DOI: 10.23968/2500-0055-2023-8-4-34-46

HABERMAS MODEL AND AESTHETIC PREFERENCE EVALUATION OF HOUSE FACADES: INSIGHTS FROM ERBIL CITY

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Abstract:
Introduction: Architecture is a discipline distinguished through diversity, message transmission, and communication. **Purpose of the study:** A notable phenomenon has been noticed in Erbil: most of the units in the typical housing complexes started to redesign or change the facade characteristics. These changes were the result of the psychological trait of aesthetic preference. This study aims to analyze aesthetic preference parameters to identify communicative action using the Habermas model of communicative action. The analysis of the effective factors contributed to the understanding of these changes. **Methods:** The methodology of this study combines case study formal analysis and a proper questionnaire survey. A statistical analysis of the obtained results was used to formulate research objectives. **Results:** Five parameters derived from the theoretical framework (unity, scale, color, proportion, and balance) serve as elements and principles of design that affect the aesthetics. As a result, the study concludes that unity, proportion, and balance are the main factors to create a pleasing aesthetic appearance on the house facades.

Keywords: communicative action, aesthetic preferences, diversity, residential complex, facade house, design principle.

Introduction

The aesthetic value of a building's facade refers to the visual appeal and overall design of the building's exterior. It encompasses the beauty and artistry of a building, as well as its ability to evoke emotions and feelings in those who experience it. The built environment of humans should not only respond to physical comfort criteria but also aim to promote the psychological well-being of communities by promoting people's happiness and encouraging communication in society (Prieto and Oldenhave, 2021). Communicative action is seen as a fundamental aspect of human social interaction and is in contrast with strategic or instrumental action, which is focused on achieving specific goals or outcomes. Communicative action, as developed by German philosopher Jürgen Habermas, refers to a theory of social action and communication in which individuals engage in a process of mutual understanding and agreement-seeking through language and discourse (Bolton, 2005). In the context of architecture, communicative action can be applied to the design of buildings and spaces to facilitate communication and interaction between people. This can include using shared spaces and places where people can get together, as well as adding cultural and symbolic elements that help people feel like they belong and understand each other (Sharlamanov and Jovanoski, 2014). Aesthetics can play an important role in increasing communicative action between humans and their surroundings. The design of a building or space can influence the way people feel, behave, and interact with one another (Prieto and Oldenhave, 2021). For example, the use of natural light and views can create a sense of connection to the outdoors, and the use of natural materials such as wood and stone can create a sense of warmth and comfort. Art and other cultural elements can also help the people who live in a building feel like they have a shared identity and understand each other better (Ferwati and Mandour, 2008). The aesthetic of a building can be influenced by a variety of factors, including the historical and cultural context in which it was built, the architect's style and design philosophy, the elements and principles of design, and the functional requirements of the building.

In architecture, elements and design principles are used to make buildings that function well and look good. Design elements like line, shape, form, texture, value, and color are used to make a building of good appearance. The principles of design, such as balance, contrast, emphasis, movement, pattern, proportion, and unity, are used to create a sense of harmony and coherence in the overall design of a building (Han et al., 2021). Every building's visual appeal is just as important as its structural stability and quality of materials because it is the first thing that people notice when they walk into a space. Attitudes about aesthetics in the present day draw from historical examples but have evolved (Sagaonkar and Narkhede, 2018). A more aesthetic appearance of a house facade attracts humans and facilitates communication between them (Rezapour et al., 2017). In Iraq, particularly in Erbil, in the second half of the 20th century, aesthetic architecture began

For citations: Hamad, N. B., Baper, S. Y. (2023). Habermas model and aesthetic preference evaluation of house facades: insights from Erbil city. Architecture and Engineering, No 4 (8), pp. 34-46. DOI: 10.23968/2500-0055-2023-8-4-34-46.

to take place, especially after the development of the economy and increase in population, and residential complex projects gained more attention (Board of Investment, 2020). But after some time, the house dwellers start changing their facades inside the complex, as humans have an instinctive interest in aesthetics. Many factors contributed to this shift, including climate considerations, the environment, human desires and beliefs, psychological needs, technological development, and building quality (Ghomeishi, 2021). Typical Houses are built with repetition, reducing diversity and communication between humans and their surroundings. The goal of this study is to use the Habermas model of communicative action to analyze aesthetic preference parameters of the house facades based on the factors that contributed to this change. This study used exploratory mixed methods, both qualitative and quantitative, including a questionnaire survey and case study analysis to develop a framework for evaluating an effective factor that contributes to greater community action.

Theoretical Framework

Jürgen Habermas and Communicative Action:

The model of communicative action is seen as a process in which participants exchange not just information, but also understandings, justifications, and valid arguments. The success of communicative action depends on the quality of the arguments presented and the level of mutual understanding and agreement reached (Smulders et al., 2008).

Jürgen Habermas developed a theory of communicative action. The most influential author of the second generation of the Frankfurter school of sociology, in the beginning of the 1970s he started developing his social theory, above all dedicated to analyzing communication (Bolton, 2005; Sharlamanov and Jovanoski, 2014). Habermas argued that communication can be divided into two types: strategic action, which is aimed at achieving a specific goal or outcome, and communicative action, which is aimed at reaching mutual understanding and agreement (Sharlamanov and Jovanoski, 2014), as shown on Fig 1.

