International Journal of Applied Arts Studies

Volume 4, Issue 3

Aug – Sep 2019

Islamic Azad University, Yazd Branch, Iran

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Acknowledgement

IJAPAS would like to thank the following people for their contributions in this volume.

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In the Name of God

Dear Readers,

I, on behalf of the editorial board, am proud to present this issue of the *International Journal of Applied Arts Studies (IJAPAS)* under the sponsorship of the Islamic Azad University, Yazd Branch. We were driven to found the *IJAPAS* by a noticeable lack of journals, in the Islamic Republic of Iran in particular, devoted to architecture, urban design, urban planning, architectural conservation and restoration, painting, art history, graphic, digital arts, fashion design, performing art, industrial design, aesthetics and semantics. Although the academic world is increasingly driven by cross-disciplinary visions and models, we seek multi-disciplinary views, an attempt to inform researchers, graduate students, and professionals about the trends, ideas and innovations being put forward in applied arts. To this end, in addition to standard articles, in every volume of the *IJAPAS* we hope to provide a special issue related to a respective field with innovation.

We are also sending out a call for papers related to *Applied Arts* to appear in the next issue of *IJAPAS* in Nov – Dec 2019.

Finally, I should mention that we are committed to a speedy refereeing process for every article submitted to us. We effort to reply to all papers submitted within five weeks' time with a response about acceptance or rejection. We also do not require formatting for submissions in our style until *after* the paper has been accepted by us for publication.

I would like to thank our Editorial Board for their work so far in helping to establish the *IJAPAS*. And, finally, I would like to extend my deepest gratitude to Dr. Ali Boloor, the assistant editor of the *IJAPAS*, for all of his hard work to ensure the timely completion of the issue.

I am delighted to invite you to visit us at www.ijapas.org.

Sincerely,

Dr. Abolfazl Davodi Roknabadi
Editor-in-Chief
International Journal of Applied Arts Studies (IJAPAS)
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IJAPAS International Journal of Applied Arts Studies

International Journal of Applied Arts Studies

IJAPAS 4(3) (2019) 07–20

Sociological Analysis of Taste Evolution in Iranian Architecture Abstract

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Received 14 June 2019; revised 15 September 2019; accepted 12 October 2019

Abstract

Among people tastes and relishes, architectural preference is one of most important tastes for selecting lifestyle. As a part of cultural capital, the taste is the people aesthetic preferences and values which is formed by various factors like social status, necessities and so on which has an obvious influence on the form of architectural discourses and its attitudes. It seems that in present-day Iran the architectural preferences lack ideological or cultural cornerstone and they are most typically an imitation or answer to trained tastes of a particular class of consumers. Our aim in this study is examining the reasons of change in taste and consequently the reflection of aesthetic preference in judgment in general and the society in particular. The type of research at first is a quantitative survey but in general a qualitative study is based on analytical analysis with the help of text mining and information analysis. The result shows that the interaction between tastes as a judge of architecture in Iran in recent years is rooted in the development of some of the seeming and intrinsic values in the field of cultural paradigms. Also, dominant values with independent variables such as gender, age, education, place of residence, employment, are not significantly different, and we are witnessing a kind of homogeneity in value findings.

Keywords: Value; Cultural Paradigm; Aesthetic Judgment; Architectural Society

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1. Introduction

For defining the beauty Hume says: “beauty is not a quality in the objects themselves, yet it is the mind which observes the objects”. Truly one name something as beautiful which chimes in with his taste and relish. In fact, it is a viewpoint based n aesthetic values mental nature that is a mélange of various sciences such as sociology, and the sociologist tries to link as much as possible the aesthetic basics with available positions in social context.

The aim of aesthetics is explaining the nature of beauty and modality of our perception and our preference of it and analyzing its levels. Before the audience face a type of variety of art, he has some generalities in his mind, that itself give rises to some presumptions and it is in the first look to the oeuvre that his feeling will be developed and one reacts to it and the texture of beauty is hidden in that reaction (Edward Reed, 2014).

Every day it seems that production and procedure of architectural consumption changes as a cultural good and gradually it turns into an economic subject for presenting an ostentatious and symbolic thing. At this moment in time, the architecture has undergone some revamps in tradition and modernity-based values which can be portentous. Present-day architecture is proliferation of forms and experience that although it is not perceived as an outstanding level in artistic established dimensions and lacks a special fineness, however, given the assessment of audience it is situated in the aesthetic ambit of the society. The mode and values in architecture sociology has a mutational role which is so energetic in response to social stimuli that can overshadow other human activities manifestations such as life style as taste and relish. The understanding of taste in the architecture is the cornerstone of selecting and preference of a building over another one. Understanding the taste and aesthetic judgment as the requirement of architectural encounter or the issue of values, organizing the social vison in the architecture of Iran during recent decade is the main trend of this study. The issue of this research is the issue of today's Iranian architecture community and a kind of pathology. The process and the evolution of the architectural aesthetic flavor transformation are the main questions of the research. Therefore, the main focus is on the social transformation factors at the community level in order to find their impact on each other in the formation of taste and taste. The following question arises: "Why studying values in identifying life styles is important?"

First of all, cultural values, these common elements are important in determining the style and selection of architecture, and the prevalence or inapplicability of these can be seen as an expression of lifestyle. Second, the values of these non-material elements of culture, norms, that is, the patterns of action and attitudes, i.e., affiliates, form us, and architecture as our practical choice has an inevitable link to values.

Although the notion of modernism as a result of some kind of unrest in the conditions of culture and the economy of architecture, although a significant subject in contemporary Iran, but "academic innovation" or "new to cultural management" is a more recent and significant phenomenon, especially the concept And shows the examples of "elite" in Iranian society and severely damages them. When we pass through the streets of Tehran, we encounter various types of building facades, with different styles, so diverse in visibility to the eye In fact, the style for architecture can not be imagined. The issue of this research is the issue of today's Iranian architecture community and a kind of pathology. The process and the evolution of the architectural aesthetic flavor transformation are the main questions of the research.

2. Statement of Problem

When it comes to reinvigorating the values, Iran society has faced new challenges regarding the aesthetic notions in the context of architecture, unfortunately, the notion of parvenu as the outcome of some kind of chaos in the architecture culture and economy conditions, also is considered as an outstanding subject in contemporary Iran, however, academic parvenu or cultural parvenu is a newer phenomenon, especially as it targets the notion of "elite" in Iran society and it marred it significantly.

Today its architecture is so that once passing the Tehran allies, one encounters the variety of building facades, which belong to various styles, definitively, the architecture and its selection is turned into a banal and commonplace fashion, and so many visual variegated can be seen that in fact, one cannot imagine a style for the architecture. The problem of this study is present day Iranian architecture society problem and its pathology style process and modality of transforming in taste change of architectural aesthetic is the main question of the study. Thus, the key focus is on the social change factors in the society for finding the mutual effect in formation of taste and relish.

3. Hypothesis

Preference and selection is one of influential variables of architectural physic. Shedding light on the cultural consumption in the classic theses are based on two variables namely social class and cultural value and it seems that the conditions of establishing change in the taste and consequently, architectural aesthetic judgment is derived from mechanism of change of insight and revamping of values in cultural paradigm (Zahedi, 2016: 180).

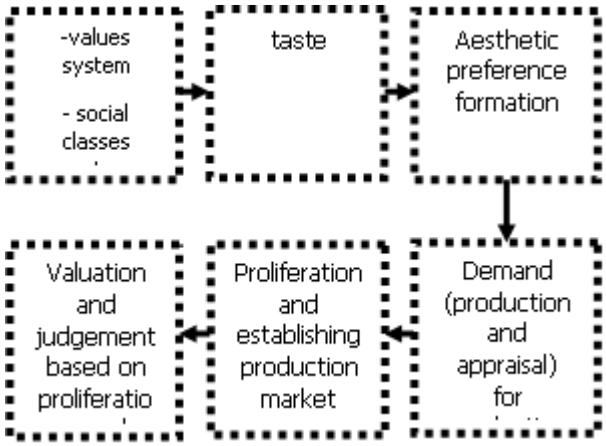


Fig 1 Primary model of the notion of change in, aesthetic tastes based on assumptions (Author 2018**)**

4. Literature Review

From the beginning of advent of sociology, examining this subject that how changes in society structure establishes change in the ambit of culture and art is brooded over (Imani, 2016:34-36).

Madame M (Iranian Contemporary Architecture, Short-Term Society - Short-Term Architecture, 2015). The architecture and scene of contemporary cities in Iran, especially cities such as Tehran, are full of amazing and different development plans with others. The sovereignty of short-term thinking with the characteristics of vision and development is a constant subject, which every day

becomes different in a new and different color, and at the same time it will end with a new birth. In the new type of construction, architecture is referred to as "commodity" rather than "place of life" and the city in the sense of "warehouse" rather than "civilization".

Distinction: A Social Critique of the Judgment of Taste by Pierre Bourdieu†has uncovered the inseparable relationship between social situations and the judgments of taste and taste; Pierre Bourdieu sets up his theory of two incompatible approaches of objectivism and subjectivism in the system of values. For Bourdieu, taste is in fact "one of the most important indicators of symbolic capital, which is not only a simple form of aesthetic preferences for certain styles and commodities, but also as an indicator of differentiation, and suggests that aesthetic choices are not just They are not a subjective, but a function of social affiliation that becomes objectified. "According to Bourdieu's definition, taste is the basis of judgment about the value of experience (Hinik, 2005).

Ravadrad‡ A In the translation and critique of Sociology of the Arts; a description of the beautiful and popular forms of Victoria Alexander, which is one of the few books in the field of sociology of art, introducing a number of examples of social change, and broad categories of the arts, including fine arts, popular or public art, is being studied together.

Table 1 Summarized results of art sociology studies (Author, 2018)

	Concepts	**Factors**
Moazami	Contemporary Iranian architecture; short-term society; short-term architecture	Disturbance of the minds and dreams of the society and the cultural knowledge misunderstandings, as well as cultural ruptures and discord in the Iranian society
Bordieau	Field- capital-character-action-taste	A context of mutual relations, judgments, structures in response to problems which are derived from change of situations.
Ravadrad	Fine arts- popular	Art public training (media imperialism)-class-based structure (status order in the society)- audience

† Pierre Felix Bourdieu (August 1,1930 –January23, 2002) was a French sociologist, anthropologist ,philosopher.

‡ Dr. Azam Ravadrad Associate Professor of Communication Science and Research Associate, Faculty of Social Sciences, University of Tehran

5. Theoretical Foundation

Available resources in the field of taste and architectural aesthetics theory can be studied in three broad categories: first, the philosophy of art and aesthetics, the second form and architectural aesthetics, and the third of sociology. The study is within the framework of the sociology of architectural culture in society.

A variety of architectural forms has become the subject of architectural developments. Insurrection in the body is nothing but a mixture of confusion in individuality, shortcomings in culture, and the weakness of consumption (Imani, 2016: 2).

Some experts such as Katouzian, referring to the current state of Iran's architecture, consider it to be a complex disease. A common illness that should be rooted in the realm of values. He considers the most important disease of the Iranian community, the knowledge of culture in Iran and the misdiagnosis of its relationship with the environment in a variety of different aspects.

In order to understand the meaning of the meaning in the lifestyle and the preference of the architectural architecture on the other hand, we first need to know the sociology theories about the current Iranian society. Here are the following sociological theories:

Regarding the theory of the transformation of Inglehart's values based on the two hypotheses of scarcity and socialization, this theory consists of the process of changing the values of the periodic and false works imposed on long-term effects, and has paved the way for diversification and rapid changes in value in architecture.

Value Transformation: Years and decades ago, away from global developments, individuals with a known population of closed structures, organic relationships, and limited social connections in a traditional structure lived. Variety and diversity as the principle of modernity tended to go beyond what was needed, and they drive to the point of view is more spectacular, changes in values are subject to change (Strauss, 1998: 123). Values are the main source of the formation of modern architectures

Types and dimensions of value: Olson (1991) considers values alongside beliefs, norms, and technologies as the four main components of culture. In a relatively general definition, he defines values as a set of basic conceptions of what is desirable, which is the manifestation of the deepest common feelings in society.

In Johnson's view, values are "a social model that, at the level of acceptance by a group of individuals, provides a basis for creating common standards and criteria for guidance and regulation of behavior." The value of the foundation of norms, institutions and social fabric. There are frameworks for the conception and meaning of values for the whole culture and the society to legitimize human behavior, and when the issue of 'value judgments' or 'evaluation' is raised, there is actually a comparison between better and worse (Johnson, 1984: 37).

From the perspective of Smeler, social values are among the cultural criteria that determine the general goals for organized social life and cause behaviors. . From his point of view, social relations cannot be understood and explained without expectations and values, or whatever they represent (Smelser, 1975).

In the term sociology, social values are the things that are accepted by all. Social values make up realities and affairs that are desirable and demanded and preferred by the majority of people in society. Regarding the theories on tasting metamorphosis, the values of aesthetics in the society, it should be said that, along with the separation of sciences from scholastic logic and logic, and after the end of the domination of traditional theories, the movement towards empiricism and diversity in modernity began. Studies on cultural and artistic transformation in our society are also starting to focus on the question of how change in society, especially through what is being achieved in the

process of modernization, is the basis of change. The recognition of the types and dimensions of values in social precedents necessitates the definition and concept of aesthetic preferences as the subject matter of the subject.

Table 2 Main features of value concept (Schwartz§ 2006)

Value	**Characteristics**
Beliefs	Values are beliefs. The beliefs that are intertwined with the feeling, not the cold and objective ideas
Preference-motivational construct	Values represent the motivational constructs. They refer to objectives that people try to achieve them.
Action	Values highlight the special actions. They are abstract objectives. The values abstract nature tells them apart than concepts like approaches, values which usually refer to special situations, actions or objectivities.
Judgment and assessment of the action	Values guides choosing and assessing of actions. In other word, the values are used as standards and benchmarks.
Priority	Values get in order due to relative importance with each other. People values shape a regular system made up of value-based priorities which specify them as individuals.

In particular, the existence of paradigms and theories about values, in a large division, places emphasis on common norms and values, social requirements, continuity and connectivity, legitimate authority, and so on. In the socialization hypothesis of Inglehart's theory, the values and tastes of the individual broadly reflect the conditions followed by those preferences, learned and accepted through experience and social interactions with others, and may sometimes be based on predispositions and stereotypes; change of taste and The tastes behind it are a change in methodology or experience that is often the basis of insight and acceptance of values that ultimately changes the way of implementation.

