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Listen, talk, repeat: women's journey through architecture and environmental consciousness

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Asserting that architecture is political is an acknowledgment that the design of form and space is founded on uneven relationships of power. At the same time, two states that are intrinsically apolitical-gender and climate-have become subject to intense socio-political polarization. While identifying these artificially imposed divides does not equate to their endorsement, the goal here is not to dismantle them. The aim is to elucidate how harnessing these differences helps a more sustainable built environment. This study delves into a practical approach, a mindset, embodied in the three-step process of "listen, talk, repeat". This process frames a discourse on gender differences without victimization or criminalization of built space, societal systems, communities or their members. Derived from the social constructs of everyday life and domesticity, these three functions have been evoked by women of diverse backgrounds to navigate their everyday life and also to thrive therein. Deployment of this three-step mindset enables designers of all gender identities to mediate between theoretical space and practical applications, and to reposition socio-ecological sustainability as a fundamental aspect in salvaging a planet ravaged by extractivism and human ambition. Understanding how women have identified with this operational perspective reveals a rich tapestry of ideas, further organized by collective movements such as ecofeminism and the drive for resilience and sustainability. The narrative is illustrated by stories of women, and projects by women and by men, whose contribution has brought on unlikely paradigm shifts and, at times, decisive historical turning points.

KEYWORDS

architecture, women, everyday life, ecofeminism, environment, climate

Introduction

This study aims to harvest simple remedies that have origins in social structures and gender specificity. Focussing on the male and female dichotomy is not meant to negate contemporary multi-gender scholarship and expression. It is a necessary oversimplification that frames aspects of architecture in the nineteenth and twentieth centuries, a time when gender discourse was largely binary and was defined by relatively inflexible social constructs. The socially constructed binary system of gender is deceivingly simple, much like nature seems simple in its omniscient presence. However, beneath the preverbal surface, the expression of genders and natural ecologies are enormously and intimidatingly complicated. Equally complex (and precarious) is the current state between ecosystems and the global explosion of urbanization. Intensive industrialization and exploitation of natural resources has led to losses in biodiversity and to a steady degradation of atmospheric and aquatic quality. Without ignoring devastating social issues stemming from economic inequalities, racism, and other social discriminations, the climate crisis is the most profound challenge contemporary civilization is called to address. Denying architecture's complicity in the planetary crisis is illogical, and searching for high-tech design solutions whose impact is as enormous as the immeasurable crisis of the planet is unrealistic.

Catastrophic events, such as extreme weather phenomena and an unprecedented global pandemic, have exposed social inequalities and highlighted power differentials (Dankelman, 2010). Climate change, weather hazards and greenhouse gas emissions reveal a gender-specific vulnerability observed through a range of intersectional factors such as gender, race, class and geography (Magnusdottir and Kronsell, 2021). This feminisation of socio-economic hardship due to environmental shocks has been attributed to gender-specific poverty, higher risks of partner violence, early marriage and even higher female mortality rates (Neumayer and Plumper, 2007; Carrico et al., 2020). However, in the face of the brutal unpredictability of climate, women have shown to be adaptable and resilient (Chitiga-Mabugu et al., 2023). Irene Dankelman's seminal book, "Gender and Climate Change," recounts devastating testimonies of women experiencing the climate crisis from a position of unequal access to resources, energy, information and education. It also conveys an optimism on how grassroots organizing can lead to multi-scalar collaborations that advance sustainable systems and empower women's resilience.

In a post-truth world, where the speed and reach of information is almost incomprehensible, establishing a common understanding of the looming dangers of climate change that will enable reparations is an insurmountable challenge. In the book "Form and Flow," Kian Goh (2021) thoughtfully lays the confounding problem of conceptualizing a global threat whose spatial and temporal dimensions are difficult to comprehend. Breaking through the barriers of such foundational issues can occur on a formal level through education; informally, it starts with listening and meaningful (inter)acting. The study of listentalk-repeat, derived from a grassroots motivation and locallyspecific gender investigations has the potential to cut through the fray and reset priorities. The uncertainties of climate and its potential impact to our common future, as well as the incomplete information on which we base our daily decisions motivate us to look toward a common platform of communication. Our universal understanding of everyday life and in particular how it relates to domesticity, provides this common vocabulary. The knowledge that everyday life is what is disrupted by climate change creates a reference point for a critical system for interconnections between human and nonhuman communities, and ultimately, a means of restoring land and climate.

