

Persian translation of this paper entitled:
تبیین مؤلفه‌های زنانگی برگرفته از آثار زنان معمار ایرانی
is also published in this issue of journal.

Original Research Article

Explaining Femininity Elements in the Works of Iranian Women Architects*

Ali Yaran¹, Honey Arjomandi^{2**}

1. Ph.D. in Architecture, Professor of Ministry of Science, Research and Technology, Tehran, Iran.

2. Ph.D. Candidate in Architecture, Nazar Research Center, Tehran, Iran.

Received: 27/02/2019 ; revised: 29/12/2019 ; accepted: 01/08/2020 ; available online: 21/12/2020

Abstract

Problem statement: Today, providing the desired environment for the human being, whether it is a male or female user, requires the architect to have full knowledge of the physical, mental, intrinsic, and social dimensions of the audience. As half of the space users, women are often ignored since their needs are derived from their mental, psychosocial, and even social bases, so they have remained disregarded. Lack of such knowledge about women's requirements may decrease their environmental satisfaction. The hypothesis of the research is that architecture consists of multiple components manifesting the designer femininity. These examples, mainly derived from postmodernist concepts or created by women, influence the quality of space, especially women.

Research objective: The purpose of the present research is to introduce elements of femininity in architecture to create desirable and utilizable contexts for women.

Research method: It is inductive research in terms of theoretical background and literature review to approach the research model. Then, the research also applied the Delphi method and interview among 28 active female Iranian architects.

Conclusion: The research conveys that components of motherhood/mother-ness, liquescence, fundamental and structural elements, besides their sub-components are introduced as femininity in contemporary female architecture.

Keywords: *Gender, Feminine (womanhood), Postmodernism, Elements of femininity, Women's architecture.*

Introduction

Sex and gender are different concepts. Sex refers to the inherent differences between men and women;

* This article is extracted from Honey Arjomandi's Ph.D. thesis entitled "Indicating Feminine Attribute to Enhance Urban Public Spaces Quality (Case Studies: Rasht and Yazd cities)" which is in progress under supervision of Dr. Ali Yaran in Nazar Research Center, Tehran, Iran.

** Corresponding author: honey.arjomandi@gmail.com, +989125980016

while, gender as a social construct is what a human being becomes in society. This "becoming" largely depends on the culture, history, society, and even the economy. The research focuses on feminist notions in post-modernist thoughts. Deleuze and Guattari in "A Thousand Plateaus", proposed Rhizome¹ and a hierarchic, tree-like

metaphor to describe masculinity and femininity. In the role of Rhizome, women are placed in the margin of a male centrality and try to depart from the center and to get rid of the monopoly of one sex. It escapes from being oneness and unity toward becoming manifold and multiplicity. Feminization may result in Rhizome generation followed by creating heterogeneous, non-hierarchical, and fluid and still relevant networks (Yaghoubi, 2014, 78). While there is no single definition for feminization and womanhood, it can be described as relying on multiple contexts, including social structures.

The significance of studying the concept of femininity as an independent subject has raised the following research questions:

- What are femininity components (elements) in architecture? (conceptual research model)
- What are the architectural femininity elements of Iranian female architects?

Theoretical background

• Concept of gender and femininity

In sociology, the sex -male and female- refers to the biological differences between bodies, while, gender -femininity and masculinity- pertains to the social construct of a set of differences between men and women. Gender can be defined as a macro social image of “femininity” and “masculinity” standards and norms; whereas, respecting “sex”, biological origins and differences are examined. Sexual differences are considered as primitive body structures and generally result from natural distinctions and primary structure. In contrast,

gender differences, though relied on sex differences, are created through social, cultural, and historical approaches that change over time and space (Farzaneh, 2011). According to Khosravi (2003, 85), these differences depend on the behavioral change, and subsequently, practice and experience. In the meantime, there is gender roles contingent upon social factors, and according to Nercissians (2004), influence gender-based behaviors and expectations. Khani (2006, 2) also indicated the different needs of men and women as an effective factor. In terms of gender roles, according to Goffman, Raymond Boudon, and Crozier, the individual is competent in role changing. They believe that not only roles boundaries are vaguely defined, but also each role has a range of changes. Thus, in this process, gender is more an external and acquired trait than an inherent and natural feature (Fig. 1).

In another study, conducted by Chini et al., it is inferred that femininity and gender are influenced by internal factors such as infrastructures as well as external factors such as culture and industry. False-consciousness of the culture industry encourages men and women to prefer a sexualized culture in which women are scared of losing their role in a competitive world and often unwillingly enter into some unwanted areas like beauty markets (Chini, Hashemyanfar & Mohammadi Kangarani, 2018). Media can be useful and informative for internal infrastructures. Baudrillard (2007) takes media into account as symbolizing and shaping a collection of individual behaviors referred to as the reality of life.

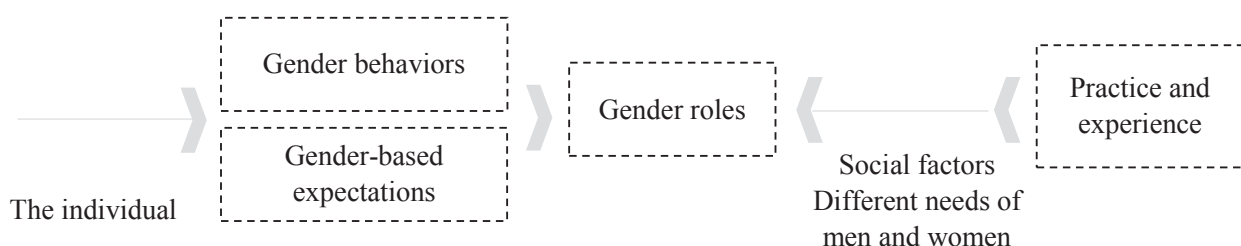


Fig. 1. The process of gender behaviors formation. Source: Author.