5.1. Aesthetic Preferences based on Value

Schwartz believe that value system makes a motivational spectrum that hedonism and the type of preferences is one of them or bent toward gallimaufry of cognitions, feelings and selection through organized experience and directive effect on responses in the positions related to the individual. Values are consistency with what we prefer. One dubs something as beautiful that it is pleasuring for him. Beauty is not a real quality and it refers only to the sense of pleasure in us, this feeling is developed by numerous qualities that in fact represent his capitals (Karimi, 1993).

§ Barry Schwartz (born August 15, 1946) is an American psychologist. Schwartz is the Dorwin Cartwright Professor of Social Theory and Social Action . Schwartz is the author of several books, including the contradiction of choice and why we work. He also teaches social theory and social action.

Contemporary aesthetic sociology is symptomatic of preponderance of touchstones and mensuration available in a certain section of time that can be revamped and be subjected to various events. Perception scheme can bring change in the taste and engenders various styles. Social value aesthetic preferences are of cultural standard which narrows down covetable objectives for organized life style and from exchange and propagation ambit, it is an impression based on which the alternative value would be another value.

5.2. Empirical Appraisal in Present-day Iran Architecture

The exasperating issue deriving from the consequences of modernization in our society is the relation between structural changes through value alterations therefore, our attention to change of values would be of interactive-dialectic type. As one can discuss the concept of "Iranian modernity" which refers to eminence of global, national and traditional values in a concomitant manner. The traditional values not only are changeable but also they can and should be replaced with resurgent values and this enables the societies to prowl after the development course (Azadarmaki, 2007).

Jumbled changes in Tehran architecture more than being an imperative based on architecture engineering requirements, can be a variant contingent on cultural and sociological elements which affect the aesthetic taste. Upon catechizing the artistic types in Iran history we encounter the periods and consequently different styles. Architecture is considered as most unwavering artistic field in Iran. Firstly: in ancient architecture, we can find a space based on power and strength. Secondly: in Iran tradition, one finds performance, native space chiming in with the culture, thirdly: at early 1950s and 1960s a kind of ideological architecture has been prevailed that culminated later with architects like Kamran Diba. Fourthly: after 1979 revolution, scattered line of thought have been developed. Fifthly: a type that with look to modernity tried to think and be materialized. Sixthly: and now this dispersion or pluralism caused that we no longer can understand what the situation of today architecture is and which explanation can have these changes?

Katouzian believe that unlike long term of European society, Iran is a short term society. In this society, the changes even the important and substantial ones have short life. It is definitively the outcome of lack of a robust and infallible framework which could ensure a long term continuance. Iran society has passed through the transition from the traditional society to modern one very rapid and without establishing infrastructure. In modern era when concepts like power and capital is replaced with sublime, Iran social modern paradigm will be at the best a framework for interpretation and decline of traditional concepts Figure 2.

Fig 2 Common modes in Iran construction within two recent decades (Author 2017)

6. Findings

The findings of this study were firstly distributed through a researcher-made questionnaire made out of 100 heterogeneous respondents in terms of age, gender, degree of education, and statistical analysis of this step has been provided by descriptions and inferences that are provided by experts and this is validated by the professors. Inferential statistics were used to classify respondents based on similarities and identify distinctions.

The findings of this survey are categorized into two categories: the appearance of the architectural values through the facade and the second of the internalize values.

Findings of research value can be classified into two categories:

The first spectrum incorporates the most prominent values in the architectural effect, which includes: 33.8-Density 64% -World 38.5-Eye and eye-23% -Different 20% -Invention 25.7% -Purity Form 17%.

The second spectrum of values such as introversion is 6 percent, adornment 2.7 percent (respecting neighbors), alignment with neighboring units 4.7 percent, simplicity 2.7 percent, 3 percent artistic education, which has a diminutive presence in the Iranian community. To investigate this issue and Analysis of these statistics, inevitably divided into different parts of the problem:

A: Process and the evolution of values

B: Modeling of Value Transformation (Compulsory Metamorphosis of Taste)

C: objective action - the physical index of evolution

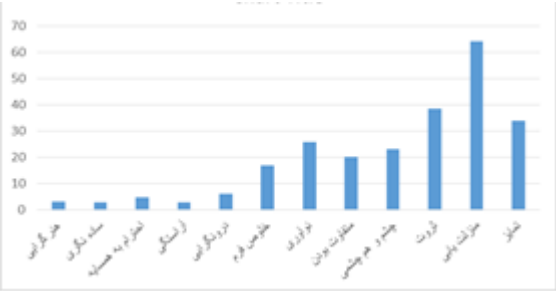


Fig 3 Distribution of Percentage of Prevalent Values in Selection of Architectural Style from the Respondent's Perspective (Author, 2018)

Process and the Evolution of Values

For understanding the social events it is needed to understand clearly the change process and nature in the value socialization. Values system direct the individual and it represents the most important factor of changes in macro and micro levels. Empiricism, adaptation, selection, evaluation have the greatest relation with values system.

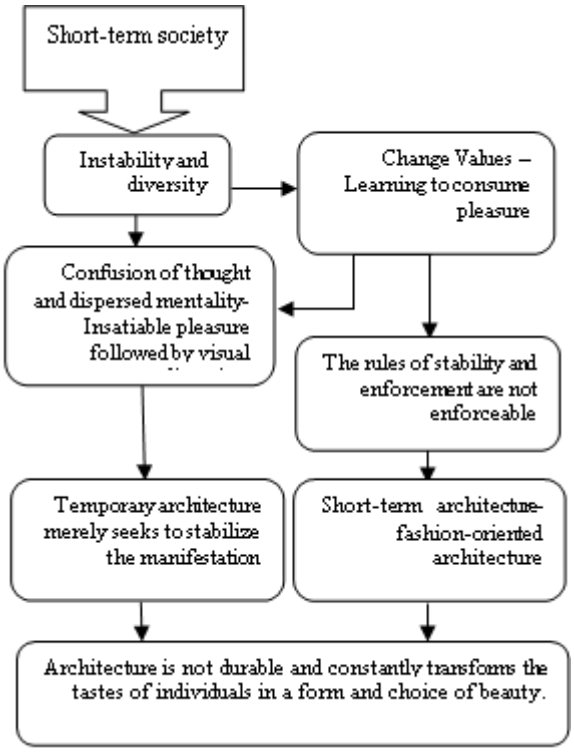
The societies are made up of individuals that are involved in a common experience and the outcome of thoughts conflation is contingent on different values which derive from their relations. When it comes to Iran architecture values changes, some deem the tradition and modernity as two strong poles in the society and consider the conditions of Iran society in oscillation between these two poles. The conditions allow the other cultural variables and paradigms to affect the architectural taste and aesthetic judgment. The values are nonstop changing and in this change they get in order with diversified styles.

Pattern changes are considered among the most important methods for bringing change. Social values which society pays attention to it, brings about social preferences which are developed in the individual and direct its value-based perception in some direction. Social values have position in the society and meet the material and spiritual of man (Vosuqi, 1991).

Modeling of change (changing mentality under compulsory modernity –change paradigm)

One of serious and common attitudes in parsing the approaches related to architecture within the ambit of social science and process of doctrinal-cultural is paradigm approach in value system. Before reaching to disruption point, paradigms shows their change grit with evidences to society actors and gradually with various events and change in common norms deriving from natural course of actions of paradigm change it approaches to disruption phase (Parsania, 2006). When the factors in a transiting society define the tradition as a value based on frozen mentality and far off the reality attitude, definitively due to disruption of tradition with the reality of the modern society, they assume decaying hint and their value would blot out.

Cultural assimilation, in our society contemporary period also experience a sort of architecture which derives from hasty transition from traditional society to modern one. As Debord** puts, in social paradigm of modern culture and a society which is apparently relied on the modern industry, its spectacular feature is not hazardous or superficious, such society is basically spectacular. Spectacle has no purpose other than itself (Howes, 2005).



Graph 3 The Short-Term Society Impact on Architecture (Author, 2018)

** Guy Louis Debord (28 December 1931 – 30 November 1994) was a French Marxist theorist, philosophe, He was also briefly a member of Socialisme ou Barbarie.

In general, two groups of theories related to values changes are in limelight: first group is the theory of micro level which is generally related to psychology and the other is macro level which is related to sociology. Beauty is a relative concept and based on the taste and the taste is not an inherent selection but it derives from the structural aesthetic reflection ruling and deriving from the power which engenders the value. The taste ipso facto is a criterion which derives from other cultural paradigms and one can only judge through the taste about beauty while if a criterion is accepted it would serve as the public taste and if a start point is considered for formation of the taste it would be the mind which serve as judgment force.

About taste modus operandi one should say: it serves as the regulator of activity and human aesthetic perception of the surroundings. One's aesthetic relation and society with regard to given phenomena and human aesthetic perception is visualized in the taste and it is assessed through it. The stages of social values change are: advent, expansion, consolidation and change.

The values convey man the power of judgment. Based on the values people can organize and assess their needs and desires as a formed action. The ingrained values bring about the taste and the taste uses itself as the criterion and a means of measurement and rapid and spontaneous judgment, judgment of an oeuvre at merely sensational-emotional level is not proper. This judgment calls for parsing form and content and other contexts as well as the relation of this art work with life and its creativity level. Man is brought up by the taste can break down and parse the various components of its perception of an oeuvre and it hinges on the degree of accuracy and the degree of veracity of the understanding to the degree of perception and experience of who which assess it Figure 4.

Taste compulsory change in architecture unfortunately is turned from single-cultural taste to multicultural one that most typically without theoretic awareness and doctrinal concepts turned toward a superficial imitation. Norms, behavioral patterns, values system, life style are considered as main touchstone of taste and beauty. From other side, in consumption culture people enjoy state of the art commodities because of their freshness and they are valuable due to their being fresh.

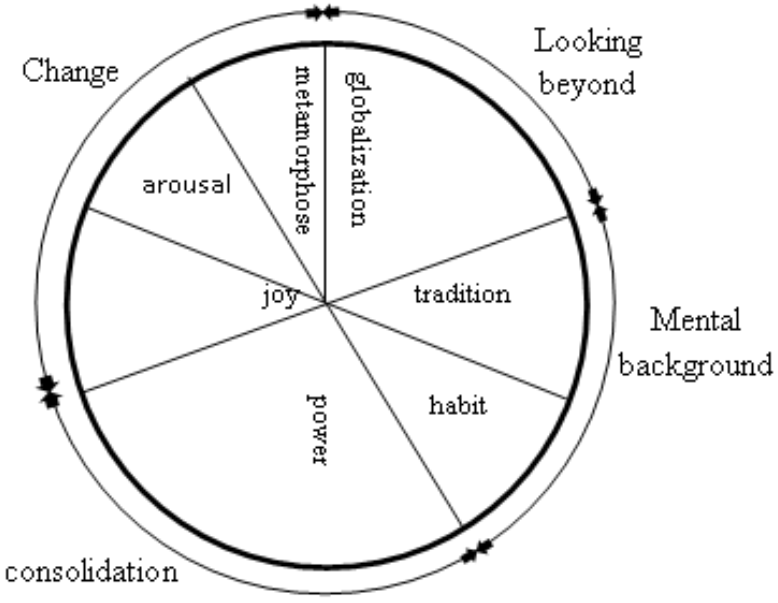


Fig 4 Architectural value dimensions (Author, 2018)

Change indicators (physical parameter)

Architecture is a physical context for determining lifestyle and selecting the type of beauty for it can be attributed to taste and relish. Architecture is one of objective parameters of lifestyle and similarly, among all commodities which come into fashion or consumed, the architecture is in lime light as one of most important consumption commodity. The relation of man to architecture can be parsed in three dimensions: need, taste and joy. In tradition realm, naturally the architectural consumption is in direct relation with meeting one of man needs along his survival and thus it is considered as a rational thing. A new born gratification which no longer adjust its needs with economy of needs but with economy of desire and dream is specified enthusiastically with something unexperienced and new and the mechanism for response to such need is fashion phenomenon (Gruno, 2014).

The question of which kind of architecture, or put it simply, which building is preferred typically can be understood in two preliminary ways: one is related to observation of apparent or objective features and second through the lens of perception and mental habits. Architecture and its beauty preferences in our society for people who experience a shared life in some way or another can serve as insight in production and value in various doctrinal paradigms with putting the general interpretation about their culture as the axis.

When it comes to aesthetic preference, architecture feature based on form and apparent outward features of the building with its effect on the mind can be discussed, then practical aspect of architecture or life and the quality of human presence in the building. Preference and taste in architecture from perception of values and schemes in different architecture aspects results in selection of building in the nexus with the fashion. The etiology of identity crisis in the architecture and urbanization of contemporary Iran is a purposeful process in which always a factor is in lime light as the interface between signifier and signified, given the society conditions that it is in it. This stance renders architecture something cultural, fluid, perceptional and tensional and action. Emphasis on triad of insight, value and action takes place respectively. According to literature, the triad relation of insight, value and action is not a unidirectional relation, but it is both side of a spectrum which mutually interact with each other (Raeisi, 2016).

Iranian architects' society failed to solve the relation between tradition and modernity through physical indicator. It seems that it deems the tradition as antipode to the modernity. Consider the example of roman and Greek facades in Iran, a great cultural calamity, the architecture found itself against an adversary world different from its own which its epiphanies also casted a spell on us and simultaneously shrunk from it, and soon we felt that we have to chime in with a physic and architecture that is not compatible with us, or in other word, we would become modern through 2000-year-old architype of West. Recognition of cultural values changes parameters in architecture concepts and the relation between them are cornerstone of our challenge in this chaos.