Listen, talk, repeat

The functions of the listen-talk-repeat triad exist in synergy and are defined by their symbiotic relationship. The first component, listening, is not always literal; it can be sensorial and experiential. Indigenous women have depended on discerning nature's rhythms for survival. For other women, it forms a daily ritual of multitasking routines and fostering connections while caring for others. When the humble act of listening is extended from the private scale of the home and stretched onto the public arena, it activates a spatial interplay of human and non-human interactions. The second part of the operational perspective occurs when the listener becomes the narrator. Storytelling can be as much an act of defiance as it is a form of activism, acknowledging that there is power in women sharing stories about water, about air, about animals. The third operation, "repeat," serves as the centripetal force that sustains the cycle of listen, talk, repeat, symbolizing the repetitive nature of domestic tasks. By default, women have excelled in experiential learning and iterative operations by placing inherent value to the process. In contrast, men's socially constructed roles in western societies have typically driven them to evaluate achievement by the product they acquire or create—be it a house, a car, or a promotion (Vale, 1996).

Likewise, regarding sustainable design as a product rather than a process is indeed counter-productive-pun intended. As sustainability is a constant inquiry and not a destination, it is projected as the potential ability of all species and all environments, both manmade and natural, to survive (Papadopoulou and Lapithis, 2015). Sustainability's accountability toward survival is closely linked to a healthy diversity of species and functions in both animate and inanimate conditions. In human terms, diversity requires listening to the voices of people of all ages, ethnic backgrounds and social strata. Sustainability through diversity can be attained only within a system where the voices of all participants carry equal weight. A significant stumbling block in embracing a polyphony of ideas and desires in design has been the persona of the male architect. Over the last 100 years, the supremacy of the professional architect over the layperson has been established through exclusive academic institutions and through media, via the printed press and later the internet. The architect has been personified as the hero, the genius, the master builder, where his and (more rarely) her brilliance and charisma weigh more than site specificity, economy of material, energy efficiency and other principles of sustainability. His vision supersedes all else. Oppositely, taking heed of others' voice refers to collective, collaborative efforts. For an architect to be truly effective as a listener, they must first let go of the image of the hero. Instead, the architect must become the facilitator, the one who listens to all voices, noises and sounds, in order to interpret, facilitate and realize their needs and desires (Gould and Hosey, 2007).

Women listeners become facilitators with greater ease then their male counterparts because of their collective experience as negotiators and peace-makers within domestic structures. Participatory design practices are designed to explore this dynamic relationship between established power norms and grassroots communities, a virtual space often inhabited by women. Instigated by architects Doina Petrescu and Constantin Petcu, the R-Urban project in Colombes, France, is an example of participatory strategies that aim toward resilience (Petrescu and Petcou, 2020). Here, resilience is understood as resourcefulness and is expressed by a series of interconnected, self-managed collective hubs, where knowledge, recycling, eco-construction, etc, are shared in a way that saves costs in building maintenance, energy and water consumption. The R-Urban hubs act as prototypes of new ways of building and grassroots managing of neighborhoods through ecological means that generate economic, ecological and social benefits (Petrescu and Petcou, 2020).

Among the many notable projects based on giving voice to communities, an installation project from 2010 by artist Candy Chang stand outs as it showcases a spark of genius in its simplicity and in enabling voices to be heard in how they envision the identity of their public spaces. When Hurricane Katrina hit the Gulf of Mexico in 2005, it caused over 1,000 fatalities and devastated large sections of the city of New Orleans. Five years later, Chang, who is trained as an architect and an urban planner, instigated a humble and innovative way to activate public opinion by giving the community voice, hope and humor in an otherwise tragic situation. She posted thousands of self-adhesive stickers with the phrase "I wish this was…" on the windowpanes of empty storefronts in post-Katrina New Orleans, where the residents and passers-by could write what it is they wished the currently empty storefront to become (Ellin, 2013). Answers ranged from "I wish this was a day-care center" to "I wish this was a dancing school", "I wish this was not gentrified," "I wish it was full of nymphomaniacs with PhDs".