• Femininity and postmodern perspective

The prevailing conditions follow after modernity is referred to postmodern (Ihab, 1985, 4). Further, feminism has also been developed in this era. Considering the notions of nature and origin, and a new attitude, postmodernism has engendered feminism (Moshirzade, 2006). These changes, especially in the second half of the twentieth century, had taken place with the creation of liberating knowledge toward the identity formation of women in a patriarchal community. In this era, feminism mainly focused on the epistemological- and political-based attitude of defending women's rights. Postmodern feminism challenged epistemological infrastructures in western communities, including racism and sexism (Zalewski, 2000). Subsequently, it pursued its objectives in the light of the "new definition of men and women" theory. In this attitude, even narratives and stories shared in society also affect the distinction between men and women. Postmodernism in macro critical narrations such as wisdom, truth, beauty, art, and science, claims that western metaphysics and technological development are of practical factors. It has been taken into account in analyzing the fundamentals of human life including "women's identity." However, Postmodernism carries a complicated historical position so that it is related to modern era in some way, due to time mismatch. Despite some conflicts, that postmodernism, deeply rooted has in the age of modern. Of which conflict and rupture of human life, the domination of some classes over others, as well as identity crises can be mentioned. Postmodernism fundamentally questions notions of origin, nature, and instinct, and consequently prepares the context of the new issue of feminism. Highlighting artificiality of body, sex, race, and women's gender ability, postmodernism feminists proposed new challenges in this area (Sajadi, 2005, 10).

Concerning the effect of the postmodern perspective on feminism, women's protests for equality have raised (ibid., 22). According to postmodernism, the issue of femininity was an attempt to recognize the

concept of justice, while Deleuze, as a postmodern philosopher, scrutinized the issue from a different perspective. He considers femininity undefined (infinite), continuously becoming not being a woman like the concept of Rhizome. In this definition, the concept of hierarchy-less horizontal movement is critical. The Gypsy nomadic travelers' life can also imply a feminist notion, a behavior against restraint and stillness that implies movement and fluidity. Successive "becoming" of Rhizome and avoiding from "being" can mean pluralism and procreation. These concepts besides other post-modernistic notions from femininity (e.g. interdependence, community, communication, sharing, affection, confidence, lack of hierarchy, nature, input, pleasure, peace, and life) can be regarded as new examples of femininity (Yaghoubi & Moghaddas Yazdi, 2016, 519).

Jacques Derrida, the French philosopher, describes Deleuze as "a philosopher who integrated philosophy with life and made it joyful". His description is characterized by two essential features of "integrating with life" and "making joyful". Proposing a deconstruction philosophy, Derrida promoted a rebellious and resisting architecture. In this architecture, getting rid of the tree-like system proceeds to the death of the author and approaches a free impression by the spectator. The proposed architecture culminates in visualization and is in line with the horizontal idea of philosophers provided by Friedrich Nietzsche and elaborated by Deleuze. Deleuze introduced femininity in parallel as a combination of science, philosophy, and art with life. On the other side, this idea deals with the distinction between femininity and muscularity; for instance, it takes birth, escaping from being, and multiplicity as feminine features. In general, Deleuze rejects the already tree-like system for defining femininity².

After the 1970s, a group of new feminists influenced by postmodernism attitudes emerged. Their approach was relying on the behavioral psychology insisted on the femininity characteristics. A postmodern feminist can be taken as a critique of other extremist

feminist trends. Postmodern feminists highlighted the differences between women and expressed that “what can be achievable for some women, it may be unattainable for some others”. They take radical feminists beliefs as unreal; they even introduced it as new kinds of oppression against women since radicalisms disregarded differences in women’s conditions such as contexts of various communities and cultural differences.

In other words, the central theory of postmodern feminists relies on prescribed absolutism founded by other feminists, and an approved relativism of women’s conditions in different communities. They asserted that efforts to provide a single, general, and universal interpretation of feminism would not go anywhere (Rokni Lamouki, 2006, 70).

Post-feminism substitutes two notions of “men” and “women” with “femininity” and “masculinity”, and while acknowledging differences, they are complementary. Both notions are clarified in the socialization process far from the biological sex, and post-feminism fights with masculinity rather than the male sex since masculinity not only assigned to men, but also affect women in a consistent social context. Independence, autonomy, wisdom, will, hierarchy, dominance, culture, transcendence, asceticism, war, and death are characterized as male traits; whereas, females can be characterized with interdependence, community, communication, sharing, affection, trust, lack of hierarchy, nature, inputs, pleasure, life, and peace (Moshirzade, 2004, 58). Against Nietzsche’s equivocality in the femininity discussion, Deleuzeblamed the centrality of western thought and challenged this tree-like attitude in “A Thousand Plateaus”. He views Nietzsche, Foucault, and Derrida as Rhizome-like, horizontal thinkers lacking hierarchy (ibid., 59).

• Femininity and postmodernism

As cited in Basirat (2013, 33), according to Luce Irigaray, the feminist thinker, nature, affection, imagination, tangibles, fluidity, and ideology can combine women’s language with architectural language (architectural context). According to the

feminist and postmodernist thinkers, it is inferred that elements such as nature, fluidity, lack of modeling, and unwillingness to centralism are more clear and evident in women’s works considered as women’s works commonalties in the field of postmodern architecture. Moreover, nature, as a common chapter among the works of thinkers and some female architects, can be introduced as a feminine element (Arjomandi & Yaran, 2016, 8).

The difference in expression, or in better words, the difference in the “tone” of women expresses the components known as feminine. Although both men and women may use the same way to find the answer to the questions or to create an artwork, or even sometimes have the same content, in the expression stage, there is a huge difference between their works. For instance, consider “It is winter” by Mehdi Akhavān-Sāles, and “Let us believe at the beginning of winter” by Forough Farrokhzad. We face two different descriptions of the cold winter. Descriptions, illustrations, word usage, existing passion, and feelings of one are primarily inspired by masculine features, while, in the other work, they are seriously feminine.