Communication in Architecture

The architectural process encompasses various communicative actions within distinct subject sectors, including social, educational, regulatory, and creative realms (Tarasova and Markova, 2018). Each of these domains entails its unique set of activities. Communicative architecture necessitates the involvement of multiple stakeholders who share information, responsibilities, and resources. The evaluation of architectural aesthetics is contingent upon the perceptions of individuals within the contextual living environment. Hence, the communicative process becomes an information interaction among participants involved in architectural events and processes across social, educational, regulatory, and creative domains (Tarasova and Markova, 2018).

Building Facades as Communicative Elements

Building facades serve as a form of communicative action conveying information and ideas about the building and its occupants to observers (Sharlamanov and Jovanoski, 2014). The design and materials employed in a building facade can communicate diverse messages, such as the building's function, the social standing of its inhabitants, and the cultural or historical context of its construction. Thomas Herzog emphasizes the role of the facade in conveying messages, suggesting that the human eye perceives various codes from the building, leading to a feedback loop of understanding (Bolton, 2005).

The initial impression is profoundly shaped by exterior elements, encompassing materials, shape, color, texture, as well as design principles and elements. An individual's visual satisfaction with the facade creates a lasting connection between humans and their built environment (Akalin et al., 2009; Sharlamanov and Jovanoski, 2014). There is a direct positive relationship between urban space, represented by building facades, and communicatve action (Rezapour et al., 2017). This relation is a dynamic interplay that significantly influences the urban experience. The city townscape, with its architectural diversity, infrastructure, and open spaces, provides the canvas for this complex interaction. Building facades, as the external faces of structures, play a pivotal role in shaping the visual identity of the city (Ghomeishi, 2021).

They serve as communicative surfaces that convey information about a building's purpose, style, and historical context to its human inhabitants and

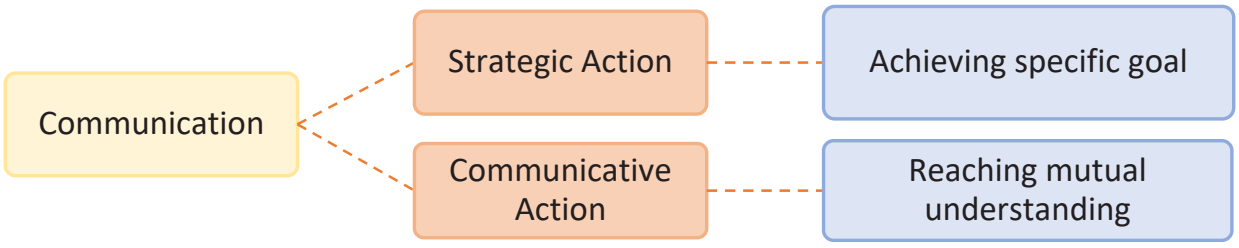

Fig. 1. Types of social action (Source: Sharlamanov and Jovanoski, 2014, Designed by Author)

visitors. In return, humans actively engage with the city, navigating its streets, interacting with building facades, and forming communities within this urban framework. The aesthetics and functionality of building facades can greatly affect the overall character of the townscape, influencing human perceptions, behaviors, and emotions (Ghomeishi, 2021).

The success of communicative action through facades relies on how effectively they engage and resonate with people, ultimately shaping the way individuals experience and interact with the city. Thus, the city townscape, building facades, communicative action, and humans are intricately linked, with each element influencing and being influenced by the others, ultimately contributing to the vitality and identity of urban environments.

Factors Influencing Communicative Action in Architecture

Multiple factors contribute to the manifestation of communicative action in architecture, including environmental conditions, cultural and historical contexts, amenities, economic development, and the building's immediate context (Rezapour et al., 2017). Aesthetic considerations and creativity also play crucial roles in this context (Aysha Jennath and Nidhish, 2015). Creativity in architectural design is a potent tool for architects and designers to express their unique vision and imbue houses with aesthetic value (Han et al., 2021), as shown on Fig 2.

Creativity in architecture is closely intertwined with communication, representing a means to create a distinct and meaningful expression of a house and its occupants (Baper, 2001). It is important to distinguish between creativity and aesthetics, as creativity significantly influences the design process and its outcomes, while aesthetics often serves as the defining characteristic of architectural products (Han et al., 2021).

In light of the multifaceted nature of architectural communicative action and its complex determinants, this research paper focuses on the role of aesthetics as a fundamental factor contributing to communicative action within architectural contexts.