The second part of the three-part operational perspective occurs when the listener becomes the narrator. Telling a story can be an act of defiance and it can be a form of activism. From Rigoberta Menchu to Vandana Shiva, women have been finding power in narrative while creating new relationships between human and non-human entities. The Chipko Movement, initiated in the 1970s, was comprised of a group of women in the Indian Garahwal Himalayas, who were troubled by the rapid rates of deforestation. Himalayan peoples were often cited by Gandhi as the embodiment of harmonious coexistence of humans with nature, so it was no surprise when the women united in order to protect the natural world of forests, water and soil. Their innate instinct to protect was manifested in a hug, a long human shield wrapped around the trees. This women-led social action came to be known as Chipko, the Hindi word for hug, and ultimately managed to preserve significant forest regions in the Garahwal area (Gershon, 2019).

The third device, "repeat," is the centripetal force that keeps the rotation of listen-talk-repeat alive. Brenda Vale, an architect who has written extensively on sustainable living and design, suggests that through the repetitive nature of domestic tasks, women have excelled in experiential learning and iterative operations (Vale, 1996). Since, according to Vale, product is a male prerogative, women are detached from product and assign more value to the notion of process. This can be evidenced by women's distinction in process-based art, such as ballet, opera and theater, as opposed to men's relationship to the physical reality of product, like a painting, sculpture, or indeed a post-Renaissance grand architectural statement (Vale, 1996). Similarly, while men's achievement is measured in the acquisition of the car, the purchase of the house, securing the promotion, women's sense of accomplishment lies in caregiving and its repetitive nature.

Exploring women's connection to everyday life not only reveals how gender roles and prejudices have dominated from preindustrial societies until recent times, it can provide a platform for empowerment. These materialist associations to domesticity that originate from women's confinement to the private sphere render women more competent in managing cities and other living infrastructures (Hendler and Harrison, 2000). Studies presented in the book titled "Mapping the Moral Domain," co-edited by feminist scholar and psychologist Carol Gilligan, have identified that while both men and women through their socially sanctioned roles possess the ability for moral reasoning, men tend to focus more on their rights, and women focus on responsibilities (Gilligan et al., 1990). When this force of responsibility transcends beyond the domestic space, and reaches broader landscapes and disparate geographies, it reinforces-on an existential level-the interconnectedness of architecture, human life and nature. This understanding calls upon architecture to employ an ethic of care, an ethic exuded from the processes of everyday life (Franck, 2000; Krasny, 2019a).

Product vs. process: the art of repeating

In trying to grapple with pluralistic concepts of capitalism, colonialism, patriarchy, and anthropocentrism, architectural discourse resorts to the distillation and (over)simplification of ideas into dualities and binary concepts. Popular binaries such as built vs. unbuilt, private vs. public, urban vs. rural, civilized vs. primitive and others, are problematic because they gloss over the heterogeneity of urban and rural identities and the complex economies that operate within. They also disregard women's and men's multiple identities and the richness of all that is biologically diverse. However, acknowledging and dismantling the particular binary relation mentioned above, product vs. process, is meaningful because it addresses democratic architectural practices that aim to improve the quality of all planetary life.

Architectural historiography has largely overlooked environmental considerations, because more importance has been set on documenting architectural production (Steele, 2005). The physical presence of the finished product draws more interest than any built space or design object which is defined by a particular and innate process. For instance, Charles Jencks' Garden of Cosmic Speculation has rightfully achieved prominence because of its astonishing sculptural presence. Considerably less famous is Diana Balmori's GrownOnUs project, a floating mini-landscape designed to purify polluted river water through phytoremediation, desalination, and rainwater collection. Similarly, Richard Meier's Jubilee Church in Rome, with its curving white walls resembling a giant hug, is noted for its poetic design, instead of its use of photocatalytic concrete and its potential over time to purify noxious atmospheric gases.

"Buildings may very well be our most faithful stenographers of late capitalism" Zach Mortice wrote in 2021 (Mortice, 2021). Buildings, however, are not political actors themselves, and it does not fall upon the building to demonstrate. It is the job of the architect and the critic to advocate for inequality and for nature. Decriminalizing architecture puts the onus on the architect as a listener and as a narrator to enable a platform of productive discussion for activism and action. The preoccupation of aesthetics in architectural production and the inadvertent neglect of process-based, environmentally conscious design, is a symptom of contemporary design thinking. Intellectualizing form is a priority that must be disrupted and instead, efforts should be set on elevating the voices of the needs and desires that fuel the process behind.