Further, paintings of Ghazale Sinai is another example where drawings, lines, paints and shapes loudly express the femininity of its creator compared to male painters with similar content and meaning. Perhaps this involuntary difference in intonation sometimes deeply touches the transferred notion attractiveness and has been a proper means to reveal frustrations and inequalities of men and women throughout history around the world. Architecture in which form is the expression of content in an architectural fashion also observes many differences in the way how women respond to the issues and their expression tone and intonation. Zaha Hadid is one of the most influential female architects works are characterized by movement and flexibility (later analyzed in detail); she revolutionized the human impression of space by creating sensory and fluid structures in the space and competing with gravity (Baer, 2005).

• Femininity elements in architecture

Pointing to the feminine language in architecture, Toy (2009, 12) introduces it as a language embracing feminine traits trying to disrupt the patriarchal structure. Then, organic architecture has provided change from inside out, which is a subset of a feminine point of view versus a masculine mechanical view.

At present, when history is undergoing a deconstruction that has never experienced, there exist two organic and mechanical viewpoints toward form variability in architecture. Organic variability occurs from within and coordinately involves performance (a typical feminine discourse in architecture); whereas, the mechanic variability in which the masculine view can be seen is involved in the system and structure lacking any dynamic, movement, and fertility. Organic form continuously changes and evolves from moment to moment, seeking for a new order in the new conditions. In fact, in this case, the sublime logical form is rejected (Alizade Gohari & Forouzande, 2010, 10).

Other studies consider feminine architecture as organic, resilient, anarchist, dynamic, changing with a fixed nature, fluid, anti-dogmatism, and mobile; while, masculine architecture is characterized as mechanical, conventional, subject to system and structure, lacking fertility and movement, static and silent, dogmatism, and confinement-oriented.

In general, it does not necessarily mean that these elements are absent in men's works; instead, they participate more in women's works. Kennedy (1981) claims that it is unlikely to define these two (feminine and masculine) architectures clearly, but it is easier to distinguish the feminine and masculine architectural principles. The differences can be characterized comparatively using "more", i.e. men's and women's works are only discerned by comparative adjectives as seen in figure 2.

Of Rhizome associated components (a postmodernist philosophy adopted by Deleuze and Derrida to explain femininity) manifested in postmodern architecture can include horizontal movement,

contextualize, centrality rejection, boundless, spatial convolution, as well as the fluidity. Zaha Hadid's works are characterized and presented by these elements. Afshar Naderi indicated the dynamism and resilience in Hadid's works, which is the common component between work and creativity. As Hadid indicated, when we quickly pass over the horizon, it enables us to recognize the space and the associated ideas; then, it is when movement and resilience critically contribute. As Afshar Naderi Conveys, according to Hadid, technology development is directly linked to the movement in architecture. In this regard, architecture evolves from stillness to mobility. Therefore, it would be almost impossible to localize each structural element in advance or to view the work from a given point of view (perspective). This is directly related to anti-dogmatism and the enclosed masculinity trait struggling to defeat the sense of ownership, possession, and solidity (Afshar Naderi, 2000, 9). Alizade Gohari and Forouzande (2010) consider movement in Zaha Hadid's architecture affected by Hegel's notion of "The zeitgeist" (spirit of the age/ spirit of the time). Unrestrained by imitation and dependence on the past, her works have been freely and courageously created for its time in an unstable and complex fashion where a new definition of

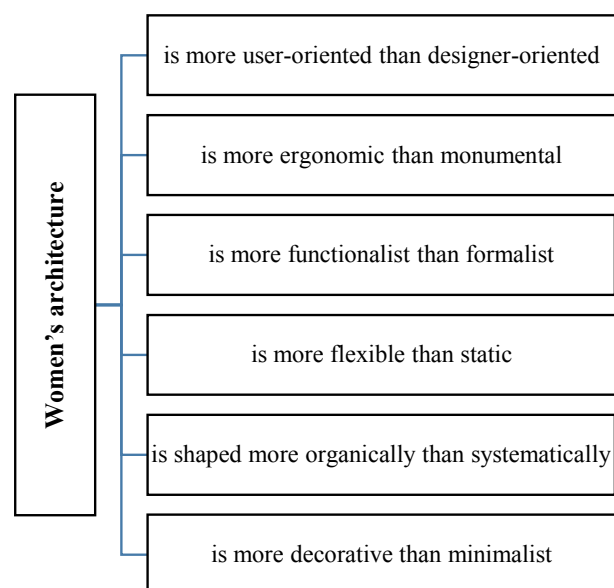


Fig. 2. Women's architecture characterization. Source: Kennedy, 1981, 75.

context, wall, and levels interconnection has been observed. Extending femininity to architecture may lead to notions of centrality criticism, dynamism, movement, and nature.

According to Kennedy (1981), feminine architecture is more economical, human-oriented, more resilient, more organic, more performance-oriented, more functionalist, more holistic, decorative, and more human scale. Furthermore, Terlinden compared works of four leading architects of different ages including “Eileen Gray,” the modernist architect contemporary to Le Corbusier, “Lucy Hilberant,” 50-60s classic German architect, “Hasegawa Tōhaku” high-tech architect, and “Zaha Hadid” the constructivist architect, to determine feminine elements in the architecture. However, these architects varied in style and were at different times; they shared commonalities, including resiliency, fluidity, harmony with nature, site dependency, dynamism, transparency, distrust of predetermined architecture (Terlinden, 2015).