Erbil House Facades as a Case Study

The architectural facade of a building gives the first impression of its style, materials, and details. It is also frequently the most decorative or detailed part (Akalin et al., 2009). Erbil is the capital of the Kurdistan Regional Government (KRG) in Iraq and one of the country's largest cities. It is one of the world's oldest cities as well, dating back to at least 2300 BCE (UNESCO, 2014). Previously, Erbil was rich in vernacular architecture with local materials; then, after technological development, the western style penetrated local culture. Architecture in Erbil has entered a new era, which can be seen in house facades (Ahmed and Baper, 2022). Facade is not only a reflection of the architectural character of a region but also a representation of local cultural, social, climatic, political and economic circumstances. (F. H. Abdullah. et al,, 2016). The figures below show examples of various facade designs in Erbil. The implementation of a facade design may differ depending on environmental, social, and cultural elements, the designer's conceptions, political views, and economic and historical importance (Askari and Dola, 2009). According to Abdel-Aziz and Shuqair (2014), a house facade has three primary zones: a foundation that ties the building to the earth, a middle zone with openings, and a roof zone that connects the building to the sky through its silhouette. Building facades combine a variety of aspects resulting from the arrangement of the roof, openings, materials, architectural details, and the most important element, the design idea (Abdel-Aziz and Shuqair, 2014). Economic development of the population in Erbil resulted in increased attention to housing complexes; several projects have been built around Erbil with differences in size, designs, and location. However, after a while, habitants began to change the facades of the houses due to several factors including: the development of technologies and new materials, quality of the building, climate consideration, desire, and beliefs, physiological needs, user identity, environment, aesthetic improvement, increased property value, maintenance and repair, as well as energy efficiency. The most effective factor was aesthetic improvement as shown in Fig. 3.

Analyzing house facades provides useful information and a great understanding of aesthetic appearance (Askari and Dola, 2009). The facades of the houses in Erbil city witnessed great development. The styles used are modern, contemporary, and neoclassical (Ahmed, 2022). The elements concentrated on facades are openings (entrance and windows, ornamentation, columns, and composition

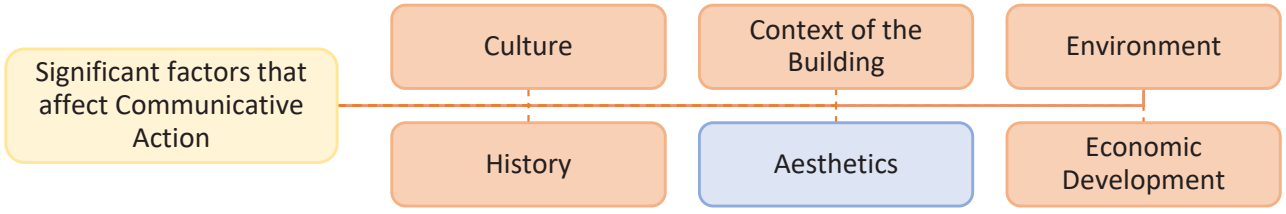

Fig. 2. Factors that affect CA (source: Han et al., 2021, Baper.,2021, Aysha Jennath and Nidhish, 2015, designed by Author)

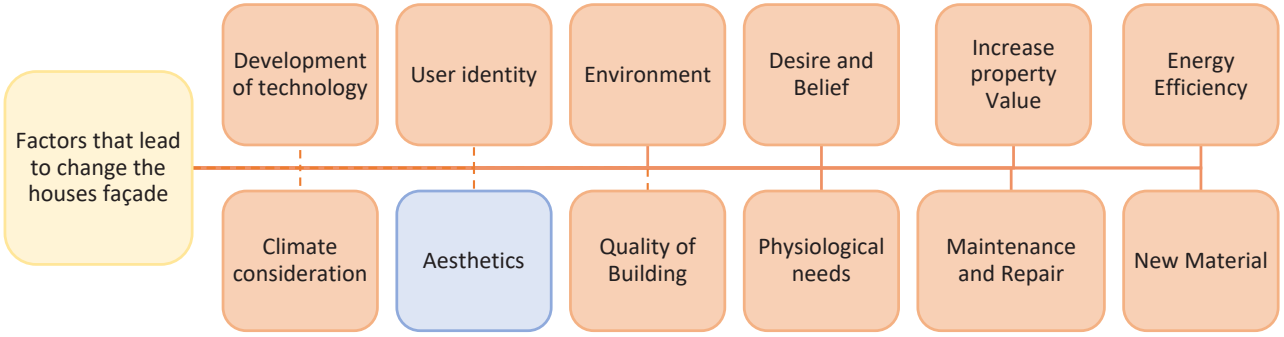

Fig. 3. Factors that lead to alternating the house facade(Designed by Author)

of masses). There are also principles of design, the scale of physical property, proportion, color, unity, and balance. According to (F. H. Abdullah. et al,, 2016)"facade is the first and most impacting connection between humans and the built environment, the outer shell of a building is not only a reflection of the architectural character of a region but also a representation of local cultural, social, climatic, political and economic circumstances". This is the result obtained via observation and is also true for the selected case studied. The figure below shows a level of alternation, a case of Italian City 2 complex in Erbil. The Figs. 4 and 5 shows a level of alternation, a case of Italian City 2 complex in Erbil. The line of the houses along the street was altered: the concept of the typical housing units starts disappearing. This is happening because aesthetic appeal can be a significant motivating factor for inhabitants of a residential complex to alter their home facades. The appearance of a person's home can represent his or her personality, ideals, and social standing. Aesthetic enhancements to the home's exterior can be viewed as a method for residents to express themselves, distinguish their home from others, and communicate a sense of pride and ownership (Salih, 2019).