Table 4 Change in architecture concepts in the contexts of paradigms (Author, 2017)

Modernity objective extensions	Social modern paradigms	Objective extensions of tradition	Paradigm of tradition	Concept	Value based on hermeneutics of parameters in architecture
Various materials, architecture as fashion	Speed, diversity	Integration-stability	Originality, identity	Fundamental principles	
Roman architecture-classic	West	Brick architecture, Iranian vaults, motifs	Iranian-Islamic	Pattern	
Extraversion, façade, cost	Commodity, outward appearance, spectacle	Introversion, central yard	Dwelling and presence in the building-inside	Basics of taste in architecture	

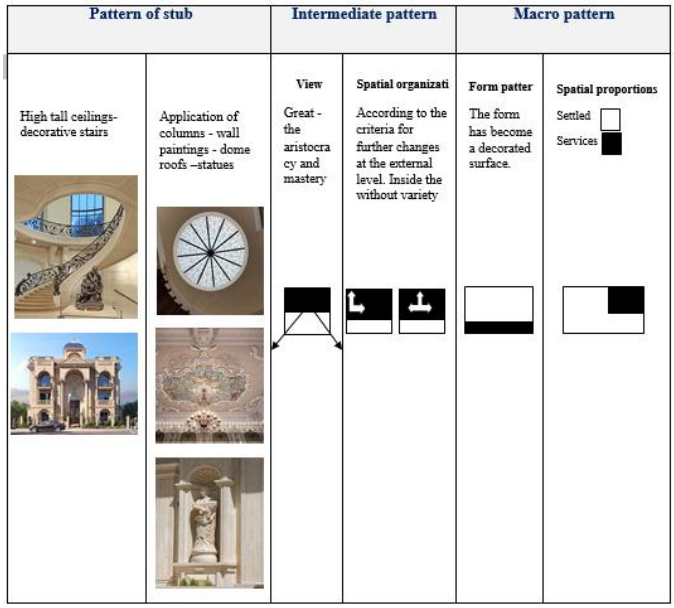
6.1. Architecture and Manifestation of Taste (Taste is in Fact an Insight, Social Actor)

In general, the taste results in aesthetic perception and has a deep nexus with the nature of fashion and social values. When the relation of sensation and perception with aesthetics made its way to architecture understanding and production, the first searches about the relation of architecture and taste as an interface turns toward the ambit of perception and aesthetic preferences.

Selection of architecture chiming in with lifestyle is systematic outcome of taste and the ingrained values which are perceived in their mutual relations and by their habitual forms and they are turned into symptomatic systems and are assessed and judged socially as prime example, folk etc (Imani, 2017).

Creation of various architectural works continues till it would cope with guiding the action that takes place in various social situations. Pattern of such system goes to such extent that homogenous conflations of value would be prevalent and valid due to response of actors to various situations.

Table 3 Demonstration of the impact of light and attitude on architectural transformation (Author, 2018)



6.2. Taste and Aesthetic Judgment of Architecture

A succinct parsing of taste in architecture in several key concepts including: perception, aesthetic value, the dissonant approaches of subjectivity and objectivity and judgment. We face at scratch with two key approaches regarding nature of values in architecture:

a. Subjective Approach

In subjective approach, the value of goodness or badness, or ugliness or beauty of a phenomenon is considered to be subjective and the value in fact is contingent to one's tendency and feeling. In subjective approach, the human is axis of value, because without existence of the human, value cannot be realized and the good and bad don't make sense. Therefore, in this approach, something is considered as good and bad which is outcome of man's feeling or bent to a particular thing. Put it differently, the values outies human experience and feeling have no extension. Thenceforward,

some consider the bents or penchants as cornerstone of value, and some other deem the pleasure as the cornerstone of values. In assent with this approach, any value-based judgment is proper as it is in assent with one's preference (Dadbe, 1993).

b. Objective Approach

In opposite to subjective approach, there is the objective approach and in assent with it, the values are attribute which is available in the object or in an action. Beauty or ugliness of what we deem them as beautiful or ugly in fact are based on the features existing in that thing. These features in fact exist in these issues and aren't contingent to one's bent and penchant.

The way in which we treat the present-day architecture is of subjective attitude. Analysis in architecture appraisal is brought about by subjective associations by the audience. The mind has a key role in the perception which summarize and assesses the set of information through mental organizing. Beauty judgment in architecture begins in human mind with typical analysis of social perception, in fact the layers in taste structure is distinguished, that are a form and type of reflection and they have mutual interaction, such layers are separated understanding and appraisal of components of reality or its entire, when we face an allegedly beautiful phenomenon, the garnered information is catechized by the mind, after being integrated and classified, it adjust it with their values, in cases of adjustment of preceptor, the phenomenon is judged and assessed as beautiful phenomenon. Judgment in architecture continues from moment of formation in the mind till selection of form. The taste is the root of assessment and touchstone of judgment. Fine and sound judgment insist upon reason and the reason-based assessments have their cornerstone on the values.

The modality of doctrinal-cultural assimilation through man aesthetic taste revamping can necessitate intangible and gradual intervention of modern aesthetic elements in tradition paradigm and presence of generality of this culture. Under such condition the audience has the right to choose and can single out his selected architectural value and enjoy it (Hongocho, 2011: 147).

7. Analysis

Based on such terms that we have upon definition of culture and form of concept of architecture preference, culture:

1. It is a set of behavioral pattern and value, culture deems the architecture as a pattern, framework and physic and in fact it is an action which man overshadows it and encompasses it and forms it. In fact, it is culture that structures as an action
2. Being structured, symbolized, externalized, sophisticated, forming the functionalities, are among features and characteristics of paradigms in culture.
3. Culture is of action and behavior type not of doctrine and thought type. It is of value type not knowledge and science.

8. Conclusion (How an Aesthetic Judgment in Architecture is made)

The result of accepting the social reality such as collective imaginations, values is accepting of society real existence. The architecture critique should offer a better understanding of architecture and enhance the level of taste and selection of society of the places which it is to live in it. As one of the most obvious of these selection, the architecture disclose aesthetic preferences and people taste. It is obvious that most of changes occur at the fashion level and the values replace with previous ones during short timespans and gives rise to change in taste and most of explanation of social perception and experience recognition and aesthetic subjectivity is focused on it. Then, in social arena, following the collective values and preferences play key role as one of cornerstones in

one's taste. The taste radically is an educational concept, thereupon, it is an ideal aim for education of visual literacy. The values in present-day architecture unfortunately are not judgment and in fact they are some reasonless penchants. Penchants are the individual relishes that one puts forward no the oeuvre itself, it is needed to turn the penchants to judgments to have something more than pleasure or preference.

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IJAPAS
International Journal of Applied Arts Studies

International Journal of Applied Arts Studies

IJAPAS 4(3) (2019) 21–34

Evaluating the Relationship between Emotional Intelligence and Interactive Thinking in Improving Architectural Design Process

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Received 22 November 2019; revised 20 December 2019; accepted 13 January 2020

Abstract

The idea of thinking in architectural design has long been one of the hallmarks of this process. On the other hand, according to the new definitions of emotional intelligence in the field of psychology, it can be concluded that if the parameters of this phenomenon are used positively and effectively, it is possible to promote the architectural design process among architecture students. Thus, identifying the related areas between emotional intelligence and interactive thinking in the architectural design process can play a significant role in promoting the creativity of future architects. For this purpose, the present study investigates the mutual relationship between emotional intelligence and interactive thinking in order to promote creativity in the architectural design process. To this end, after identifying the necessary infrastructures to develop either of these two phenomena, a mutual relationship between these two phenomena is discussed. It should be noted that the present study is descriptive and analytical and the evaluation is done through a questionnaire among some students of architecture at Damavand University. The results indicate that there is a significant relationship between emotional intelligence parameters and interactive thinking prerequisites for developing creative skills in architectural design process.

Keywords: Interactive; Thinking; Emotional Intelligence; Mutual Relationship; Architectural Design; Creativity

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1. Introduction

In architectural education, we cannot depend on general rules in anytime and anywhere. In architecture education, anything that happened or happens anywhere or anytime should not be modeled. In many Western countries, the basic lessons of architectural education have been omitted; it may be that in the pre-university era, nurturing creativity and talent is the most important purpose of the educational system (Hojjat, 2014: 239). But innovation in art is a dialectical product. In our era and in our eastern world, the spirit emerges and develops new art and thought which is the result of the inevitable collision of traditional society and modern times. Synthesis does not occur in the absence of each side and remains sterile (Ardalan and Bakhtiar, 2013). Art, as the manifestation of truth, goodness and beauty, conveys the concept of human truth and the path of good and aesthetic tendencies in the field of humanities (Noghrekar, 2015: 13). Creative and great people have talents, but the inferior people lack, and we see that the power of creating a strange building pregnant with life depends only on that talent. However, many agree that the creative power of every great architect and his ability to beautify relies on true and profound observation (Alexander, 2011: 189). Gestalt psychology has valuable research in the area of perception that has left much about how visual patterns are recognized, as well as how human beings view and organize incoming visual data and visualize the output of visual data. Abstract elements or psychological elements of visual grammar can be defined by their properties (Dandis, 2010: 42).

Now, each design program, which proposes a solution to a particular problem, has a specific purpose; and after presenting specific program (problem design), it is emerged by the designer (Sabahieh et al., 2008: 58). A complex and multifaceted process leads to problem solving via investigating the problem. There are two issues of creativity and criticism, such that the original design is based on a thematic design and needs criticism to be approved (Mirriahi, 2006: 87). Here the problem of creative thinking and criticism arises in the field of design; in this way, creative thinking, while engaging directly with the subject, steps up to raise awareness of itself and presents issues, ideas, and theories. To achieve better and more practical results, it needs a critical perspective to evaluate and rethink ideas to become a final design. The alternation between these two activities of creation and critique in the process of questioning to the answer in the design process must be repeated until the best design is selected (Razjoyan and Sheikh Taheri, 2003: 25); The above periodic trend is clearly evident in all design issues, including the design process in architecture which is a complex issue for the ultimate architectural design (Lawson, 2005: 111). Given that the process of architectural designing is an artistic-scientific activity and that some of these issues are rooted in art and another part in science, they cannot be solved by specific methods and equations, so thinking is required (Elias, 2005). In the design process, one can look for ways that, unlike the usual methods, help to flourish the hidden talents of architect to be more creative in designing and inventing. The areas of thought and the power of thinking design during the design process are among the topics which can have a direct role in improving the formation of architectural design patterns (Nadimi, 1999: 95). Throughout a design process in architecture, creative thinking attempts to search and focus on possibilities and pathways to find a design idea, while critical thinking attempts to search or select the most important or hopeful choice. (Yazdanfar, 2004: 146). Many philosophers and scientists have introduced different views on how to think and acquire knowledge. First Attitudes of Plato and Socrates and in the course of these currents, the views of others such as Descartes, Kant, Berkeley, Hume, and others were presented. In the field of thinking in architecture, Brian Lawson and Alexander also discussed. Mahmoudi has also done several researches on the way of thinking and patterns of architectural education and introduces a variety of modes of thinking in general and in particular .He finally introduced an

interactive pattern and the importance of its utilization in the architectural education (Mahmoudi, 2003: 40).

For many years it was thought that IQ was a measure of success. In schools, benchmarking awards to students was intelligence testing, and even some companies were using intelligence testing for rewards. In the last decade, researchers have found that IQ is not the only measure of a person's success rating (Utaberta et al., 2010). Hvargardner's research abolished the mere notion of a single intelligence. He argued that there are at least eight forms of intelligence for each person. Each of them is bred to a greater or lesser degree. Education, experience, information, cognitive intelligence cannot determine why one person succeeds but the other fails, so there is another feature that society seems to have no explanation for (Mozaffar et al., 2009).

Explaining the anonymous aspects of public intelligence, emotional intelligence backgrounds can be searched in Wexler ideas. Wexler sought to evaluate the non-cognitive and cognitive aspects of public intelligence. His effort was to understand social adjustment and to adapt images of cognition and distinguish social situations. In 1968, Cattell and Butcher were psychologists who sought to predict both school achievement and creativity through the ability, personality, and motivation of individuals. They were able to demonstrate the importance of this issue even in academic development (Samari and Tahmasebi, 2007). Other psychologists, such as Salovey and Mayer, have also focused on the emotional aspects of intelligence in their research (Salvo and Meyer, 1990), and in addition, the idea of emotional intelligence on human thinking was pursued again after 50 years by Gardner Professor of Psychology at Harvard.

According to the theories about emotional intelligence and interactive thinking, although there seems to be a relationship between these two phenomena, there has been little research to investigate this relationship, and various articles have been studied each of these two phenomena separately. For example, Batastin (2001) achieved a strong positive relationship between Emotional intelligence and creativity among the three groups of students. In this review, he suggested that emotional intelligence can facilitate the process of creative thinking to create new thoughts and actions. Zenasni and Lubart (2009) also examined the relationship between emotional intelligence and creativity in two studies. The results showed that there is a negative relationship between the facets of identifying emotions in face and image and the ability to generate new thoughts. Ghiabi and Besharat examined the relationship between emotional intelligence and interpersonal problems among students and their findings showed that the relationship between emotional intelligence was negative depending on the gender of the students as well as various aspects of interpersonal problems such as self-esteem, sociality, intimacy and responsibility. Therefore, emotional intelligence is essential to achieve team goals for interpersonal problem solving (Ghiabi and Besharat, 2011). Nazidizaji et al. in the research examined the relationship between emotional intelligence and architectural design competence. They examined an indicator of student design progress with evaluation of the five courses of the Architectural Design Studio. The findings of this study showed that there is no significant relationship between emotional intelligence and any of its promotional factors in architectural design (Nazidizaji et al., 2014).

Although identifying and nurturing student creativity with reliance on emotional intelligence isn’t noted a lot in the architectural education system, it is necessary to identify the processes of emotional intelligence accurately and interactive thinking to promote the creativity of future architects, and to investigate the factors affecting them. Therefore, the present study is based on the study of the issue of emotional intelligence and the emergence of interactive thinking in the process of architectural design to utilize the high mental capacity of architecture students as a suitable tool for promoting creativity. To this end, this study investigated the necessary infrastructure to develop

interactive thinking and utilized emotional intelligence effectively to find a mutual relationship between these two phenomena. It should be noted that the present study is descriptive and analytical and evaluation is done through some questionnaires among some architecture students. The main question posed in the research is: "parameters such as self-awareness, self-control, and self-motivation can promote interactive thinking in the architectural design process?"