Each architect adopts his/her specific style that not only satisfying the physical, psychological, and sensory needs of the audience but also meets his own needs. A designer, whether an architect, painter,

or artisan, is trying to connect with the audience visually, will be involved in a serious of dilemmas of rejection, selection, and measurement in creating (Dondiss, 2001, 153). Architecture in each period, on the one hand, consists of the result of values and spatial-temporal architectural ideas; on the other hand, it relies on the designer individual and mental ideas where the designer creates a creative plan using mentioned values and under his freedom in form selection (Alizade Gohari & Forouzande, 2010, 6). The architect applies several strategies for meaning creation. It can be stated that every artwork stems from techniques that were consciously or subconsciously inserted in work; therefore, to discover strategies that female architects use in their works, it is better to start with them (Ahmadi, 2003, 73). To say it differently, feminine elements referred to those more in line with feminine spirit leading to a higher level of satisfaction; however, due to lack of sources, higher analysis is required to explain the elements. According to the authors and practitioners, the following elements, shown in figure 3, are regarded as primary feminine elements (research primary scales).

To present these as feminine elements, a two-step analysis was performed here that firstly explored

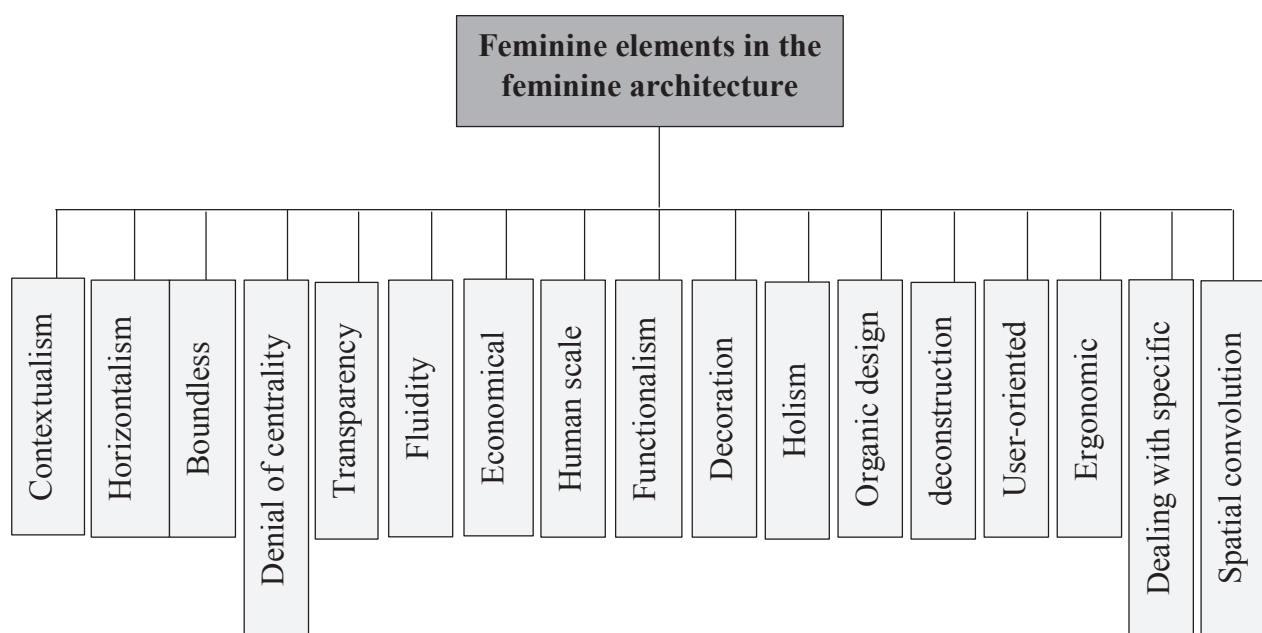


Fig. 3. Research primary scale; feminine elements in architecture. Source: Authors.

the mentioned components in women's architectural projects, and second the Delphi method besides interviewing experts were conducted, and then, the final model of feminine elements in architecture was provided.

In this regard, five of the most effective and influential works of 10 leading architects were examined. According to top ranking websites, these architects are rated as influential women of contemporary architecture. As earlier mentioned, works of Zaha Hadid are mainly characterized with dynamism, resilience, and spatial convolution (Table 1). Contextualism, light, and transparency are of the most important visible elements seen in the works of Kazuyo Sejima, Japanese architect and the winner of Pritzker Architecture Prize in 2010 (Table 2). Odile Decq, a famous French architect who promoted women's architecture, is also popular for horizontalism, fluidity, and dynamism (Table 3). Amanda Levet, English architect and the winner of many prestigious architectural awards develops contextualism, fluidity, and dynamism in her works (Table 4). Farshid Mousavi, Iranian architect living in the USA, who considers concept as the foundation for designing, is human-oriented and contextual in her works (Table 5). The successful Danish architect, Dorte Mandrup is distinguished by form and material (conceptual). Her work is characterized by alignment by nature, dealing with details and boundlessness (Table 6). Gisou and Mozhgan Hariri, two successful Iranian

architects living in the USA, mostly care for human scale, alignment with nature, boundlessness, and resiliency. Further, they strongly believe in sustainability in architecture (Table 7). In her works, Jeanne Gang also concerned for harmony with nature; besides, movement, dealing with details, and human scales are also dealt with in her works (Table 8). Amale Andraos is a well-known Lebanese architect not only designs in the USA but also teaches. Her works feature with transparency, contextualism, functionalism, as well as dealing with details (Table 9). And finally, Tatiano Bilbao, Mexican architect, majorly concerned for sustainability in architecture. Her works characterized with economic, resilience, and or functionalism (Table 10). These architects have been selected for the research analysis whose works are examined and the common elements are determined (see tables 1-10).

According to the analysis of the selected projects (as seen in tables 1-10), common factors can be inferred. Implying the femininity, including user-orientation, dealing with particular details, resilience, human scale, organic design, fluidity, transparency, dynamism, boundlessness, and horizontalism. The frequency of each factor per architect can be examined in the following matrix (Fig. 4).