Factors Affecting Aesthetic Value of House Facades

The exterior facade of a building, frequently referred to as the frontage, encompasses the architectural design and detailing of the building's front aspect. This brings about considerations related to the materials employed, the arrangement of windows and doors, and the integration of decorative elements. Additionally, the facade extends to encompass roofing and other exterior features, such as porches and balconies (Majid, 2022).

The house facade comprises two distinct categories of components: physical and nonphysical. Physical components are tangible elements that constitute the building's exterior and include aspects such as openings, mass geometry, articulation type, materials, arches, ornaments, porches, balconies, lighting, and fencing (Fig. 6).

On the other hand, nonphysical components pertain to elements and principles of design. Elements of design in architecture serve as fundamental building blocks utilized by architects in their creative endeavors. These elements encompass line, shape, form, space, texture, color, light, volume, and functionality (Ferwati and Mandour, 2008).

Principles of design in architecture pertain to how the elements of design are organized and employed to craft a coherent and aesthetically pleasing architectural design. Architects utilize these principles as guiding criteria for their design decisions, thereby creating visually captivating and functional designs. A comprehension and effective application of these principles empower architects to fashion buildings that seamlessly combine beauty

Figs. 4 and 5. House facade alternation (source: captured by author)

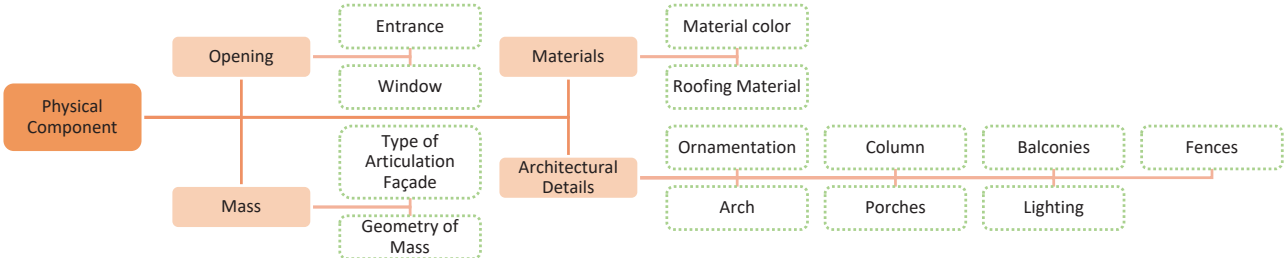

Fig. 6. Physical components of a building (Source: Designed by Author)

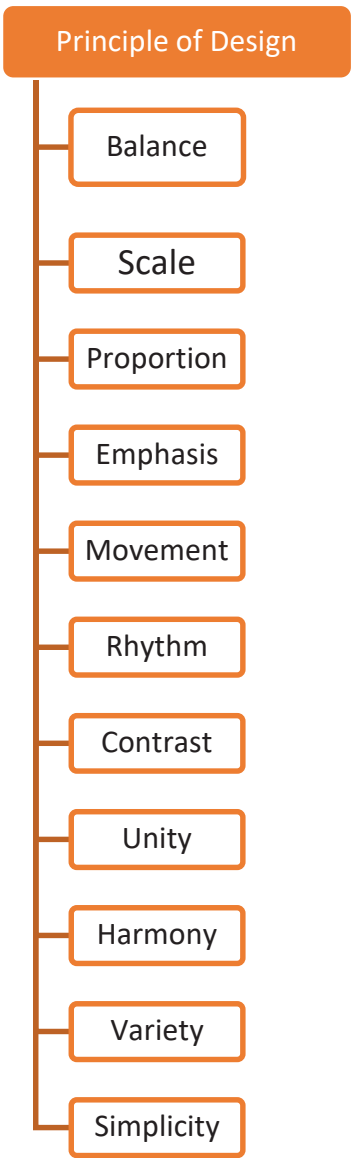

Fig. 7. Principles of design (source: Designed by Author)

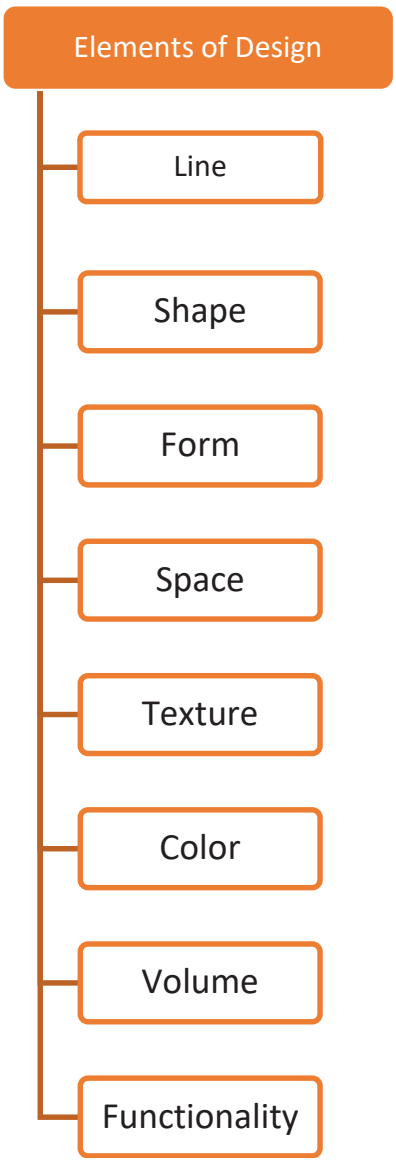

Fig. 8. Elements of design (source: Designed by Author)

and functionality. Examples of principles of design in architecture include balance, scale, proportion, emphasis, movement, rhythm, contrast, unity, harmony, variety, and simplicity (Pirhadi et al., 2017) are shown on Figs. 7 and 8.