2. Theoretical Foundation of Research

2.1. Emotional Intelligence

In the Oxford English Dictionary, the meaning of emotion is as follows: (any irritation or disturbance in the mind, feeling, and any powerful or stimulated state of mind). Emotion is a psychological construct that includes evaluating cognition, motivation, and situations. The discussion of emotion and the development of its related concepts as a research topic were first addressed in psychology and then in other areas such as cognition, anthropology and sociology (Tran, 1998). In the early 1980s, a different concept of emotion was introduced and began to grow. In a general classification of these years, emotions fall into two opposing dimensions, including positive or pleasant emotions, and negative or unpleasant emotions (Martinko and Gardner, 1987). The new idea is that an emotion does not interfere only in thought and behavior but also they are considered as a contributing factor to cognitive intelligence with meaningful advancement (Salovey et al., 2002). In fact, one of the important ideas that emerged over the years was that emotion is a kind of information that is people use their emotions, just like familiar types of information, to judge the world and their surroundings. According to this theory, emotions are abbreviations which evaluate and judge a phenomenon in the human surroundings positively or negatively. This notion that emotions are some kind of information helped to emerge the concept of emotional intelligence. In fact, emotional intelligence is needed to manage emotions.

Gotbesal (1986) holds that emotional creativity is an important structure both theoretically and practically that brings the discussion of the two areas of creativity and emotion together which was traditionally separated.

April (1991) defines three basic criteria for creativity according to his social structuralism view, including innovation, efficiency, and originality. From his point of view, to create a response or emotional change, these three criteria must be combined in different combinations depending on the person and the situation. He argues that in addition to the existence for three criteria of innovation, efficiency and originality, the aspect of preparedness as a descriptive factor should be added to the above factors.

So far three main approaches to emotional intelligence have been identified and this issue is addressed based on these three approaches. In the first approach, Goleman (1998) defines emotional intelligence as traits such as motivation, optimism, adaptation, and resistance to failures, delaying happiness, empathy, and hope. He considers the affective dimensions of emotional intelligence as increased self-efficacy, job success, nurturing and creativity, increasing group performance, motivation, and reducing psychological stress (Goleman, 2000).

In the second approach, other psychologists such as Salovey and Mayer (1997) have also focused their research on various aspects of emotional intelligence and have published articles in this field. These articles, entitled emotional intelligence, provided the first review of potential areas of emotional intelligence and emphasized the existence of emotional intelligence as real intelligence in people's thinking. These researchers have identified emotional intelligence as a set of abilities to perceive, absorb, and direct emotions to improve thinking development.

In the third approach also Bar-on (1997) presented a model of emotional intelligence in which there has been a lot of emphasis on coping with anxiety. He defined emotional intelligence as a set of emotional, personal, and social skills and abilities to cope with environmental pressures and demands. In this approach, the five components of emotional intelligence include interpersonal skills, intrapersonal skills, adaptation, and anxiety control strategies (Bar-On and Parker, 2000).

As can be seen, all the approaches using to define emotional intelligence have emphasized the importance of interpersonal and intrapersonal skills. In fact, emotional intelligence comprises a set of emotions, social knowledge, and abilities that directs and reinforces a person's overall ability to respond appropriately to environmental factors and pressures, and results in optimal performance in the four domains of self-awareness, social awareness, relationship management, and Self-management (Goleman et al., 2002).

Simply put, emotional intelligence indicates that what is appropriate and inappropriate in social relationships and psychological and emotional interactions in particular situations, it means that one can always keep hope alive in different situations, have empathy with others, listen to the feelings of others and ignore small rewards to obtain greater rewards (Higgs and Hender, 2006).

2.2. Interactive Thinking in Architectural Design

In human attitudes, both his psycho-mental dimensions, his behavioral dimensions, and his relationship to cultural and intercultural social systems are all important and complementary, Dac Kopeck emphasizes in environmental psychology, none of the attitudes is more important than the other and all are considered together (Shahcharaghi, Bandarabad, 2016: 32). In the interactive attitude, man and the environment are considered always on Interactions and to understand human behavior, the environment and the individual, as well as the interaction between these two are emphasized. In the meantime, some scholars have examined the mutual effects of human and environment on one another, while others view human and the environment as a single set, and they sometimes discuss the link between human and environment to the extent that they consider them as one phenomenon. Based on the Altman‘s theory, if there is a proper interaction between humans and the environment, a single set will be identified (Shahcharaghi, Bandarabad, 2016: 40).

DiBuno (2006), on the other hand, believed that design, in fact, is rooted in what he calls "design thinking". In his book ‘New Thought for the New Millennium’, he wrote: "Relationship of value to design is like truth to logic. Logic is in search of evolution from truth to truth, and design is in search of value evolution to value". Psychologists have classified the types of thinking into three groups according to their goals and the characteristics: "direct thinking", “non-directed thinking ", "creative thinking" (Anderson, 1995). Direct thinking is often used to solve problems that are defined "well", such as solving a puzzle. Direct thinking usually uses two techniques for problem solving. In the first technique, a variety of solutions are proposed, in which the trial and error process is used and the problem is solved. In the second technique, by breaking the general problem into minor problems, minor problems are solved first, and by combining the answers of minor problems, the final answer will be found. In contrast to direct thinking, there is non-directional thinking in which the human mind activates without any foreground and does not seek a specific purpose; one of the characteristics of this type of thinking is its free-floating nature. Such thinking in architectural design can be searched in concept formation by design techniques which were created without any specific purpose. The third type of thinking that is used in complex issues such as the design process in architecture is called creative thinking. This type of thinking is purposeful and needs creative ways to reach the correct answer (Stenberg, 2002). The source of all ideas is human experience and understanding. Ideas come from knowledge and knowledge also comes from

external environment observation and our inner consciousness to the observations. In fact, our knowledge interprets our observations (Luke, 1690). The most appropriate way to apply thinking in a complex activity such as architectural design is to utilize a variety of thinking interactively. This feature in thinking enables the simultaneous approach to various issues during design and enables the use of different types of thinking simultaneously.

As discussed, in the design process some of the discussions require critical thinking and the other require creative thinking; hence the need to use both types of thinking in an architectural design process requires the use of a thinking model, which allows simultaneous use of any kind of thinking. According to the results of studies by the University of Iowa, College of Education and Arts and Design, the appropriate pattern of thinking in complex processes is the use of the interaction of the three types of "content", "critical" and "creative" thinking. In this model, the interaction between the three types of thinking is influenced by three types of consciousness, so that content thinking is influenced by accepted awareness, critical thinking is influenced by perceived awareness, and creative thinking is influenced by generated awareness (Fig 1).

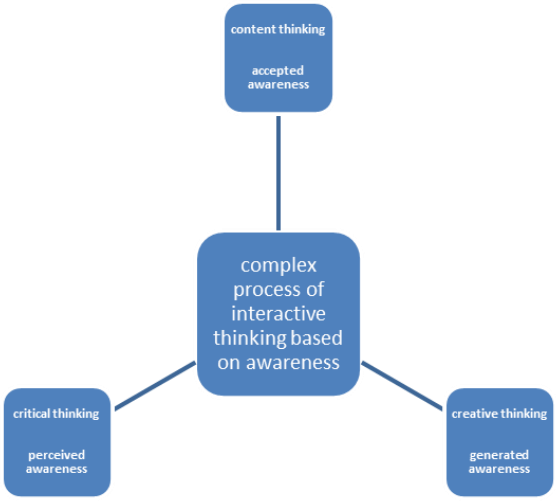


Fig 1 Pattern of Interactive thinking provided in University of Iowa (Cadwell and Dake, 2004: 11)

Content thinking is introduced actually based on the mentality which is formed in the person and “accepted awareness". In this thinking, collected information from the environment during the time in the mind allows one to use the information archive in the mind. For example, the roles and colors that are valuable to a designer are certainly influenced by his or her ethnic, racial, social, and cultural values, and this person unconsciously uses them in his design work. Critical thinking is discussed with logical thinking and with information analysis and the use of "accepted awareness". For example, in the design process, all activities related to gathering information, analyzing information, and targeting are shaped by this type of thinking. Creative thinking is coupled with "generated awareness" and innovative solutions to problem solving. The designer uses creative thinking in the design process to create ideas and concept of design. Many people describe design as one of the most creative human quests (Lawson, 2011: 171). Creative work is full of contradictions and the creative thinker needs to be immersed in the problem at once while freeing his or her mind. Having a full vision of the problem and constantly thinking about it, a creative

thinker should relax his or her own conscious mind so that his / her desire to solve the problem is not an obstacle to creativity and finding a new answer (Azami, Khajeh Yian, Tholai, 2008).

By using an interactive pattern of thinking which is introduced by University of Iowa, The following pattern can be used as prerequisites for its adaptation to the architectural design process. In the proposed design pattern, given the activities involved in the design process in architecture based on thinking of architecture, the titles in design arena include three areas of "cognition," ideation, and "presentation" (Fig 2) (Tzamir and Churchman, 2004).

In the model proposed in Fig 2, the relationships between the design prerequisites are not linear and it is necessary to look at them interactively in a chained cycle. In other words, instead of looking at the process as a step, that is, first complete the "cognition" phase in order to enter the "idea" phase, practically we should consider the process of designing as a set of activities which come from three realms and the simultaneous interaction between these three prerequisites leads to the optimal and comprehensive response to a design in architecture.

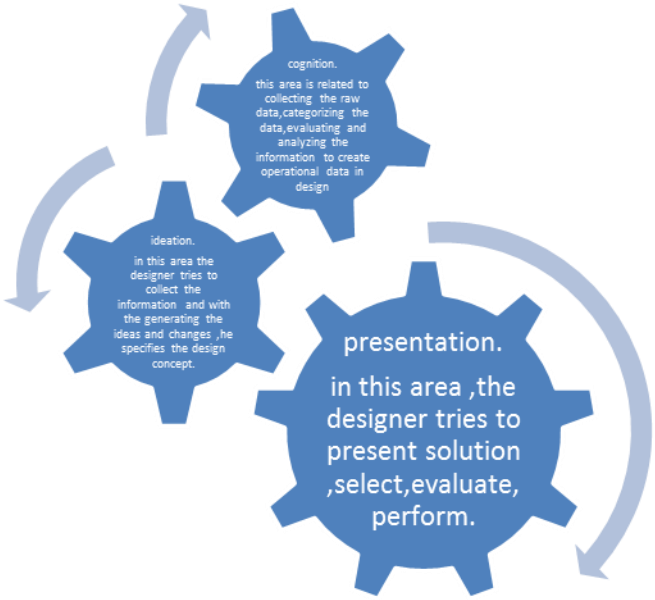


Fig 4 Design Prerequisites on the basis of interactive thinking in architecture

2.3. Relationship between Emotional Intelligence and Interactive Thinking in Architectural Design

Researchers' achievements have confirmed that there are at least two distinct intelligences, including emotional intelligence and cognitive intelligence in humans. Many theories, including Gardner's theory of intelligence (1983), Bar-on's theory of emotional intelligence (2001), and Salovoy and Meyer's (1990), state that success does not depend solely on cognitive intelligence and that cognitive intelligence is not a measure of one's success and it depends on another factor called emotional intelligence (Castilloz et al., 2013). About the difference between cognitive intelligence and emotional intelligence. It can be said that cognitive intelligence allows one to understand how

information is processed. Cognitions, similarities, differences, inferences are all clearly within the cognitive and intellectual realms. Recognizing feelings of self and using them to make appropriate decisions in the design process, the ability to manage optimally mood, and mental status and impulse control are measured by emotional intelligence. Emotional intelligence is genetically acquired and also it is modifiable and during the life it improves with education and it requires thinking (Cavazotte et al., 2012). The existence of emotion is important for wise thinking, and in the relation between emotions and thoughts, emotions guide the decision-making moment by moment and work closely with the rational mind and enable or disable thought. Emotional intelligence evaluates the person emotionally, that is, how much the individual is aware of his or her emotions and feelings and how he or she can control them through thought (Salovy et al., 2002). Likewise, the master-mind plays an essential role in generating emotions (Goleman, 1995). People with high emotional intelligence skills calm and clear their minds quickly and easily, and open the way to access inner insights and creative ideas in thinking (Nordin, 2012).

People with stronger emotional intelligence use creative, innovative ways to express their ideas and they show creativity in design and are able to perform better (Batastin, 2001). This is also evident in the complex design process for architects. The more the architect uses his emotional intelligence to create a new design, the more creativity and patience will emerge in that design (Mahmoudi, 2004).

Some researchers believe that only part of the properties of an engineer is related to his or her cognitive intelligence and the other important part is related to emotional intelligence (Sam, 2009). In the process of architectural design, the types of thinking and adopted approaches by the designer have a direct role in the process of answering the question and the result is evident in the design of product (Carmichael, 2006). Architects need to be aware of the characteristics of different types of thinking as well as how to utilize related talents to emotional intelligence and to work out on solutions.

Since the creation of human environments takes place in interplay between reason, emotion and intuition, and on the other hand, in addition to logic, emotions and feelings play an essential role in emotional intelligence, the most important research hypothesis is the relationship between emotional intelligence criteria and interactive thinking skills in the architectural design process. the relationship between two variables of emotional intelligence and interactive thinking to create new ideas in the architectural design process has not been researched and also the necessity for creative and innovative thinking by the architect is emotional intelligence, this paper examines the relationship between these two variables focusing on the thoughts and emotions of architecture students as well as the different prerequisites of design in architecture based on the interactive thinking model. Accordingly, the four parameters of self-awareness, self-control, self-motivation and social skills are identified as the most important emotional intelligence criteria in executing complex processes, as well as three factors of cognition, ideation, and presentation are identified as key prerequisites for implementing an interactive thinking pattern in the architectural design process. Target has been evaluated among the population and statistical sample to identify the correlations and the mutual relationship between these variables.

3. Research Methodology

Architectural design needs extensive knowledge, from the physical properties of building materials to the principles of visual perception. Research's subdivisions with the astonishing figure are done with different and varied mental patterns (Grout and Wang, 2013: 24). The research method in this study is "logical reasoning" and uses "analytical-descriptive" methods with a

quantitative and statistical approach. The present study has assessed these two variables in order to achieve appropriate hypotheses for examining the role and mutual relationship of Interactive thinking in using the high mental capacity of architecture students as a suitable tool for promoting creativity and to examine suitable prerequisite for increasing their emotional intelligence. The studied variables in this study included emotional Intelligence parameters and the interactive thinking prerequisites in the architectural design process and mutual relationship between these variables which are based on the architectural students' views. To this end, first, through documentary and library studies, the theoretical foundations of emotional intelligence and interactive thinking and the variables of these two phenomena were identified to increase student understanding of the design process. Then to test the parameters of emotional intelligence and prerequisites of using interactive thinking and determining the mutual relationship between these variables, first descriptive statistics results were determined by using analytical questionnaires with Likert spectrum method. Then correlation and preference between variables were tested by using SPSS software, Pearson and Friedman statistical tests.