As long as, the maximum common components are obtained, research final measurements are achieved through interviewing with experts by the Delphi test method.

Table 1. Analysis of Zaha Hadid's 5 selected works. Source: Authors.

Architect		Zaha Hadid			
Title of the work	Nanjing International Youth Cultural Centre	AD Classics: Vitra Fire Station	Napoli Afragola Station	Morpheus Hotel	Puhui Office Design
Image					
Main characteristics of the works	Spatial fluidity, contextualism, harmony with nature, resiliency, dynamism, horizontalism, spatial convolution, boundlessness, human scale				

Table 2. Analysis of Kazuyo Sejima's 5 selected works. Source: Authors.






Architect	Kazuyo Sejima				
Title of work	Sumida Hokusai Museum	Reflective Serpentine Gallery Pavilion 2009	The River	The louver-lens	Rolex Learning Centre
Image					
Main characteristics of the works	Transparency, fluidity, interior, and exterior entanglement, Emphasis on the context, infrastructure, human scale and dimensions, horizontalism, Rejection of centralism				

Table 3. Analysis of Odile Decq's 5 selected works. Source: Authors.






Architect	Odile Decq				
Title of work	FRAC Bretagne Museum	Fangshan Tangshan National Geopark Museum	Saint-Ange Residency	GL Events Headquarters	The Opera Garnier Restaurant
Image					
Main characteristics of the works	Transparency, communication with nature, using warm colors, fluidity, dynamism, centrality rejection, dealing with details, entangled spaces, horizontalism, dynamism, human scale				

Table 4. Analysis of Amanda Levett's 5 selected works. Source: Authors.

Architect	Amanda Levett				
Title of work	Maat	V&A Museum	Oodi Helsinki Central Library	Central Embassy Bangkok	Alto University Metro Station
Image					
Main characteristics of the works	Fluidity, transparency, human scale, horizontalism, natural elements, warm colors usage, following foundations, dynamism				

Table 5. Analysis of Farshid Mousavi's 5 selected works. Source: Authors.


Architect	Farshid Mousavi				
Title of work	LA Folie Devine	Ilot 19 La Defense	Carabanchel Social Housing	Zak Eureka	Alto University Metro Station
Image					
Main characteristics of the works	Naturalism, transparency, fluidity, flexibility, horizontalism, dealing with specific details, centrality rejection, using warm colors, dynamism				

Table 6. Analysis of Dorte Mandurup's 5 selected works. Source: Authors.






Architect		Dorte Mandurup			
Title of work	The Icefjord Centre	Råå Day Care Center	Multifunctional Sports Centre	Amar Children's Culture House	Skansen Residences
Image					
Main characteristics of the works	Harmony with nature, fluidity, transparency, horizontalism, human scale, boundlessness in foundation, centrality rejection, dealing with details				

Table 7. Analysis of Gisou and Mozghan Hariri's 5 selected works. Source: Authors.

Architect		Gisou and Mozghan Hariri			
Title of work	Jewels of Salsburg	Cap Code Beach House	Lavasan Villa	Alvand Tower	PreFab Folding Pod
Image					
Main characteristics of the works	Human scale, harmony with nature, transparency, human proportions, horizontalism, dealing with details, flexibility				

Table 8. Analysis of Jeanne Gang's 5 selected works. Source: Authors.






Architect		Jeanne Gang			
Title of work	University of Chicago Center	Writers Theatre	University of Chicago Campus	Gilder Center for Science	Eleanor Boathouse
Image					
Main characteristics of the works	Naturalism, transparency, contextualism, horizontalism, dynamism, dealing with details, human scale, centrality rejection, flexibility				

Table 9. Analysis of Amale Andraos's 5 selected works. Source: Authors.



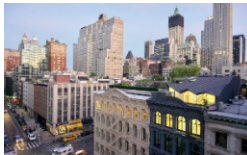







Architect		Amale Andraos			
Title of work	Miamei Meuseum Garage	Courtesy of Colombia Graduate School	Courtesy of Colombia Graduate School	school of Architecture	Art Campus
Image					
Main characteristics of the works	Transparency, human scale, horizontalism, contextualism, color usage, dynamism, dealing with particular details, functionalism				

Table 10. Analysis of Tatiana Bilbao's 5 selected works. Source: Authors.

Architect	Tatiana Bilbao				
Title of work	Biotechnological Park Building	Ventura House	Reflective Holiday Home	Plane-Site	Viviana Papular
Image					
Main characteristics of the works	Naturalism, horizontalism, contextualism, economical, dealing with details, color usage, flexibility human scale				

Research method

Since qualitative studies are directly related to social studies; this study tried to find the answer to the research questions through grounded theory. According to Strauss and Corbin, grounded theory is trying to find a theory, which is inductively obtained from studying a phenomenon. In this method, the theory must be discovered and demonstrated through regular data collection and analysis (Strauss & Corbin, 2011).

This study intends to investigate the notion of femininity in architecture interpretively. On the other side, the Delphi test is one of the most widely used qualitative research methods. In this study, a group of experts and professionals were interviewed. The method is based on collecting opinions and reaching a consensus among respondents. Since participants were experts and professionals, the collected responses will be effective and useful. Thus, it can be concluded that the Delphi method is particularly crucial for issues where little research has been done or are ambiguous and controversial.

Femininity in architecture and its factors were analyzed in two rounds. In the first round, the questionnaire was revised based on the experts' opinions; and in the second round, a final questionnaire was distributed online. In this method, the research population includes 10 to 50 people, in general, while, for this study, 28 Iranian women architects were questioned. All the expert participants were of well-known, awarded designers working in the area of architecture. The Delphi test

was used to also monitor the factors because of two reasons: first, experts must verify the identified factors reliability, and second, since gender is a social and cultural concept differently interpreted in various nations, a Delphi test was used to verify components' reliability in Iran.