In the context of facade aesthetics, numerous design elements and principles exert their influence. This paper underscores the most pivotal factors contributing to the aesthetic value of facades, including unity, scale, color, proportion, and balance (Ferwati and Mandour, 2008). These elements and principles (Fig. 9) play a leading role in shaping the visual appeal and overall impression of building exteriors, making them

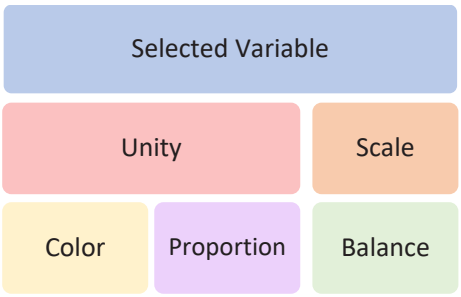

Fig. 9. Design variable (source: Designed by Author)

crucial considerations in architectural design and the assessment of facade aesthetics.

Materials and Methods

This paper employs a mixed-method approach, integrating both quantitative and qualitative methodologies, to comprehensively investigate the correlations and implications of aesthetic appearance in house facades. The initial methodology entails an analysis of case studies, delving into the repercussions of aesthetic preferences on house facades within Erbil. The subsequent method involves the implementation of a questionnaire survey, chosen as the primary research strategy for acquiring quantifiable data from the designated populace (individuals with a background in the field of architecture) to substantiate the research framework. The sequential progression of research methodology steps is visually represented in Fig. 10.

Case Study

The focal point of this study centers on the house facades within residential complexes situated in Erbil. For the purpose of case selection, eight distinct cases were chosen, employing specific criteria: zone location, land value, style approach, building quality, number of floors, project status, allowance for alternations, percentage of reconstruction, and societal popularity. These criteria were meticulously devised based on a comprehensive review of pertinent literature and insightful discussions with real estate experts in Erbil. The chosen case studies, namely Royal City, English Village, Dream City, Italian City 2, Gunjan City, Zen City, Erbil Gate Complex, and Hiwa City, are delineated in the Appendix.

Questionnaires

A comprehensive distribution of 300 questionnaires was administered to individuals possessing a background in architecture, encompassing both architecture students and professionals in Erbil. Out of these, 217 questionnaires were effectively completed and returned, reflecting a notable response rate of 72.3 %. The collected dataset underwent meticulous analysis using the Social Package for Soft Sciences (SPSS). Consequently, the examination yielded outcomes from 217 respondents, with 53.9% of participants identifying as male and 46.1% as female.

Results and Discussion

Evaluation of the Factors Affecting the Aesthetic Value of the House Facade

In relation to the primary factors influencing aesthetic preference in house facades, the data indicate that 25.1% of the respondents acknowledged the impact of the design principle of Unity, while 22.3% attributed this effect to Proportion. Furthermore, Scale received an average agreement of 15.3%, while both Balance and Color garnered an average agreement of 18.4% as presented in table 1 the respondents notably associated the aesthetic preference of house facades with elements and principles of design. These findings affirm the alignment of the study's focus on house facades as visually prominent aspect of a building's structure with the perspectives of the participants concerning matters of aesthetic preference for house facades.

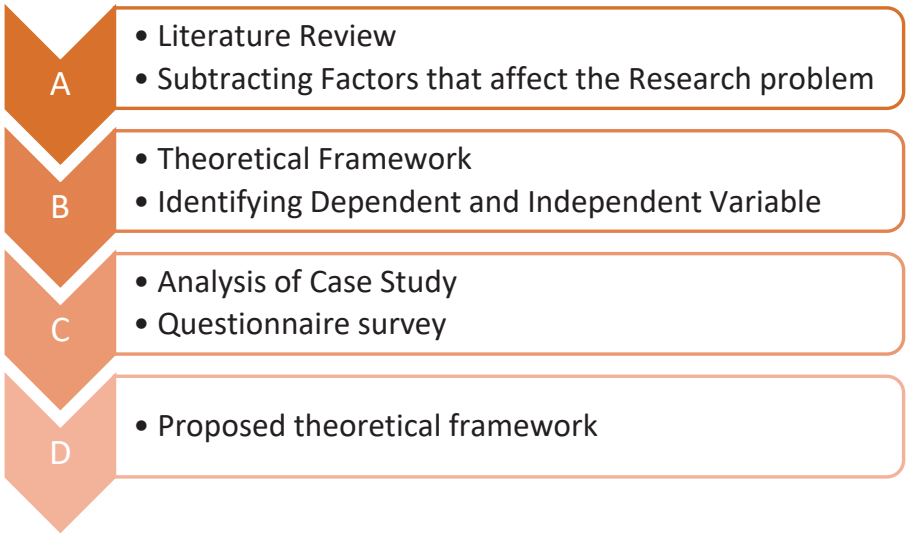

Fig. 10. Research Methodology (Source: Designed by Author).