The statistical population of this study was all male and female BA students in Architecture at Damavand University and for lack of access to all individuals of the society, a total of 40 students were selected as the statistical society. Since the statistical population of this study is a limited population, Cochran's finite population sampling formula was used to estimate the sample size.

$$\square = \frac{N Z_{\alpha/2}^2 \, pq}{\varepsilon^2 (N-1) + Z_{\alpha/2}^2 \, pq} \quad (1)$$

In this respect, n is volume of Statistical sample, N is population of statistical society, $Z_{\alpha/2}^2$ is normal distribution value, q is ratio of non-trait in statistical population, p is ratio of trait in statistical population and ε^2 is error level. In the above formula, the maximum permissible error (ε) is usually 0.05, the confidence coefficient is 95% and 0.95, the parameter $Z_{\alpha/2}^2$ is 1.96, and the values of p and q are both 0.5 and N is considered as a volume of society. According to the above relationship and values, in the present study the population of the statistical society is 40, the number of statistical population is 36.

4. Findings

In this section, questions related to each components are combined together and has been discussed the amount of significance from the students' point of view through a one-sample t-test. Considering that the theoretical mean of the respondents is 3, the mean of each component is compared with 3 and a significant or non-significant difference is shown. The results are presented in Table 1.

Table 1 Descriptive Indicators for Emotional Intelligence and Interactive Thinking Prerequisites in Architectural Design Process

Variable	Component	Mean	T	Degree of Freedom	Significance level	Average Difference	5% Confidence level	
Emotional Intelligence	Self-consciousness	3.164	202.581	35	0.000	3.972	3.933	4.010
	Self-control	3.410	163.681	35	0.000	3.410	3.369	3.451
	Self-	3.972	228.594	35	0.000	2.164	2.146	4.183

	motivation							
	Social skills	1.917	180.989	35	0.000	1.917	1.896	1.938
Interactive Thinking	Cognition	3.040	149.324	35	0.000	2.844	3.011	3.944
	Ideation	3.491	186.641	35	0.000	3.080	3.026	4.054
	Presentation	3.178	211.321	35	0.000	3.122	2.842	4.0197

The parameters utilizing emotional intelligence in the architectural design process were examined by t-test, self-awareness (3.164), self-control (3.410), self-motivation (3.972) with a significant level of (0.000) in comparison to the theoretical mean of responses namely 3 showed a higher level and these parameters show the emotional intelligence effect on the design process. It should be noted that based on the presented answers and the results analysis, it can be concluded that the social skills parameter (1.917) has a lower average than theoretical mean of responses, indicating that there is no significant relationship between these parameters. Also from the t-test results on the prerequisites of using interactive thinking in the process of architectural design, cognition factors (3.040), ideation (3.491) and presentation (3.178) with the average above mean responses (3), show steady state and impact as the main factors. Considering the significance level of less than 5% in all parameters and affective prerequisites of interactive thinking by using emotional intelligence parameters in architectural design process whose significance level is less than 5%, there is a significant similarity between respondents' attitude towards these two variables.

After reviewing the data related to the questionnaires, the research hypotheses are analyzed. Therefore, the research hypotheses are first expressed as follows:

Hypothesis 1: Applying parameters such as self-awareness, self-control, and self-motivation leads to promote interactive thinking in the architectural design process.

Hypothesis 2: Adherence to prerequisites such as cognition, ideation, and presentation leads to effective intelligence use in the architecture design process.

To investigate these hypotheses, we examine the mutual relationship between three emotional intelligence parameters and promoted interactive thinking and also the relationship between the three prerequisites of interactive thinking and the impact of emotional intelligence on the architectural design process. As stated earlier, Pearson's correlation coefficient was used to analyze the hypotheses.

Pearson's coefficient indicates the degree of linear relationship between the quantitative variables (Maser et al., 2012:152). To interpret the severity of the relationship and the variable, various classifications are presented in terms of Pearson's correlation coefficient. The variation of this coefficient between 0.8 and 1 indicates a very strong relationship and in the range of 0 to 0.2 indicates a lack of relationship or insignificant relationship between two variables. Tables 2 and 3 present the results of inferential analysis based on Pearson's correlation test for the first hypothesis and the second hypothesis, respectively.

The results of Table 2 show that there is a high correlation between factors such as self-awareness, self-control, self-motivation in architectural design process to promote interactive thinking. This high correlation indicates that if these factors are observed and applied, they can contribute to promote the use of interactive thinking, so the first hypothesis is confirmed. It can also be seen from the results of Table 3 that there is a high correlation between the prerequisites of cognition, ideation, and effective use of emotional intelligence in the design process, and therefore the second hypothesis is confirmed.

Table 2 Correlation Status between Emotional Intelligence Parameters and Interactive Thinking promotion in Architectural Design Process

Self-awareness	correlation	1				
	Sig	Self-awareness				
Self-control	correlation	0.626	1			
	Sig	0.000	Self-control			
Self-motivation	correlation	0.775	0.619	1		
	Sig	0.000	0.000	Self-motivation		
Enhanced Interactive Thinking	correlation	0.893	0.890	0.822	0.867	0.805
	Sig	0.000	0.000	0.000	0.000	0.000

Table 3 Status of Correlation between the Prerequisites of Interactive Thinking and Emotional Intelligence Promotion in Architectural Design Process

Cognition	correlation	1				
	Sig	cognition				
ideation	correlation	0.626	1			
	Sig	0.000	ideation			
presentation	correlation	0.775	0.619	1		
	Sig	0.000	0.000	presentation		
promoted emotional intelligence	correlation	0.893	0.890	0.822	0.867	0.805
	Sig	0.000	0.000	0.000	0.000	0.000

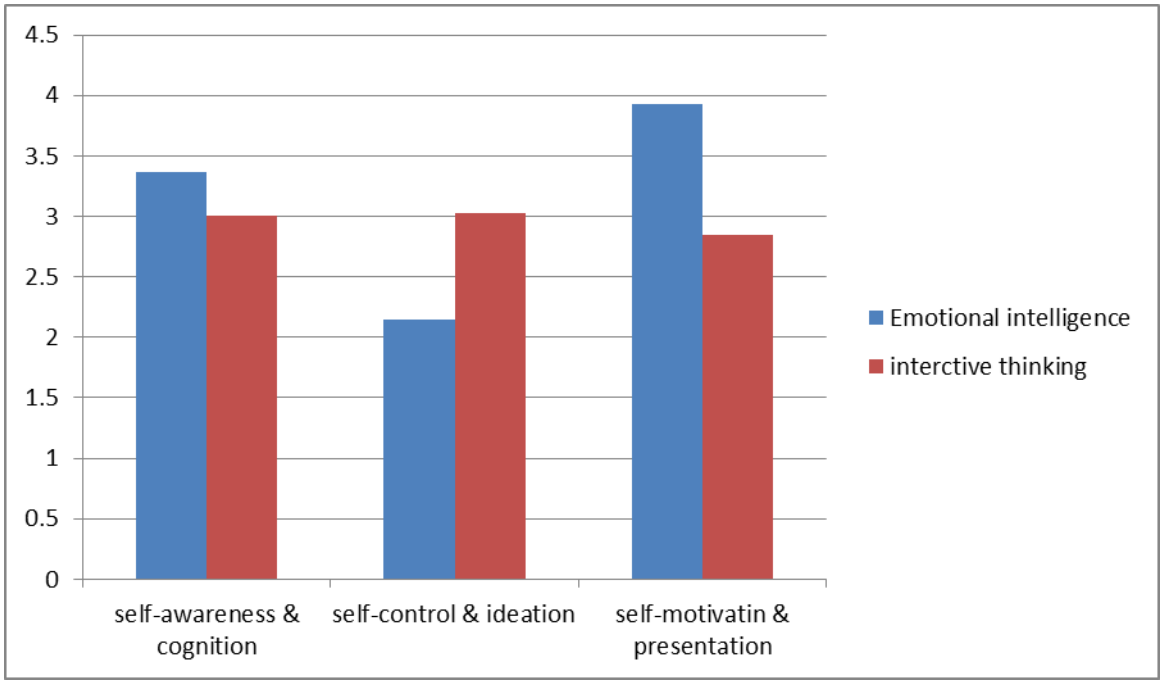
The significance of each of the identified indices and their ratings were analyzed by using the Friedman test. Using the respondents' opinions and the importance of their allocation, Friedman's ranking test prioritizes the different variables based on the mean of their ratings. It should be noted that the purpose of the present study was to determine the importance of emotional intelligence parameters in promoting interactive thinking as well as the prerequisites of interactive thinking in the effective application of intelligence in the architectural design process based on each of the variables, so any variable that has a higher average rank, will get a higher ranking. The results of descriptive information and ranking of emotional intelligence parameters and interactive thinking prerequisites for promoting the architectural design process are shown in Table 4 and Figure 3, respectively.

Table 4 Descriptive information of emotional intelligence parameters and interactive thinking prerequisites for promoting the architectural design process

Variable	Component	n	Mean	Standard Deviation	Mean (min)	Mean (max)	Test statistic	Average rate
Emotional Intelligence	Self-awareness	35	3.164	0.2888	2.150	4.595	3.933	1
	Self-control	35	3.410	0.4129	2.094	3.983	3.369	2
	Self-motivation	35	3.972	0.3934	3.0.1	4.879	2.146	3

Interactive Thinking	Cognition	35	3.040	0.332	2.441	3.784	3.011	2
	Ideation	35	3.491	0.2894	2.187	3.891	3.026	1
	Presentation	35	3.178	0.4392	2.994	4.011	2.842	3

As shown in Table 4 and Fig 3, the parameters self-motivation, self-awareness and self-control with mean scores, 3.933, 3.369 and 2.146 respectively as well as ideation, cognitive and presentation prerequisites, with mean scores of 3.026, 3.011, and 2.842, respectively, are ranked first to third in the two variables of emotional intelligence and interactive thinking in the architectural design process.



	Self-awareness & cognition	Self-control & ideation	Self-motivation & presentation
Emotional Intelligence parameters	3.369	2.146	3.933
Interactive Thinking	3.011	3.026	2.842

Fig 3 Friedman test rating results for ranking emotional intelligence parameters and prerequisites of Interactive thinking to enhance the architectural design process

5. Conclusion and Discussion

In all educational societies, it is essential to define new patterns to strengthen thinking and thinking prerequisites use for ideation and presenting creative solutions to complex design processes such as architectural design. On the other hand, with the new definitions of intelligence in the field of psychology, identifying areas and prerequisites related to emotional intelligence to promote the ability of architecture students is also very important. This requires that by studying and examining these two issues, we evaluate the mutual relationship between them to determine the effective factors on the growth and excellence of architecture students. For this purpose, in this paper, the role of interactive thinking in using high-capacity intellectual students as an appropriate tool in enhancing creativity and exploring appropriate infrastructures to enhance their emotional

intelligence is discussed to achieve a mutual relationship between emotional intelligence and interactive thinking in the design of the case study. In other words, this research aims to investigate the mutual relationship between emotional intelligence and interactive thinking among architecture students of Damavand University .This study has been discussed the coefficient and effects by taking into account the major and influential variables in these two phenomena and with reference to the stated objectives of the project and the logical relationship between the components of this project. Given the purpose of the research, the mutual relationship between interactive thinking and emotional intelligence was identified with information from interviews with architecture students for promoting the architectural design process by using statistical and inferential analysis. Based on the analysis of data from inferential and statistical analyzes between Students, it was found that by confirming the first hypothesis ,there is a significant relationship between three parameters of emotional intelligence, namely self-awareness, self-control and self-motivation, and the promotion of interactive thinking in the architectural design process. The second hypothesis was also confirmed and showed that observing prerequisites such as cognition, ideation and presentation leads to the effective application of emotional intelligence in the architectural design process.

As a preliminary result it can be said that although based on correlational studies, the mechanisms underlying the relationship between interactive thinking and emotional intelligence in the architectural design process cannot be clarified, each of the emotional intelligence parameters seems to influence on the promotion of interactive thinking. On the other hand, the prerequisites for interactive thinking also emerge the ability of the effective use of emotional intelligence to facilitate creative thinking in the field of architectural design. In describing this mutual relationship, it should be noted that some architects perform activities better under certain emotional conditions. So emotion affects their thinking system and changes it. These changes force the architect to look at matters from different aspects and think about them deeper and more creative. The aspect of emotion regulation also demonstrates the architect's ability to reduce negative emotions and maintain positive emotions, and thus, positive emotional intelligence can create more flexibility in the development of interactive thinking, which in turn leads to increased creativity in the architectural design process.

In fact, in interpreting the existence of a mutual relationship between the parameters of emotional intelligence and the prerequisites of interactive thinking, it can be said that self-motivation, self-awareness, and self-control, with consideration of the positive emotions of the architect in the process of architectural design, lead to increased awareness and flexibility in the field of thinking. This will lead to improved cognition, creative ideation and ultimately an innovative outline in the architectural design process. There are, however, obstacles to lack of creativity in the research process including strategic barriers - value barriers - conceptual barriers - personal imagination - perceptual barriers - sensitivity barriers - cultural barriers - environmental barriers - expressive barriers) in understanding their interaction with the environment.

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Available online at www.ijapas.org

IJAPAS International Journal of Applied Arts Studies

International Journal of Applied Arts Studies

IJAPAS 4(3) (2019) 35–44

Impact of Technology on Evolution Process and Expansion of Art

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Received 12 September 2018; revised 10 November 2018; accepted 05 December 2018

Abstract

Human beings have witnessed rapid growth of technology that consumerism and the effects of technological era on art and the audience are unpredictable. Today, the use of various technologies in arts and their impact on the audience is undeniable. Although the mind is an important factor in the creation of artistic works, the evolution process of creation of artistic works expresses the ups and downs of shapes, aesthetics and content. Therefore, the present paper examines the role of technology in the production of work of art; and the impact on the audience in digital-oriented works with the aim to study the interaction of the audience and the digital effect based on the assumption that technology only raised the appearance of artistic forms into the problem. But influence of digital technology in art, the passive audience has become active and eventually intelligent over time, and during the technological developments, the user has taken the role in digital artwork.

