing of walking as an important and essential mode to access facilities and support local livelihoods. Juxtaposing national policy, municipal development plans, and residents' lived experiences, we find policy/plan congruities with locally reported lived realities of walking. This result is consistent with the emerging "active turn" in transport policies and local plans in Sub-Saharan Africa, where national and local governments in countries such as Kenya, Rwanda, South Africa, and Uganda are integrating walking and other active transport modalities into policy objectives on enhancing accessibility to goods and services and thus improved residents walking experiences (Loo & Siiba, 2019). Ideally, this situation can potentially offer strategic direction and support to enable planning for walkable cities at the local levels.

Nonetheless, the fact that the GUPF neither refers to walking nor accessibility aspects of it should be of concern. The policy framing of transport is heavily focused on auto-based road infrastructure, which appears to corroborate the assertion that urban planning in Africa and other Global South contexts tend to prioritize automobility without much attention to other forms of mobility such as walking (Behrens, 2005; Guzman et al., 2022). While the underlying reason for this situation was not clear from the study, a careful look at the urban policy framework team (no representative from the transport ministry) combined with the institutional interviews indicates this is likely an issue of limited vertical and horizontal coordination across institutions (e.g., ministry of transport, local government, spatial planning, etc.) at both local and central levels—a situation well documented as an impediment to holistic urban development planning in Ghana (see Poku-Boansi & Cobbinah, 2018).

Regarding safety, findings reveal a chasm between policy ambitions for walking and walking realities at the community level. Despite the GNTP and the GNMTS aim to ambitiously provide "NMT facilities on all roads over four years," "increase the number of sidewalks," and "improve road safety by enhancing pedestrian crossing designs and intersections," residents lived realities pointed to the lack of sidewalks and exposure to risks and occasional accidents for vulnerable groups such as school children. Indeed, institutional representatives acknowledged the stark realities of the precarious walking environment and the many risks it posed to residents. We find that municipal development plans do not articulate actionable strategies to address the competition for street space that emerges from contestations between traders, motorized transport, and pedestrians. Such "policy-reality gaps" (Heeks, 2002) are not uncommon in African urbanism; it reflects the difficulties in the translation of policies/plans to development initiatives at the local level due to challenges around fiscal decentralization and technical expertise (Cirolia, 2020). It also highlights medium-term development plans' inability to clearly articulate active transport policies beyond a dominant focus on road transport infrastructure framings (Obeng-Odoom, 2015).

Our findings also show that creating a safe environment for walking will require attention to divergent perspectives in the everyday walking environment. For example, while institutional respondents and residents underscored the precarious nature of the walking environment, they disagreed on the underlying causes. For the institutional respondents, this was a case of inability to strictly enforce laws, check residents' indiscipline, and funding challenges. On the contrary, residents expressed municipal "indifference" and the unwillingness to make walking a central issue in municipal transport planning. This situation typifies "conflicting rationalities" (De Satgé & Watson, 2018; Watson, 2003) between the urban technocrats and residents in framing and rationalizing urban challenges in Africa. This calls for deeper engagement through coproduction methodologies (see Okyere et al., 2023) in the

problematization of walking and related responses that open the medium-term development planning process to multiple diverse stakeholders and their lived experiences.

The availability of street trees, shading devices, street furniture, and reduced noise and proper smell are integral to the quality of walkable urban spaces and the enactment of social, economic, and environmental benefits (Oviedo et al., 2021). Compared to accessibility and safety, our findings revealed that the pleasurability dimension is the least considered in the policy and development plans reviewed. Only GNMT partially referenced street trees as part of improving the comfortability of the walking environment. The lack of attention to pleasurability manifests in the unpleasantness of the walking environment, where residents become "captive walkers" (Wood, 2022) who have no choice but to walk to avoid expensive public transport. This finding contrasts prior research that indicates clear NMT strategies to increase the number of walkers and walking experiences in cities such as Nairobi, Lagos, Johannesburg, and Addis Ababa City (Loo & Siiba, 2019; Wood, 2022).

Yet, even in this captive experience, our findings bring to the fore community agency: the pockets of collective action in communities to improve the walking experiences, such as cleaning the streets, mounting informal road signs, and providing streetlights. Here lies a bottom-up opportunity for addressing policy-reality gaps by harnessing local interest, ideas, and experiences in the planning, design, and implementation of walkability initiatives. Therefore, intentional and strategic approaches to walkability will require municipalities in Accra to transition from treating walking "as the last mile" (Wood, 2022) of road transport infrastructure to prioritize active transport options such as walking.

Overall, the lack of a well-coordinated, concerted, and concrete walkability strategy at the institutional level of policy formulation and development planning is at odds with the inaccessible, unsafe, and unpleasant everyday lived experiences of walking. This demonstrates the disconnect between policy and the realities of daily walking and, thus, the urgency for urban and development regimes to bridge this gap by treating active transport as the "first mile" rather than the "last mile" in urban transport policy and planning.

Conclusion

This paper set out to produce evidence on integrating walking dimensions (accessibility, safety, and pleasurability) into policy/plans and their alignment with the walking experiences of urban residents living in low-income communities of Accra. Conceptually, the paper built on existing frameworks grounded in the reality of walking practices and walking environments in African urbanism.

Findings show that although policy rhetoric and objectives may highlight key dimensions of walkability and its local challenges, these do not necessarily translate to applicable strategies and allocation of resources that afford walkable lived experiences for residents. Such perspectives have knock-on implications for decision-making and the consolidation of unwalkable environments in Accra, which have overlapped and mutually reinforced over time. Accra, and consequently, much of the sub-Saharan African region, faces widening gaps in safety, accessibility, and pleasurability in low-income or informal neighborhoods. From a policy perspective, the results show that policy formulation and institutional awareness are important starting points but insufficient to reduce gaps between policy and everyday walking urbanism. We, therefore, call for coproduction approaches that create inclusive stakeholder engagement platforms where policymakers across the urban and transport sectors, municipal planning authorities, traditional authorities, assembly members, and residents can collectively engage. Indeed, recent examples of such coproduction initiatives in Sierra Leone (see Broto et al., 2022) and Ghana (see Okyere et al., 2023) demonstrate that it is possible for stakeholders across the vertical and horizontal levels of urban development planning to share, discuss, design, and produce strategies that address differences and harness local knowledge and agency toward walking cities that are walkable in Africa.

This study has two limitations. First, the inaccessibility to land use plans for the study sites implies that physical or spatial planning provisions and their implications for walkability cannot be ascertained, though essential. Second, socially vulnerable but walking-dependent groups such as people with disabilities, the elderly, and women were not disaggregated in this study. These invite

further studies to enforce distributive and recognitional dimensions of equity in walking urbanisms in addition to mixed methods that expand the range of policies, plans, and the diversity of stakeholders.

Note

1. The number of departments varies depending on the size of the administrative unit, which is determined by whether it is a metropolitan, municipal, or district assembly. For instance, there are 16, 13, and 11 departments in metropolitan, municipal, and district assemblies, respectively. Departments in municipal assemblies include Education and Youth, Works, Health, Urban Roads, Physical Planning, Agriculture, Disaster Prevention, Natural Resource Development, Finance, Central Administration, and Social Welfare and Community Development.

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