Table 1. **Descriptive analysis Factors that affect aesthetics**

Variable		Responses	
		N	Percent
	Unity	89	25.1 %
	Proportion	79	22.3 %
	Scale	54	15.3 %
	Balance	65	18.4 %
	Color	65	18.4 %
	Other	2	0.6 %
Total		354	100.0 %

Analysis of Case Studies

The case study approach aligns with one of its formal definitions, characterized as "an empirical study that investigates a contemporary phenomenon within its real-life setting, particularly when the boundaries between the phenomenon and its context are not immediately distinct". To achieve an in-depth comprehension of the phenomenon of facade alteration, a selection of case studies was undertaken in Erbil based on the aforementioned criteria. The analysis encompassed nine distinct cases through a meticulous examination of facade designs, with the aim of identifying the principal elements contributing to the aesthetic value of houses, thereby aiding in the development of a theoretical model. The characteristics of each selected case study presented in Table 2.

Common Characteristics of Selected Case Studies

• The selected case studies employed both modern and neo-classical architectural styles.

• Incorporating a larger entrance gate and windows contributes to a visually appealing exterior appearance for houses.

• The rhythmic arrangement of windows on the facade significantly influences preferences for aesthetic value.

• The inclusion of large-scale columns at the facade's forefront adds a sense of grandeur and aesthetic value.

• Skillful utilization of appropriate ornamentation scale enhances the impressive look of the house facade and creates a feeling of splendour.

• The use of uniform colors enhances the aesthetic value of the house facade by fostering a sense of unity.

• Textures like natural stone, brick, or concrete, characterized by rough surfaces, are favored over materials like aluminum or steel, as they infuse vitality into the facade.

• Imposing regularity in the composition of elements contributes to the aesthetic value conveyed by the facade.

Factors Analysis

Proposed Theoretical Model

As a result of the analysis of the case study and questionnaire survey, this theoretical model was figured out, which represents five parameters consisting of scale, balance, color, proportion, and unity. The first parameter, Scale, has two dimensions,

Table 2. **Characteristics of the housing complexes ("cities")**

Name of Complex	**Characteristics**
Royal City	One of the most luxuriant housing complexes in Erbil: the house facades reflect unity, harmony and rhythm between a facade and its constituent parts; the modern and neo-classical styles give the city a diverse look, it is balancing between solid and void, by using dark and light colors.
English Village	English Village is one of the cities with minimum alternation; with classical style, "form follows function" reflected in the facade, small- and large-scale of openings, the facade looks unbalanced to the human eye; the city has light colors and the minimum proportion between the whole and the parts.
Dream City	The city has modern, classical, contemporary, and neo-classical styles, with unity reflected between all parts in the facade; the facades use symmetrical and asymmetrical balance; with light and dark homogenous colors, the facades are designed proportionally; large-scale openings and architectural detail are reflected in the design.
Italian City 2	This city was almost completely changed from its basic company design; it has modern, classical, and neo-classical design, unity between all parts reflected in the facades, large-scale openings and architecture detail, harmony and rhythm between facades and their constituent parts; light and dark color available, balancing between solid and void; symmetrical and asymmetrical balance in facades.
Ganjan City	Ganjan City was one of the diverse cities of house design type in size and style; what was selected for our case was classical style, reflecting unity between all parts, proportional and harmonious design, large-scale openings, solid fences reflect the privacy in contrast with the other selected cities; symmetrical balance reflected in facades.
Zen City	This city has both classical and modern design, symmetrical and asymmetrical balance in the facades; houses were designed in a proportional way which reflects harmony and rhythm; large- and small-scale openings were seen in the facades; unity between solid and void.
Erbil Gate	This city has both neo-classical and modern styles, facades with large-scale openings; houses focus on architectural detail and ornamentation, a symmetrical balance, unity of the whole in the facades; all physical properties with design elements are proportional; light and dark color used in the facades.
Hewa City	This city of neo-classical style with architectural details seen very strongly in the facade, balancing between the solid and void; symmetrical balance in the facade design and unity between all parts create an aesthetic appearance; large-scale openings; the facade design is proportional, which reflects harmony and rhythm between the facades and their constituent parts.

namely 1) emphasis on the elements of design, 2) scale of openings. The second parameter, Balance, has two factors 1) symmetry/ asymmetry and 2) balance between solid and void. Color has two factors: 1) dark and light color and 2) homogeneiety of color. Proportion has three factors such as 1) the golden ratio, 2) unity and simplicity. The last parameter of unity has two factors: 1) harmony and rhythm, 2) regularity. The proposed conceptual framework is presented in Fig. 11.