Examining the studies and available evidence by descriptive-analytical method, the results indicate that digital world has brought a new identity and new characters that have different psychology. In this situation, the artist and audience are present in a continuous interaction and are constantly converging, so in this interaction, the audience's name becomes the user. In this sense, the user takes the role of the audience of the work of art and artist in an interactive relationship. The space and digital products will place the user in the position to enter the world and new experience, as a child who will experience the absolute universal freedom of the modern world. In this world, some audience as user break down the old code and with a new understanding of the aesthetics of the virtual world will have a new deal with the phenomenon of art. They are producing books that are related to the process of their lives and their understanding of this virtual world.

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Keywords: Technology; Perception; Audience; Digital Art

1. Introduction

The consumerism and new technologies era lead to the generation of trends that each has its own visual language and unique expression. This multiplicity of expression with the abundance of various technologies, including digital technology, has over shadowed the process of creating and displaying artwork. In fact, in the late twentieth century, the influence of technology on art opened up a new horizon for artists and audiences, and provided the necessity to use digital instruments for audiences such as computers as a means of reaching the speed, accuracy, diversity, creativity and integration of diverse arts; in a way that since 1970s, the production of artworks by the new tools has allocated various names to itself such as computer art and digital art. The digital instruments led to evolution of activities such as painting, designing, sculpturing and music composing, etc. and new forms of art based on digital technology are crystallized as new styles of art. While explaining the position of technology in art, this research attempts to address the technical aspects and the effects of technology on digital art audience in order to achieve the answer to what extent the aesthetic reactions from technology to the audience have gone through the evolution?

2. Art and Technology

So, many researches have been done on art and technology, but they often investigate the issue of technology and art separately, except in certain contexts that only the presence of a technological tool and its evolution in art with the emergence of new forms of art such as digital art has been considered. Most of these studies by means of morphology of the artistic terms and technology have tried to study the process of evolution and formation of artwork during the previous centuries. But the effect of technology on changing the nature of the perspective and behavior of the artist and the audience toward the artwork has not been discussed Man in the Technology era has been changed biologically and attitudinally. The state of humanity on the nature and capabilities of technology in the production of artistic work provided a lack of authenticity and originality in the field of artistic experience. Thus, various artistic forms emerged is based on reproduction (Gianni Vattimo, 1988: 54). Following the advancements of technology and the artists' lack of satisfaction with what they inherited from their predecessors, in the middle of the twentieth century, the desire for change in art was again created. In the digital era, some principles were broken down by others, and while a multiplicity of meaning appeared, a new artistic discourse was created that articulated the concepts of the artist and artwork in specific time and place.

Fig 1 Marcel Duchamp, Fountain, Prefabricated Porcelain (Marzona, 2010: 16)

In the twentieth century, Marcel Duchamp presented The Fountain to the museum as a work of art in an attempt to protest against the conditions of capitalism and museum managing (Figure 1). According to the institutional theory of art, what is important in line with this work, regardless of spatial and temporal conditions, is its placement in the museum. George Dickey, in the institutional theory of art, "claimed that what transforms artwork into an artistic work is not a specific feature of the work of art, but a special status given to it by a person or people from the artistic community" (Ramin, 2011: 391). Of course, some believe that this kind of attitude in art is the result of plots and initiatives of everyday life, that the reaction to which has led to changes in the nature of art and the emergence of postmodern times (Ocvirik et al., 2011: 467).

The foundation of the discourse of art, in each historical period, focuses on understanding the world and achieving a goal which, in contemporary times, has entered the global process with the collapse of the walls between cultures. Therefore, the artistic nature of a work cannot be searched just in its appearance, but outside the work such as keeping with the theoretical foundations, the historical passage and the nature of the instrument involved in the work of art.

3. Method

It is certain that technology is based on human imagination in relation to its surrounding environment and has changed according to the characteristics of each society. An interdisciplinary knowledge of technology plays an active role and influences on its thinking through its presence in all aspects of human society. Similarly, it is equipped with human resources that regulate and interact with the world in different ways. The present study was conducted by using a descriptive method and referring to library resources with the aim of achieving the concept of the artwork audience in the era of technology tried with the investigation of the relations between art and technology, examined the position of digital technology in the audience's aesthetics. Thus, with a profound look at digital art as a consequence of technology, the behavior of the audience and how it evolves in terms of digital phenomena can be examined.

4. Discussion

4.1. Technology Explanation

The explanation of technology is directly related to the evolution of knowledge. In Mesopotamia, people kept thousands of clay tablets related to legal contracts, sales, and laws in libraries in the city center, but with the invention of print more than 500 years ago and the advent of the Renaissance and the Enlightenment, the function of knowledge evolved. This development can be seen from two aspects: first, knowledge is as capital, and the main purpose is to transfer the correct information at the right time at lowest possible cost, but in the second strain, knowledge is a tool that creates conditions to the ease of sharing knowledge and practice based on the ultimate goal. Therefore, each strain leads to interaction.

Events and discoveries of the 15th century opened the door of the whole world to Europe, to the point where the Enlightenment era brought all humanity and the universe into itself. It is not possible to easily reach a point of sharing in defining issues that depend on human experience. The philosophy of technology is one of the issues that, because of its relationship to reality or human experience, the definition or conceptualization are disputed. The term technology has been used since the beginning of the emergence of modern society, and generally refers to nineteenth-century instruments, systems, and technical, industrial and electronic processes.

This term was also used to describe the design, painting and sculpting practice. Of course, design and painting, and even the nineteenth-century photography, have become fashionable and aging, because the term "new technology", such as digital and electronic systems, the production and display of video, DVD, computer simulation, and even Internet technologies are used in art. So, while painting brush as a tool of technology, it was difficult to understand brushes as a technology in such a situation. From the perspective of contemporary visual arts, with the advances in technology since the 1970s, contemporary artists have ceased to work with the traditional painting and sculpture media; rather, they have been working on animated or multimedia-based products. (Harris, 2006: 316- 317).

4.2. Technologic Art

In recent centuries, the presence of new technologies is evident not only in software, but also in the production of games, digital media, advertising and information. Thus, with the advent of technology in the human livelihood process, a new conception of culture and subculture was born. So that, if all the mechanical innovations of the past five millennia disappeared from mankind, a wicked harm would come into his life, but man would still remain human; but if the interpretation was taken from him, the planet would be destroyed more quickly than imagined; and mankind more than any animal is in a helpless state. Since human beings have a sense of thought, the human goal has been to use its organic resources to achieve the achievements of technology, in order to fulfill its wishes. That's why Lewis Mam Ford believes that "human essence is not making, but finding or interpreting" (Mitcham, 2013: 55).

Concurrent with technology development and the artists' interest in using it in creating the artwork, the artists' communities were divided into two groups. The first group was those who, without paying attention to galleries and museums, used direct dialogue to maintain their contact and audience, and the second group used the digital page to pursue their goal. Gradually, they provided possibility that the respondent comes out of his potential state and finds the possibility of interference in the provided work (Baqi, 2011: 19). Contemporary art has strengthened the feeling

that every work of art can be experienced on the basis of the inner principles and without reference to other objects in the world through technology that is used in it (Wared, 2005: 103). So, can any work that utilizes the capabilities of the tool be considered as an artwork? The answer to this question leads us to the theory of Roman Jacobson about the linguistic role of artwork. He points to five functions.

1. *The emotive (alternatively called "expressive" or "affective") function*: Emphasizes the expression of inner feelings.
2. *The cognitive function*: Refers to the involvement of audience in doing something. (Works such as advertising teasers, military marches, etc.).
3. *The metalingual (alternatively called "metalinguistic" or "reflexive") function*: It deals with the media itself. For example, a movie that deals with cinema and film itself.
4. *The referential function*: Represents information such as news posters and personnel photographs.
5. *The phatic function*: The orientation of the message towards the channel of communication (Sassani, 2010: 208).

It is worth noting that every artistic feature must have a realm of expression and discovery specific to itself, but in technology-based works, the instrumental nature plays an important role. Accordingly, Marshal McLuhan believed that new technologies would enhance human perception, and moot themselves as a massage. In his view, content is less important than the media structure, and it is the media structure that deeply shapes human consciousness. In McLuhan's perspective, the media is a continuum of human senses that leads to the expansion of the relationship and the emergence of a global village, and human beings will become more and more developed as a result of technology, and they will establish a close relationship with real issue (Parhizkar, 2010: 187). In discussion of the medium of the message, McLuhan emphasizes that the message media sends a message related to the technical nature of the medium and is decoded. Therefore, media imposes itself as a message, but what we consume is outcome of a world which is interpreted in terms of media, because in most cases the real role of the media is hidden from the audience and the media presents itself as a message. For example, TV "message" is not the images that it sends, but new ways of communication and understanding that it imposes. In fact, the truth of the media lies in neutralizing the unique, universal, and ultimate characteristics of the world and replaces the multifold world of the media with it. "This means that the true message that the media sends, is the message that is decoded and is used internally and unconsciously, the clear concept is not sounds and images, but this message is a limiting pattern (related to the technical nature of that medium) of the separation of reality to sequential and equivalent symbols"(Baudrillard, 2001: 113).

The question now is how can the outcome of this attitude be evaluated in art? This attitude in the realm of art has come about in societies where technology has increasingly transformed the existing personal beliefs with the massive influx of very large and varied information, and this transformation has created an interactive insight into art.

4.3. Computer Art (Digital)

Following advances in technology, the introduction of computers into the realm of new wave of art created the realization of Marcel Dushan's belief on the dependence of the concept of artwork on the audience. Because visual information in digital technology was so flexible, that the image in the language of the medium became information and could be manipulated. Therefore, technological advances encouraged artists to use the modern media to produce their works. Another, technical facilities for strangers were not strange and unfamiliar but were considered as an encouraging

factor, resulting in numerous performances in art. In the second half of the twentieth century, digital technologies such as computers were the means by which computer art was created, and the artistic work of computer and digital tools was formed. Artwork is provided using digital media and in graphic forms. Until the mid-1960s, only engineers and scientists were involved in the creation of computer art through research laboratories. According to Darley, the 60s is a decade of optimism toward computers, as it has solved many social and political problems. In this decade, programmers are beginning to write algorithms that can produce consistent and linear images.

Darley envisages two types of orientation in aesthetics of computer imaging or, in general, digital art. First, in the 1970s, software engineers tried to create tools that could interact with the audience. Secondly, with the help of realistic aesthetics and the realization of boundaries, they tried to transform the virtual experience of the audience into real experience (Moridi, 2015: 94-96). Michael Nol was one of the first digital artists who worked on the quality of telephone transmission. In 1962, he designed a computer that produced a visual pattern for artistic purposes. Computer models produced simulations of Mondrian and Rayleigh paintings (Rush, 2010: 199).

Lev Manovich calls this trend as a balancing act of art and software. By the way, when a picture is presented as a numeric matrix, it can be used to execute various algorithms such as color contrast and contrast, automatic changeover and reproduction (Manovich, 2002: 141-145). This interpretation is very important in computer art. Because in this computer art, they are not aware of the nature of the data, and they all have the same importance at a glance.

5. The Aesthetic of Digital Art

New media, a form of art under the umbrella of aesthetic issues, provided new types of modes and forms of production and consumption through sensory data, and set new challenges for the semantics of the audience. In the era of digital forensics, artwork is never definite, because it is always in the hands of the consumer, both the interpreter and the creator of the work. During the transition from the industrial age to the electronic age, artists gradually become interested in the commons between arts and technology community, which has worked together with engineers and artists such as Andy Warhol, Robert Rauschenberg, Tingley, John Cage and Jasper Jones, and eventually turned into a feature of digital art.

It is worth mentioning that digital media-based arts, for interacting with the environment and the audience, provide new criteria for structuring and interpreting the work. The idea of artistic work as a time-consuming and short-lived existential interferes with the fluid structure of media-centered works and, by placing multiple systems in it, leads to genre displacement. In fact, art based on digital technologies challenges time, place and space and turns into a combination of information retrieval and communication tools; therefore, new insights are created about the creation of meaning, physical presence, and true conscience. Therefore, digital aesthetics is based not on the form's analysis, but on the basis of a structural understanding of the relationship between ontology and observation, and reflects certain developments that are of a computer-like nature (Boccampman, 2001: 25-27).

6. The Meaning of Interaction in Art

From the beginning of the 20th century, in order to personalization and empiricism in the artworks, the artist looked at his existence with doubts. At this time, the artist was no longer looking to create beautiful images. Therefore, conditions were created to make interactive insight in art.

Marcel Duchamp and his associates create works that were sometimes interacting with the audience and the environment. Duchamp emphasized the involvement of the audience and believed that audience is part of the work of art and its completion factor. This idea was implemented in the late 20th century in new and interactive art. For example, the Duchamp's rotative plaques verre (Figure 2), created in 1920 with the help of Man Rey, it is made up of a visual machine and invites users to turn the device on and off at a certain distance, and observe the revealed effects. Transformation of the object into the concept that is embodied in many works of the new art can be seen as the previous generation of the concept of the virtual object as a structure in the works of Duchamp. By looking at the new works, especially the works that are possible to capture and manipulate the images in them, digital art works can be considered as interactive effects

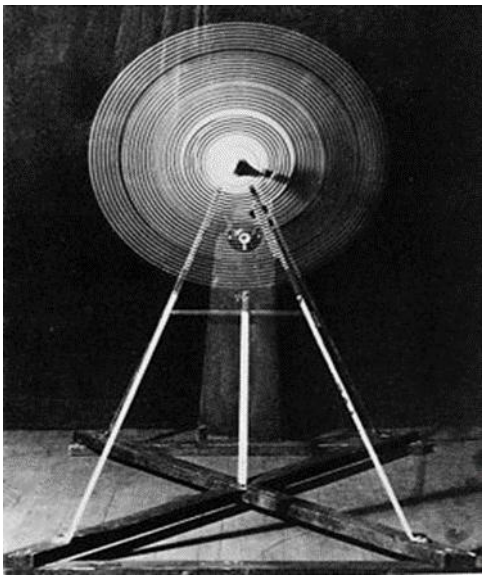

Fig 2 Marcel Duchamp and Man Ray, Rotative plaques verre, 1920 (www.dada-companion.com)

In the new art, the artist uses digital instruments as artistic media and sees it as part of the process of producing his work. Nowadays, with the lack of border between arts and the presence of computer and digital facilities, the boundaries between styles and artistic events are more confusing and by the means of computer images manipulation can take place (Lucie Smith, 2011: 20).