Proto-activism

The fracture between perceptions of product and process is not unlike the disparity in the pursuit for gender equality and environmental justice. In some ways, this void has been filled by ecofeminism, a movement that has linked women's liberation to planetary health, based on the premise that the treatment of women is connected symbolically, psychologically, economically and politically to the treatment of nature. The movement advocates for an end to all oppressions, because liberating women and other oppressed groups is ethically and practically equivalent to liberating nature (Gaard, 1993). The movement also provided a much-needed antidote to early perceptions of sustainable development as an issue that needs to be managed in a corporate, i.e., masculine, way (Irving and Helin, 2018).

Ecofeminism provided agency to women who listened to the tensions between anthropocentric and non-anthropocentric entities, embraced repetitive processes of nature's seasonality and told stories of truth and life. Ecofeminists proclaim that women's sense of self is most commonly present in a self that is interconnected with all life (Gaard, 1993), and as such, it is not surprising that the rise of ecofeminism coincided with the propagation of ideologies of sustainable development. While the architectural community struggled to formalize a universally accepted definition of sustainable architecture, a small group of pioneering women from outside the professional disciplines of the built environment, transferred their "listen, talk, repeat" skillset onto the global arena and became protoactivists in one of the most significant movements of the twentieth century.

The list of proto-activists includes chemist Alice Hamilton, who in the early twentieth century led a campaign against lead poisoning from leaded gasoline (Stebner, 1997), and marine biologist Rachel Carson, who in 1962 published the seminal book "The Silent Spring," and became a whistleblower for the dangers of widespread use of synthetic pesticides. Carson placed herself against the powerful chemical industry as she uncovered an organized and purposeful campaign of disinformation, bestowing her the legacy as the mother of contemporary environmental movements (Lear, 1997). Framing the agenda of a sustainable future from a perspective or urban infrastructures, journalist Jane Jacobs advocated against urban renewal and a modernist approach to urbanism. With no architectural training, Jacobs was able to decipher the informal spatial syntax that made New York's Greenwich Village a unique enclave of messy, vibrant, urban exuberance (Flint, 2009).

Although Jacobs' earlier work seemed to be preoccupied with urban living rather than the greater ecological context, her later work relayed a deep understanding and commitment to diversity and inclusivity; she considered them fundamentals to the survival of communities and to the principles of sustainability. In 1992, she published her book "Systems of Survival, A Dialogue on the Moral Foundations of Commerce and Politics". It was written as a series of tales told in a loose form of Platonic dialogues, and it stroke a different tone than her previous work where she shifts the attention away from her own authorship and allows the main characters to speak in their own voice (Flint, 2009). True to the format of listen-talk-repeat, Jacobs' "Systems of Survival" is an early form of participatory intensions.

Conclusion

Environmentally conscious architecture requires not only innovation in thinking and in technology; it demands a repositioning of the role of the architect. It requires a willingness to decline the glories of leadership and to accept the consequences of losing control whether it be from engaging in activism or embracing participatory processes of creating space (Sandercock and Forsyth, 1992). Feminist urban planner Clara Greed suggests that women as historically marginalized members of the community, are compelled by an urgency to act as facilitators in participatory processes (Greed, 1994). Does this imply that women's social conditioning renders them better suited to operate in the absence of control? If so, then women's acceptance of their role (or indeed lack of role) in chaos should not be perceived as complacency or apathy. It is a tool that enables them to listen, to speak up in favor of others, to repeat and persevere. For this to be furthered, the importance of understanding everyday life cannot be overstated. Just as unequal climate events interrupt the social dynamics of everyday life, everyday life can insert itself to restore it. Through their generational experiences in the private realm of domesticity, women have emerged as distinguished advocates, activists, and, occasionally, as designers with environmental consciousness. In order to reinforce their place in history as agents of environmental change, women in the design professions must resist work ethics that are characterized by a product-oriented desire.

Spatial designers of all genders benefit from the femininederived listen-talk-repeat perspective, which imbues an ethic of care and a perseverance for the betterment of the built environment and for ecological justice. Krasny (2019b) writes "The premise that the built environment is not separate from the natural environment allows for a connection of architecture to climate struggles and the required care for the planet. With the Earth dangerously close to global-scale tipping points and the risk of ecological collapse and human extinction, I call for architecture—a profession that aims at building the future—to be at the forefront of change." Differences emerging from gender-related constructs should not be concealed and rejected as irrelevant or anachronistic. They should be exposed and examined for their potential to contribute positively and inclusively in a socio-economic system that is historically and unapologetically anthropocentric.

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