Multiple Regression Analysis

Multiple regression analyses were conducted to test the changing average between the selected parameters. The formula of multiple regression was employed to determine the variance of each component of the aesthetic appearance parameter. The independent variables were five variable parameters of 1) scale, 2) unity, 3) color, 4) proportion, and 5) balance; the dependent variable was the communicative action in the house facade. Due to that a regression model was created to determine the relationships between variables.

• The application of the golden ratio is consistently observed on the facade.

• Arranging columns symmetrically contributes to an air of royalty and grandeur.

• Introducing symmetrical balance to the facade unifies its appearance.

• Implementing proportion between shapes and masses on the facade has a positive impact.

• The use of light colors on the facade creates visual balance and comfort for viewers.

• Facades painted with dark colors evoke a sense of power and dominance.

• Emphasizing the entrance porch fosters a welcoming and regal ambiance on the facade.

• Incorporating steel fences in the yard establishes a connection between the interior and exterior spaces.

As shown in Table 3, the first parameter, scale (β = 0.090, p = 0.994), showed no significant effect on communicative action within the house facade. However, the balance parameter demonstrated a relationship with communicative action, with an average of 30% (β = 0.232, p = 0.000), signifying a positive and significant association. This parameter corresponds to 0.307 change in communicative action on the house facade. Conversely, the color parameter with values (β = -0.010, p = -0.887) exhibited a negative and significant change in communicative action. Meanwhile, proportion with values of (β = 0.148, p = 0.020) and unity with

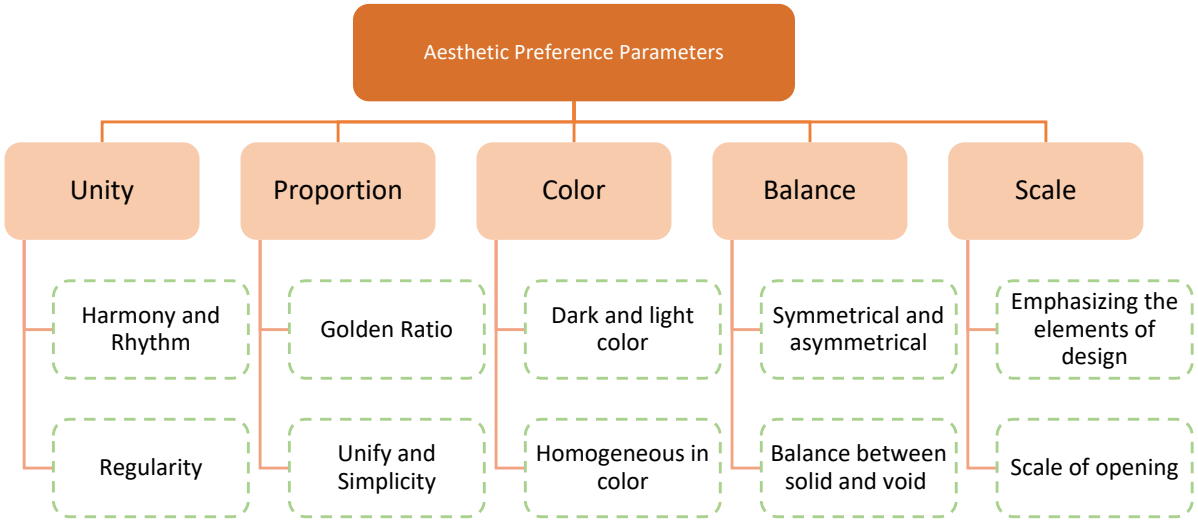

Fig. 11. Proposed theoretical framework (Source: Designed by Author)

Table 3. **Multiple regression analysis**

Coefficients							
Model				T	Sig.	Collinearity statistics	
	B	Std. error	Standardized β			Tolerance	VIEW
(Constant)	1.256	0.206		6.112	0.000		
Scale	0.090	0.056	0.090	-0.010	0.994	0.681	1.469
Unity	0.307	0.071	0.350	4.328	0.000	0.386	2.592
Color	-0.010	0.069	-0.010	-0.142	-0.887	0.499	2.006
Proportion	0.148	0.063	0.172	2.347	0.020	0.470	2.129
Balance	0.232	0.061	0.275	3.839	0.000	0.494	2.026

values of (β = 0.307, p = 0.000) both displayed a positive relationship with communicative action in the house facade. As a result, balance, unity, and proportion emerged as the main influential factors impacting communicative action. The presented model represents the outcome of multiple regression analysis, indicating the extent of change in communicative action due to these factors.

Equation 1 multi-regression equation

Communicative action = β^1 + β1 Scale + β2 Balance+ β3 Color+ β4 Proportion+ β5 Unity+ ε

β = constant

ε = standard error

Communicative action = 1.256 + 0.09 Scale + 0.232 Balance – 0.010 Color+ 0.148 Proportion+ 0.307 Unity+ 0.20

Conclusion

In conclusion, this research paper delved into the intricate relationship between aesthetics and communicative action (CA) on house facades, guided by Jürgen Habermas's model. CA, as a vital aspect of connecting humans with their built environment, is influenced by numerous factors, including the environment, culture, history, contextual elements, psychosocial factors, and aesthetics. The interplay between aesthetic appearance and CA is a complex one, where each can both influence and be influenced by the other in multifaceted ways.