To ensure the research validity, the following steps have been taken:

- Member checking: Half of the interviewees reviewed their analysis of variables and provided their viewpoints. Scholars revised findings according to the obtained opinions if needed.
- Some Ph.D. students and professors research questions and findings. their consensus largely influenced the research process.
- Existing documentation, regular, and field notes and memories are of other issues guaranteeing the research validity.

Discussion

In general, the questions asked from experts reveal their preferences and probability of using each factor. The research focused on the participants' attitude and approach in designing and understanding how they view architecture regardless of urban planning and architecture limitations. Questionnaire results showed that horizontalism and borderless (boundlessness) had been intentionally and unintentionally selected as maximum factors. Architects acknowledged that they prefer horizontal designing with no boundaries within the site. Since the research uses "a posteriori," the obtained

factors are categorized in similar classes so that a conceptual model of femininity criteria is obtained. Considering the operational definitions in the theoretical basics and the notion of Rhizome, these factors were explained as Rhizome sub-criteria. Moreover, the Rhizome criterion was a sub-criterion of motherhood. Further, dynamism, which was considered a spatial element, had been indicated as an effective factor of women architects. It was followed by fluidity and transparency subdivided as visual factors in this research as they enjoy practical visual

features. Ultimately, spatial and visual sub-criteria were classified under the main standard of limpid. Organic known as a natural-oriented factor, which is itself a sub-criterion of fundamental, was confirmed by the significance and preference of female architects. Based on analyzing experts' responses, human-orientation, resilience, and human scale were inseparable components of most female architects and introduced as functional elements. Besides, dealing with particular details in women's works was an integral part sub-classified as supplementary. Both

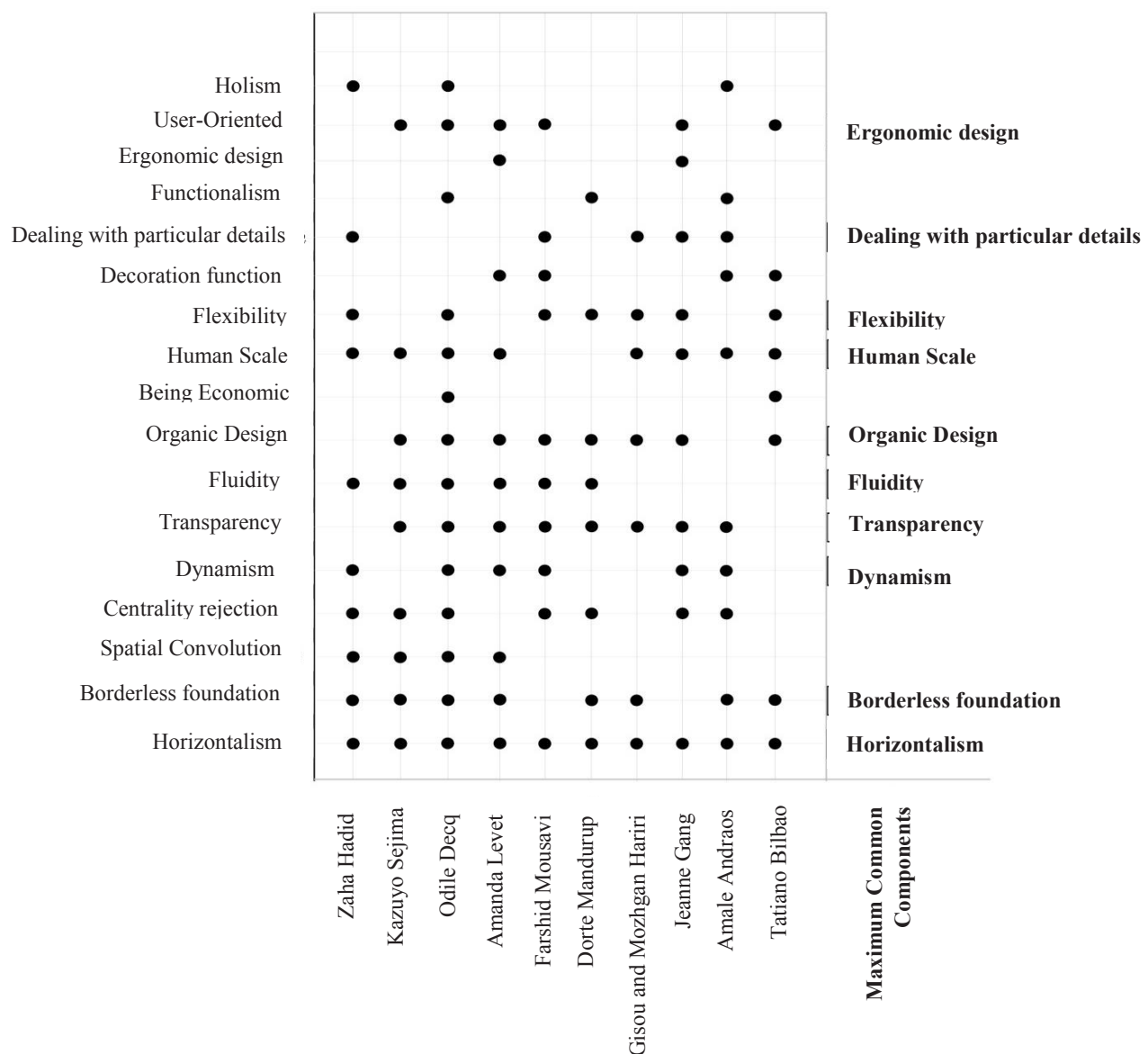


Fig. 4. The analysis of the works of the selected female architects. Sources: Authors.

functional and supplementary criteria were explained under the main structural criterion.