7. The Audience's Position in Interacting with Digital Art

Technology development has stimulated visibility so much that a new kind of movement abstraction emerged and digital art was named (Halby, 2003:180). This art takes two types of orientation. First, software and hardware engineers in the 1970s tried to create that could interact with the audience. Secondly, with the help of realistic aesthetics and crossing the realities of the boundaries, they tried to transform the virtual experience of the audience into real experience (Moridi, 2015: 94-96).

Collaboration between the audience and the author is one of the most fundamental features of digital technology that eliminates the boundaries between the audience and the author, because the audience is able to manipulate and change the content produced by the authors. Audiences can attach something to the original content or even remove something from it; therefore, in the

interactive process, the choice of the audience is important, because it affects the process of formation of the work. For example, in multimedia works, the author finds this possibility at any time to use commonly used expressions in a variety of media; equally, audience can also interact with the quality of content at the same time as receiving a message. It is important to note that in this systematic process, by the impressibility of the emotions of the audience the mental challenge is formed. The artist, with a logical look, transforms beauty into an algorithm, which is generally influenced by the laws of natural and predictable nature. Therefore, what determines the cultural and technological community in a given technological society is the understanding of the following three points: 1. The values of the audience, 2. The cultural expression, 3.Cultural Institutions and their social functioning (Mouchtouris, 2015: 83).

Bourdieu believes that the taste of individuals varies according to their social class. He relates cultural investment with the concept of form or internalized class conditions and its conditionality's, and divides the audience's attitude into two categories. One is a pure look at the production and understanding the works and the other is a practical or non-functional look. At first glance, representativeness is more important in representing the subject. An eye that sees a work legitimate and contemporary is created and cultivated with the creator of a cultural production field. This eye is a product of history and history is reproduced with instruction. The folk patronage of art not only does not refer to art history, but rather shows need for empathy and clarity. Bourdieu notes that the working class people all expect images, pictures or paintings, to work, and their judgments, praised or blamed clearly issued on the basis of norms of morality or custom.

"The audience is the key to understand art, because the produced meanings and the ways in which art is used does not depend on the creators but also on its consumers" (Victoria Di, 2014: 279). According to the institutional theory of art, "the work of art is legitimized by the institution, but it's strength true values are achieved from the welcome received by the audience" (Mouchtouris, 2015: 45). Following the disappearance of the boundary between art and everyday life, the sixties coincided with the emergence of the twentieth century's subcultures and strategies. During these years, Dushan was praised with ready work, and this story has a two-sided approach. At first glance, direct struggle against art and the ultimate dehumanization of art, and moreover, the existence of art in everywhere and everything means that art is found in anti-art and every product and consumer goods, or even in human body and body (Fetherston, 2001: 189).

Audiences are generally associated with artistic works through one of two general aesthetic approaches. People's aesthetics, which is emotional and passionate, rewards visual realism and pure aesthetics that values art not in terms of the subject, but because of its form (Victoria Dee, 2014: 429). They are actively involved with the artwork, because the levels of individual attention to artwork vary. In fact, how productivity and attitude of the audience are determinants. In the shadow of the interaction of the new arts and media, the quality, originality and unity of the artwork collapsed due to the influence of media patterns and the multiplicity of works and made it a cultural commodity in the capitalist system and consumption and industrial production. Conceptually, therefore, the semantic relationship of these works with capitalist society, media and consumer culture is formed. As the decline of the modern age-era isms and the emergence of new media, the classification of work of art is made possible through the productivity of technology in the creation of works. In fact, technology is the basis of designing, creating and displaying work, but what is certain is the presence of a technology user who uses his idea of converting his idea of it as a tool.

8. Conclusion

In the present era, man has an abstract nature and it is constantly changing, and s/he is defined in different ways, for instance, based on place, time, specific kind of media, content, social situations, and tendencies and beliefs.

Digital art in this decade brought about a change in the artist's concept that the work of art had no longer a creator, but a collection of artists and specialists based on the original idea of an artist designer, produced an artwork. The work of art is no longer a unique work; it has the ability to produce and reproduce. Due to the media surge, each artist uses his or her media from photography, painting, performance, film, or animation to create his own work and by taking into account the particular manner of expression, s/he interferes his or her personal with work. For this reason, interactivity is one of the features of these works. This means that the works involves a virtual environment (two or three dimensional), built by the computer, and the viewer often interacts with the intermediaries with the effect.

In the virtual space, it's not possible to categorize the author and the audience. We deal with people who as much as are authors can be considered as audience. In other words, there is no particular difference between the author as creator and the author in the role of the audience. In general, these interweaved roles can be called the user. The digital product spaces and software will put the user in the position of entering the new world and experience. When he enters this world, sees a vast array of possibilities in front of him, and as he experiences the world as a child in which he has achieved absolute freedom and tries to understand the necessities and ethics of this world; therefore, many of the audience come out of the role of the user and they compose and produce something. From this perspective, some audiences, and certainly not all of them, break the old codes and have a new understanding of the aesthetics of the virtual world and a new interaction with the phenomenon of art, which is related to the process of their living and their recognition of this virtual world. So the digital world brings a new identity and brings new characters that have different psychology. In this community, the artist and the audience are in continuous interaction and are constantly evolving.

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IJAPAS
International Journal of Applied Arts Studies

International Journal of Applied Arts Studies

IJAPAS 4(3) (2019) 45–56

The Role of Intellectual Influences in Enriching the Artistic Print

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Received 20 January 2019; revised 27 January 2019; accepted 02 Febuary 2019

Abstract

The research includes a study of the relationship between motives and influences and events that revolve around the artists of the artistic print, and affect the formation of their thought and artistic style, and determine what those influences, through a review of a range of printed artwork, resulting from these intellectual influences.

There is no doubt that artistic creativity is one of the most important and complex intellectual issues, because it is related to the hidden sensations of the artist resulting from the intellectual influences and motives surrounding him, which resulted in his artistic work; therefore, the researcher sought to identify the motives and intellectual influences that influenced the formation of the mind, imagination and conscience of the artist of the contemporary artistic print, and discover new or unclear contents in his artistic output, to reduce the gap between him and art connoisseurs. As a result of these influences, the artistic print evolved form and content with the development and penetration of modern arts in the depth of the daily life of the contemporary artist, where the artist tended to develop his artistic methods in order to interpretation the formal and aesthetic aspects, and to meet his intellectual needs, and emerged in the new technological environment modern works were a reason Directly in a significant and tangible change of both form and content in modern and contemporary graphic arts.

Keywords: Intellectual Influences; Artistic Print; Graphic Art; Thought and Art; Intellectual Content; Sources of Thought

1. Introduction

The diversity of intellectual phenomena and trends that have multiplied and varied since the late nineteenth century until now , seems to be putting a barrier to the discovery of the unity that brings

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these phenomena together, so trying to link this large flow of theories, doctrines, methods and artistic movements seems very difficult, but The meaning behind it necessitates the need to try to look behind the intellectual influences and motives that formed so many different artistic styles and trends, because their development has already become a phenomenon in which many social, economic and political changes may have combined, and other The influences that shaped the thought, style and direction of contemporary artistic print artists.

The aim is to promote cultural and artistic needs to satisfy our intellectual, skill and creativity needs, because the resulting intellectual trends will enable those who work in the field of art to provide them with all their new effects and results, in order to raise the level of visual art culture, and to keep pace with the spirit of the times, and understanding those experiences, trends, methods and turning them into artistic templates, with origins and roots, and we will see together these influences because of their positive impact in developing artistic abilities, and giving the audience the content of artistic culture.

Contemporary visual art has begun in its revolution on the absolute, and rejected mental thinking, and in the last century destroyed all stereotypes, formulas and schools, in exchange for new results, similar to the reality of the times, and became merely a commitment to the idea mean closing in a mold, then immobility; And Since the day that Paul Cézanne broken limits vision, nature, reality, and things, the fine art revolves around experimentation.

The artistic experience through the ages has passed in many forms that was a criterion for the level of awareness of the artist, as the development of the experience depended on the events that occur around the artist in the form of scientific, social and ethical progress, and progress was vigorous in the whole experience until the twentieth century, the era in which artistic thought developed much more what has happened to it in all past times. The development of plastic art thought in the last twenty years alone is the equivalent of all developments in the past, and thus the thought has been influenced by reality and the circumstances of contemporary life, and by scientific and technological changes, and with the increased speed of the human mind." (Wehbe, 2017) Any change, or development in any direction or stable situations in social, political, intellectual, etc., must have sufficient incentives and influences, as in the artistic movement, for example, large changes cannot appear suddenly and without introductions.

Through this research, the researcher tries to answer several key questions that go in one direction: Does art develop in its own inner space, without the intervention of any factors that belong to a field outside of it? Or are there external influences and factors that lead to different trends and schools in an artistic print? Can the art be clarified only through art itself, or is it seen within a broader framework, the framework of social life and human civilization in general? .. Is the artist's personality and the individual circumstances he has gone through enough to provide sufficient explanation for the emergence and disappearance of certain artistic trends, because of the clear correlation between these trends and the intellectual influences prevailing in the same era?

Talking about this problem in certain historical periods is difficult and complicated, given the lack of information about these time periods, it requires sufficient knowledge about social, economic, political and other influences, and because this research is related to our present time, there is no problem in this regard, but the real problem is that human societies are increasingly complex, and the link between art and the intellectual influences surrounding it has become more ambiguous, and it needs many careful studies to capture and interpret this link, hence this research has come to be a step in this area.

1.1. Research Problem

- Trying to determine the extent to which political, social, psychological, environmental and other circumstances affect the composition of thought and artistic direction of the contemporary graphic artist.
- Trying to determine the extent of the influence of thought in the contemporary artistic print.
- Trying to identify the intellectual influences that contributed to the formation of artistic trends of contemporary Graphic arts.

1.2. Research Objective

- Shed light on the effects surrounding the artists of the artistic print and recognize about their impact on the composition of their thoughts.
- To illustrate the relationship between the philosophies of contemporary thought and contemporary artistic print.
- To raise the cultural and artistic level to the perceptions of the times, to satisfy our intellectual and creative needs.
- Review examples of the most important contemporary graphic works in intellectual, artistic and aesthetic terms.

1.3. Hypotheses

- There is a close relationship between the contemporary artistic print and the circumstances and variables surrounding its artists.
- Intellectual content is one of the most important elements of contemporary graphic art.
- Intellectual influences have influenced the artistic print and made it sometimes more diverse and sometimes ambiguous.
- The various and non-traditional forms of contemporary Graphic art are the product of the diversity of thought sources.
- The presence of intellectual content in graphic artworks helps to enrich the expressive aspects.

The importance of research: The importance of research lies in the study of:

- The impact of political, social, economic and other conditions on the contemporary artistic print.
- The role of thought in enrichment and development of contemporary artistic print.

Limitation: Time limits: from the beginning of the twentieth century to the present. Spatial boundaries: in the world.

2. General Influence that Affects the Artwork

- Sensory influences: Natural sensations such as love, hatred or joy are evoked.
- Mental influences: provoke the mind and thinking such as rejection, admiration and disapproval, which are mental reactions.
- Psychological influences: it speaks to the subconscious mind and experiences within the subconscious.

3. Intellectual Influences in Contemporary Graphic Art

Graphic art is closely linked to the personality of the artist and society, through the applications of Graphic art in the various fields of life, where we find the relationship between the printed artwork on the one hand and the human soul on the other, as well as with the environment in intellectual terms, cultural, religious, political and social, where its media and applications surpass all other arts, it is an integral part of the cultural work and has a direct influence on daily life, and its artists are not a group isolated from the rest of society, but in fact they form a large part of the collective mind, so the contemporary Graphic art is the closest contemporary art to society and the most influential.

After the concept of the creative process became complex, especially after the arts developed in the modern era and many schools and the world recognized in it countless individual tendencies, the artist goes through the process of creativity with many developments and many thoughts and experiences influenced by the circumstances surrounding him, through his environment and his Social and economic circumstances. These factors affect the process of creative thinking and artistic production.

Creativity is a manifestation of the fertility of thinking, but the creative person is the one who has a delicate sensitivity and the ability to perceive the gaps to produce an artwork in which the creative process is available in it, expressing what is inside his mind and what is going on in the unconscious area of visions and his own stored experiences, begin to go out through his artistic activity, and the connoisseur receive it also through his own culture and the circumstances of his society, the artist has ability to store the mental image related to the art that he is interested in and practice, the printmaker stores many visual images in his mind, as well as the sculptor stores concrete mental images, and the musician stores mental images Audible, where the artist's delicate senses can receive the senses which encounter, the mind transforms them into mental perceptions in the form of images that follow and store in his imagination; Graphic art had to have a big place in the creative aspect, It eliminates the dominance of exaggerated technical performance to creative expressive performance, through creative factors influencing the graphic artist through his tools, techniques, materials and technical innovations that have emerged with the amazing development in modern technology" (Omar, 2012).

4. Most Important Factors that Influenced Artist's Thinking in Modern and Contemporary Art

4.1. Social Revolutions and Wars

The popular revolutions had a fundamental impact on comprehensive change, as the revolution changed all the previous rule and the foundations that prevailed, as in the French Revolution, which contributed to the emergence of contemporary French and European society in general, as well as the different role of art and the message of the artist And his freedom, revolutions are the generators of freedoms; wars have had a great impact in changing society's view of political and economic systems, as happened after the two world wars, where the impact of the war on intellectuals and artists was great. The impression of artists is the total collapse of traditional values, which led to the sense of absurdity of existence represented in the group of Dadaism, art after the end of The First World War rejected all that is a constant classic, inherited and antithesis of the movement of society.

4.2. Theories of Contemporary Philosophy

The philosophies of a phenomenological approach of Martin Heidegger (September 26, 1889 - May 26, 1976) have had an impact on the movement of art, he did not tend to study the personality of the artist but he went to study his work as an artistic phenomenon, as the ideas of Karl Marx (5 May 1818 - 14 March 1883) and Sigmund Freud had a great influence since the beginning of the twentieth century, and began ideas that emphasized the importance of inspiration that Considered reverse the logic.