Aesthetic appearance serves as a potent tool in fostering CA, as it can effectively convey codes and meanings about a building. Conversely, CA can exert its influence on aesthetic appearance by shaping the design's messages and meanings, thereby influencing its visual representation. Particularly in residential complexes, where residents often havea profound emotional attachment to their homes, aesthetic improvements to house facades serve as a means for self-expression, differentiation, and a source of pride and ownership. Well-maintained and visually appealing homes contribute to the desirability of a community, making it more attractive.

Through a comprehensive analysis that included case studies in Erbil and a questionnaire survey, this research identified key effective factors influencing the creation of aesthetic appearances in house facades. Elements and design principles such as unity, proportion, scale, color, and balance emerged as pivotal in enhancing aesthetic appeal. Among these, balance, unity, and proportion stood out as primary and influential factors in shaping CA in building design. Architects and designers can harness these elements thoughtfully to craft building facades that are not only visually appealing but also functional, effectively communicating messages to the public.

In summary, this study underscores the reciprocity of the relationship between aesthetic appearance and CA, with each element capable of influencing and molding the other. The interplay of communicative and aesthetic facets in design is crucial for conveying information, meaning, and visual appeal, ensuring a harmonious integration of function and aesthetics in our built environment.

Acknowledgments

I would like to extend my sincerest thanks to Dr. Salahaddin Y. Baper, my supervisor, for his invaluable guidance, support, and encouragement throughout this research project. His knowledge and expertise in the field greatly aided me in the completion of this work. His patience and understanding throughout the ups and downs of this project have been greatly appreciated. I am deeply grateful for his contributions and his dedication to my success.

[1] The beta coefficient is the degree of change in the outcome variable for every 1-unit of change in the predictor variable.

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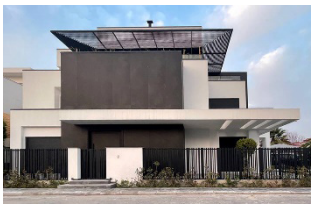
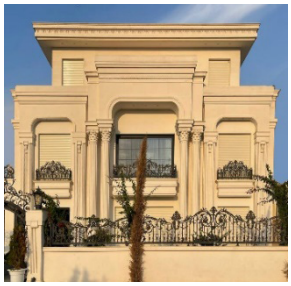
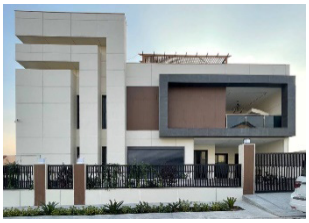
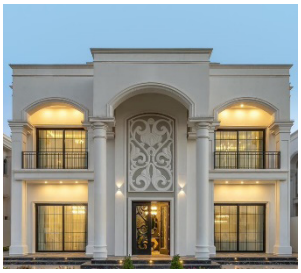
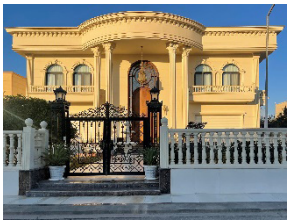
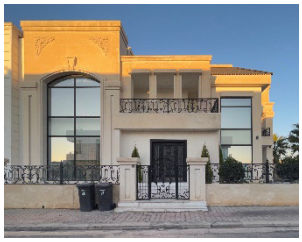
Appendix

Table 1. **Table of Case studies** (source: author)

Name of Complex	Case 1	Case 2	Case 3
Royal City			
English Village			
Dream City			
Italian City 2			
Ganjan City			
Zen City			

Name of Complex	Case 1	Case 2	Case 3
Erbil Gate			
Hewa City Zone A			

МОДЕЛЬ ХАБЕРМАСА И ОЦЕНКА ЭСТЕТИЧЕСКИХ ПРЕДПОЧТЕНИЙ В ФАСАДАХ ДОМОВ: ОПЫТ ГОРОДА ЭРБИЛЬ

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Аннотация:
Введение: Архитектура — это дисциплина, отличающаяся разнообразием, передачей сообщений и коммуникацией. **Цель исследования**: В Эрбиле было замечено примечательное явление: большинство строений в типичных жилых комплексах были перепроектированы или претерпели изменения характеристик фасада. Эти изменения стали результатом психологической черты эстетических предпочтений. Целью данного исследования является анализ параметров эстетических предпочтений для выявления коммуникативного действия с использованием модели коммуникативного действия Хабермаса. Анализ действующих факторов способствовал пониманию указанных изменений. **Методы**: Методология данного исследования сочетает в себе формальный анализ тематического исследования и надлежащее анкетирование. Статистический анализ полученных результатов был использован для формулирования задач исследования. **Результаты**: Пять параметров, выведенных из теоретической основы (единство, масштаб, цвет, пропорция и баланс), служат элементами и принципами дизайна, влияющими на эстетику. В результате исследования делается вывод, что единство, пропорция и баланс являются основными факторами создания приятного эстетического вида фасадов домов.

Ключевые слова: коммуникативное действие, эстетические предпочтения, многообразие, жилой комплекс, фасадный дом, принцип проектирования.