Moreover, the factors' prioritization by experts was also impressive. Respondents prioritized resilience, followed by organic design, human orientation, boundlessness, horizontalism, human scale, transparency, dynamism, fluidity, and finally, details. The only non-frequent component in analyzing women's works and experts was "centrality rejection," which was excluded. As a result, the research conceptual model of femininity factors in architecture in terms of Iranian architects' prioritization is illustrated in figure 5.

Conclusion

As stated, femininity is a social construct, which may not be used as an absolute or essentialist issue like sex (male and female); hence, it has different meanings in various societies. In the age of post-modern, new notions of femininity have been introduced such as centrality rejection, hierarchy rejection, movement, nature, and or fluidity. These concepts were also brought into architecture and valued by some architects like Zaha Hadid. Her projects, inspired by postmodernism basics, were released from dominant layers of modernism and proposed movement and flexibility as the most

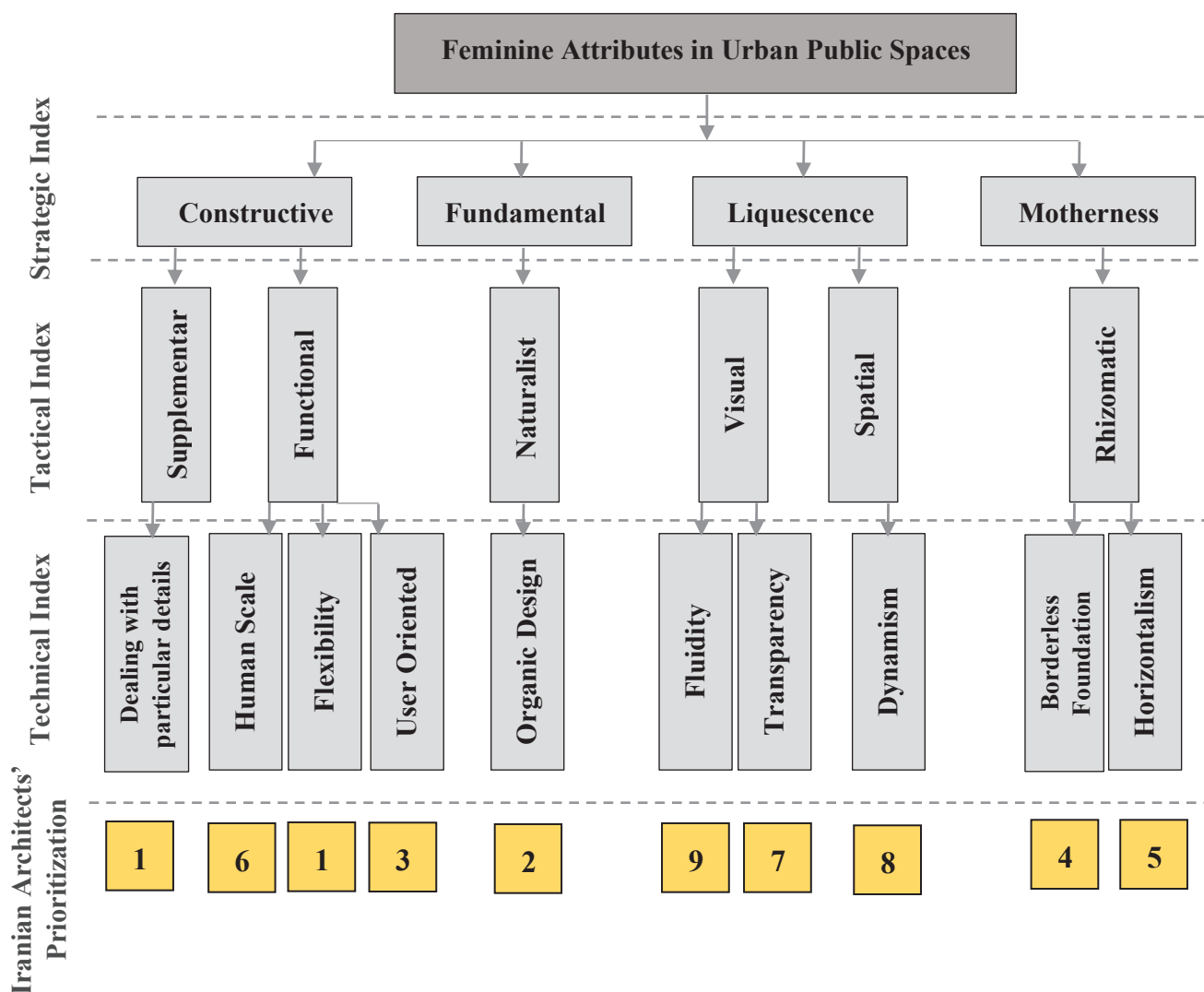


Fig. 5. The research conceptual model of femininity factors in architecture. Source: Authors.

significant principles of designing and a framework of femininity design.

In this research, 50 works of the contemporary well-known women architects have been analyzed six primary criteria and 18 sub-criteria of 28 Iranian female architects, it is concluded that factors such as spatial convolution, centrality rejection, holism, economical, and decoration function are excluded from their works. Whereas, elements such as horizontalism, boundlessness, dynamism, transparency, fluidity, human-orientation, human scale, flexibility, and particular details are among factors architects has been followed practically and theoretically. Disregarding other factors may not necessarily imply their masculinity. Maybe the masculine atmosphere of the society in addition to the cultural context leading to gender construction has influenced Iranian female architects. Perhaps, if they are in an environment free from many social and cultural limitations and constraints, some stated components may gradually emerge in their works, or they may discover new dimensions of their existence. Thus, to answer research questions, it can be concluded that femininity in the works Iranian female architects can be considered as a key to design and provide desirable places for women, to be "more" appropriate, and to endow the environment a feminine intonation and color. As previously mentioned, femininity factors may not necessarily deny masculinity, but rather they are sometimes complementary with little significant differences. It is hoped that such studies would bring equality effects in the realm of urban construction and architecture.

Endnotes

1. Rhizome has Greek roots that is Rhiza, defines root, underground stems of some plants with nodes and roots which are grown wildling beneath the plant. This plant as Deleuze declares has no root, no construction, has irrational life and this irrationally is an ambiguity. On the other hand, rhizome has a logic which is not comprehensive easily. As far as there is no specific pattern for snowflake, so that it is not irrational. From deleuze perspective, there is no beginning and or end and still is in-between.

2. For further information see: <http://vista.ir/article/310718>

Reference list

- Afshar Naderi, K. (2000). Techniques of Creation. *Memar Magazine*, (9), 4-12.
- Ahmadi, Sh. (2003). *Man yek Koodak Hastam, Barrasi-ye Omde-tarin Avamel-e Moasser bar Khallaghiat-e Koodak* ["I am a child", Studying effective factors of child creativity]. Mashhad: Movahed publication.
- Alizade Gohari, N. & Forouzande, E. (2010). Kalaghiyat dar me'mari-ye zanan: didgahi bar paye-ye pajooheesh-haye ravanshenakhti [Creativity in women's architecture: a psychological-based research perspective]. *Quarterly of Women and Culture*, 2(3), 5-15
- Arjomandi, H. & Yaran, A. (2016). *Tabiat: Onsori zanane; moalefe-ye ijad-e ta'adol-e jensiati va ertegha dahandeye keifiat-e fazaha-ye omumi-ye shahr* [Nature: a feminine element; the component of sexual balance, and improving urban quality]. The first international conference of women and urban life. Tehran, Iran.
- Baer, J. (2005). *Gender and creativity*. Paper presented at the Annual Meeting of the American Psychological Association, Washington, DC, USA.
- Basirat, A. (2013). Pichidegi-ha-ye zabani va Me'mari-ye zaneh [Linguistic complexities and femininity architecture]. *Namaye-ye Tehran*, (7&8) (Special issue for the conference of women, architecture, and city), 32-33
- Baudrillard, J. (2007). *Seduction* (A. Ghazaei, Trans.). Paris: Nashr-e She'r-e Paris.
- Chini, N., Hashemyanfar, A. & Mohammadi Kangarani, H. (2018). Women's social construction of rhizomatology in the context of sports, cosmetic and beauty centers. *Quarterly journal of Women and Society*, 9(35), 85-116.
- Dondiss, D. (2001). *A Primer of Visual Literacy* (M. Sepehr, Trans.). Tehran: Soroush Publications.
- Farzaneh, F. (2011). An Introduction to the Interaction of Gender and Space. *Soffeh*, 21(2), 99-110.
- Ihab, H. (1985). The culture of postmodernism. *Theory, Culture and Society*, 2(3), 119-131.
- Kennedy, M. I. (1981). Towards a rediscovery of feminine principals in architecture and planning. *Woman's Studeies Int.*, 4(1), 75-81.
- Khani, F. (2006). *Jensiyat va Tose'eh* [Gender and Development]. Tehran: Institute for Social and Cultural Studies.
- Khosravi, Z. (2003). *Psychological Foundations of Gender*. Tehran: Ministry of Science, Research and Technology, Center of Social Planning and Cultural Studies.
- Rokni Lamouki, M. T. (2006). Bonyad-ha-ye feminism, chalesh-ha-ye pish-e rou [Feminism foundations and upcoming challenges]. *Quarterly of Trainers*, (20), 53-86.

- Moshirzade, H. (2004). *An Introduction to Women Studies*. Tehran: Ministry of Science, Research and Technology, Center of Social Planning and Cultural Studies.
- Moshirzade, H. (2006). *Az Jonbesh ta Nazariye-ye Ejtemaei: Tarikh-e Do Gharn Feminism* [From Movement to Social Theory: the History of Two Centuries of Feminism]. Tehran: Shirazeh.
- Nercissians, E. (2004). *Anthropology of Gender* (B. Nourozzade, Trans.). Tehran: Afkar Publications.
- Sajadi, S. M. (2005). Feminism in postmodernism thinking. *Motale'at-e Rahbordi-ye Zanan*, 8(29), 7-38.
- Strauss, A. & Corbin, J. (2009). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (B. Mohammadi, Trans.). Tehran: Institute for Humanities and Cultural Studies.
- Terlinden, U. (2015). *City and Gender: Intercultural Discourse on Gender, Urbanism and Architecture* (M. Sadoughianzadeh, Trans.). Tehran: Kalagh.
- Toy, M. (2009). *The Architect: Women in Contemporary Architecture* (M. Mahdlou, Trans.). Tehran: Yazda publications.
- Yaghoubi, Ali. (2014). *Nazariye-ha-ye Mardenegi ba Ta'kid bar Rooykard-ha-ye Jame'e-shenkhti* [Masculinity Theories Focused on the Sociological Approaches]. Tehran: Pezhvak.
- Yaghoubi, A. & Moghaddas Yazdi, H. (2016). Femininity typology and girl students (Case study: students of Guilan University). *Women in Development and Politics*, 14(4), 513-533.
- Zalewski, M. (2000). *Feminism after Post-Mdernism: Theorizing through Practice*. London and New York: Routledge.

COPYRIGHTS

Copyright for this article is retained by the author(s), with publication rights granted to the Bagh-e Nazar Journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>).



HOW TO CITE THIS ARTICLE

Yaran, A. & Arjomandi, H. (2021). Explaining Femininity Elements in the Works of Iranian Women Architects. *Bagh-e Nazar*, 17(91), 87-100.

DOI: 10.22034/bagh.2020.172035.4013

URL: http://www.bagh-sj.com/article_118624_en.html