4.3. Scientific and Technological Progress

The twentieth century is a very rich period, in which many artistic trends have emerged in a broad and successive way that encompassed all aspects of knowledge, thought and art, as a result of the expansion of the fields of science and technological progress, and art began to run parallel to this progress.

4.4. Artist Culture

The cultural dimension of the artist is an essential element in the formation and formation of his artistic personality, which reflects greatly on his creativity and artistic direction, it serves as the driving force to move his feelings and stimulate his imagination, and to open the horizons of creativity and bring new and dazzling.

5. Literature as an Intellectual Influence in the Artistic Print

"The word in literature expresses all intellectual concepts, and with the advent of printmaking the word has been transformed into symbols, images and visual forms, making it faster, easier to reach the recipient and more enjoyable,' the fantasies of symbolic literature continued to exert their influence, generating writings by symbolic authors of literature, such as Edgar Allan Poe (January 19, 1809 - October 7, 1849) and Joris – Karl Huysmans (February 1848 - May 1907), who interpreted imaginary traditions and hidden sub-fantasies in the arts, for example, observing dreams, fantasies and subconscious dominating the paintings of artists such as Gustave Moreau, Odilon Redon, and De Champs may also have absorbed the symbolic vision of the literary vision" (Minnick, 2002).

The beginning of the 14th century was the beginning of the European Renaissance, at the same time as the famous divine comedy by Dante Aligieri (1265-1321) the father of Italian poetry, composed between 1307 and 1321. One of the most important artists influenced by the divine comedy in their printed artwork is Robert Rauschenberg (October 22, 1925 - May 12, 2008), he is an American photographer and printmaker, and although Rochenberg derive his ideas from American folklore, he became one of the artists whose moved between abstract expressionism in the 1950s and the new pop art of the early 1960s with his outstanding artwork distinguished in form from other works of art at the time.

In late of 1958, Rochenberg began working on a two-year series of works consisting of thirty-four illustrations of the Divine comedy by Dante Alighieri's thirty four songs, including his work The Dark Wood of Error (Fig. 1), and in some of these works he used collage technique through photographs. In some of these works he used the collage technique through the pictures of newspapers and magazines that he attached in his works.

Fig 1 Robert Rauschenberg - The Dark Wood of Error - From the series of thirty-four illustrations of the songs of the Divine comedy - Offset lithograph – (28.89 x 36.51 cm) - The Museum of Contemporary Art, Los Angeles – 1958. (197)

6. Social Influences

Art, like society, develops and changes, some of its branches progress, while others lag behind, and these changes have their causes resulting from the relationship between art and social reality, along with many other intellectual influences. The control of a particular social climate necessarily affects the general climate of thought and art. "Marxist historians and critics of art - a development of some of the views that appeared briefly in Marx and Engels book - supported the concept of cultural progress and development, saying that works of art, like all aspects of culture in a particular social class, were defined primarily by historical social conditions, They stressed that there are necessary relationships between visual arts and socio-economic conditions, and these relationships can always be discovered" (Kleinbaur, 2002).

"Socialization is the area in which the artist acquires - from a young age - knowledge, values, ways of thinking and all social and cultural elements, it works to promote generations through the necessities of life provided by the family, as the primary community to which the individual relates, in addition to what the school contributes in a social, scientific and educational activities that helps him acquire new knowledge and skills, but the composition of the artist is determined not only by what these two institutions offer, there are other ways of developing and enriching previous knowledge, namely, media, which include advanced technologies, which help him to understand what is happening in society.

Media has been dominated in our world today in various fields, whether social, cultural, political or artistic, and has resulted in fundamental changes in social arrangements and formations,

lifestyles and patterns of thinking and behavior. In this context, Wilbur Lang Schramm (August 5, 1907 - December 27, 1987) says: ((The media can expand horizons, it makes man see and hear what he cannot know with first-hand experience, and to recognize people he would not have known had he not been exposed to the media.))". (Jamal, 2007) One of the most important artists influenced by social life in their artworks is the French artist Edgar Degas, as evidenced in his work Marie Cassat at the Louvre: The Etruscan Gallery (Figure 2).

Fig 2 Edgar Degas - Mary Cassatt at the Louvre: The Etruscan Gallery - Soft ground etching + drypoint + aquatint + etching - plate 26.9 x 23.2 cm / Paper 35.7 x 26.9 cm - (1879 - 1880). (1941)

7. Heritage as an Intellectual Influencer

"The 19th century was invaded by a tendency to sanctify the ancient Greek heritage of art and literature, and the enthusiasm of some artists and writers reached such an extent that they were sent to Greece to saturate Greek idealism and thought closely, and in this way we recall the literary Lord Byron, who was inspired his inspiration from his enthusiasm for the cause of Greece and its ancient heritage, and then the inspiration for artists, writers and musicians from Greece to Italy, especially Rome, became the direction of every art student. No matter how much the artist's production is steadily , no matter how mature it may be, it is considered incomplete, or rather regional, in relation to the artistic level of Rome, Therefore, the countries of the world were all sending their talented in the arts to Rome to inspire their inspiration from their civilized art, and the period of inspiration from the art of Rome followed another period in which Paris became the cradle of art, in which Chopin (1810-1849) inspired his Polish music, and inspired by Franz Liszt his Hungarian music, and Whistler (1834-1903) in painting, that he's leaving from America is to glitter his artistic character in Paris, as came Grigorescu from Romania, Van Gogh (1853-1890) from the

Netherlands, and thousands of other from Germans, Russians, Sweden, Norway and Spain" (Al-Khadem, 1993).

The construction of the artwork on the basis of heritage is in fact a foundation of deep-rooted humanity and strong cultural values, and therefore we should not abandon the national heritage out of the desire of development and progress, or stand motionless on the pretext of preserving the heritage, but must combine heritage, its value, development and its many additions.

"The artist is inherently experimental, tends to dive into the origins of forms, researches the art of civilizations, and tries to enrich the sources of his vision, there are many international artists who have benefited from the Islamic heritage, including Maurits Cornelis Escher, who benefited from the idea of integrating form and ground in Islamic art, and creating complementary relationships between them through color spaces or color groups, also benefited from Islamic arts Piet Mondrian through the idea of abstraction and simplification, horizontal and vertical relationships between symbols and shapes, what happens some spaces Geometry is like rectangles and squares that the Islamic artist has followed in expressing his art, which he saw as being consistent with his religious beliefs" (Yousef).

In the work (Figure 3) of Morits Escher entitled Puddle is a realistic depicting two perspectives at once, depicting a road with a large pool of water, and when the work is turned upside down and the reflection in the water, it becomes a depiction of a forest with an upper moon; the road is soft and muddy and has two different groups The tire tracks, two sets of footprints, are moving in opposite directions and two bicycle paths; Escher has focused on three elements in this work (water, sky and earth).

Fig 3 Maurits Cornelis Escher – Puddle – wood cut including three plates printed in olive, brown and black ink on thin Japanese grain paper - plate 23.9 x 32 cm / paper 29.3 x 37 cm - Rosenwald Collection – 1952. (1943)

8. Culture as an Intellectual Influencer

The cultural dimension of the visual artist is essential in the formation of the artist's personality and directly affects his creativity, it serves as the necessary charge to arouse the imagination of the artist, and give him the impetus so that he can innovate and continuous creativity, the artist needs to be constantly provided with new knowledge and experiences In various fields and intellectual, mental, sensory and emotional trends, it has sufficient stock to draw out alternatives and technical solutions and make aesthetic and expressive decisions that keep pace with the state of creativity.

The cultural dimension of the artist means not only cognitive accumulation, but also a mine of feelings, reflections, thoughts and visions, which make each work of art a self-contained world, and whenever these feelings are intimate and glowing, results an art that reaches the recipient immediately, so that each passes through the same psychological and aesthetic experience that the artist went through during the creation of his work or a situation close to it at the very least, thus turning the visual artwork into a melting pot of ideas, feelings, experiences, knowledge and all that the artist is exposed to.

The integration of different cultures is the way to increase fertility and artistic richness, and to achieve a rich and pluralistic culture, because one-type culture produces a sense of boredom and repetition of artistic forms, so people aspire to dialogue and mixing cultures while each culture retains its roots, character and traditions. There is no need to cling to subjectivity and individuality, and this does not mean that the time of individuality is over, but with the artist's immersion in automated production, he sometimes needs to overlook individuality and self-expression; And the American artist Warrington Colescott (March 7, 1921- September 10, 2018), is one of the contemporary printmakers, who embodied American culture in their printed works, as in his work entitled In Birmingham Jail (Figure 4), which supports Through it, civil rights conflicts in the South, and rebuke racism and the violence of the corrupt regime.

Fig 4 Warrington Colescott - In Birmingham Jail - drypoint + aquatint + etching + Roulette - plate 45.1 x 60.1 cm / paper 54.4 x 72.5 cm - editions 20 – 1963. (198)

9. Environmental Influences

The process of creativity in the arts in general and in the art of printmaking in particular often results from some visual effects, such as things that fall on our eyes no matter how simple or preliminary, and the realization of some familiar things in a new and unusual way, and the artist may find his inspiration under his feet or around him, or inside himself; and the imagination is not something completely separate and isolated from reality, imagination is the summery of the experiences acquired by the artist as a result of the constant interaction between him and the environment in which he is present, and through countless mental images, so imagination is one of the most important pillars of the printed artwork, where It sometimes requires a lot of different treatments, technical formulations, and creation of new relationships between artistic elements, and new compositions and formulations, which come only through the process of imagination.

"Ernst Fischer (July 3, 1899 - July 31, 1972) also realizes that there is a distance between man and nature, and at this distance there is art. And this distance, no matter how much we try to cross it, is indispensable. He says: ((***Man is an object that forms and still forms himself, which is incomplete and imperfect, and will never be complete, but it nevertheless constantly forms himself, as it forms the world around him.***)) and the artist Mondrian says: ((***Art can disappear when life reaches a higher degree of balance***)), and Fischer realizes the impossibility of this s, he said: ((***The existence of a permanent balance between man and his world is unlikely, so art will be as necessary in the future as it was in the past***.))" (Mujahid, 1997) Mondrian has researched the absolute image, which is based on simplifying the construction of shapes and objects in pursuit of total serenity, clarity and simplicity, as in his work entitle Composition of Blue, Red and Yellow (Figure 5), Mondrian searched for a pure aesthetic, based on the organization of relationships, color spaces and lines, starting in black and white.

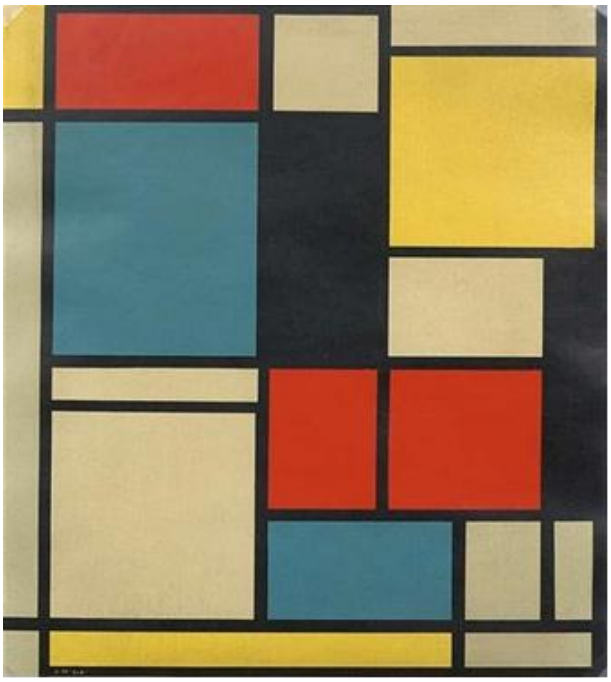

Fig 5 Piet Mondrian – Composition of blue, red and yellow – silkscreen - From the series of The victory of color - 44.5 ×38.5 cm – 1924.

10. Conclusion

1. The realization of new or unfamiliar artistic values in contemporary art is an incentive for the artist to resort to the creation of new non-traditional techniques, so that he can offer the recipient a new form of unrefined artwork.

2. Many of the original and innovative types of graphic arts carried a common thought, but differed in addressing this thought, which had an impact on the artistic values of the graphic art product.

3. Influences (literary, social, environmental, heritage, and culture), play a major and direct role in enriching the contemporary artistic print.

4. The intellectual symbolic nature prevails in the art of the information age, so the function of art is not limited to matters related to taste and aesthetic development, but has become closely related to the development of the thought itself.

10.1. Recommendations

1. Increasing exhibitions and art workshops for the artistic printmaking course in the Arab world, and encouraging intellectual and technical creativity by experimenting with modern technological media and integrating them with the original techniques of this art.

2. There is an urgent need to enrich the graphic art by increasing its educational possibilities in universities and educational institutions, to confirm the status of the graphic art in the Arab world in the same or nearest place as it has reached in international art.

3. Increasing scientific research in the specialization of the artistic print, especially with regard to the role, importance and impact of thought.

4. Establishment of studios specializing in the art of printmaking, similar to The Atelier 17 studio created by the artist Stanley William Hayter, represented a paradigm shift in contemporary artistic printmaking in the West.

5. Work to increase artistic awareness in Arab culture, and related to issues of taste and aesthetic sensitivity, by teaching aesthetics and artistic education in Arab educational institutions, at their primary, secondary and university levels.

6. Establishing a strong relationship between our creativity and modern technology, and this requires concerted efforts in the study of creativity in the Arab world from its various intellectual aspects, and to take advantage of technological innovations to enrich these intellectual aspects.

7. We must speed up the teaching of modern technological media for the artistic print, theoretically and applied in Egyptian and Arab technical faculties, to catch up with the tremendous development in this field.

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Available online at www.ijapas.org

International Journal of Applied Arts Studies

IJAPAS 4(3) (2019) 57–66

A Semiotic Study of the Relationship between Form and Content in Theater Posters (Case Study: Women's Trick Play (1943))

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Received 17 August 2019; revised 10 November 2019; accepted 11 January 2020

Abstract

Audience is one of the important pillars of the theater art. One way to win the audience's attention in the theater art is to use the announcement (post). A poster is a medium to state the messages and convey the concept. One of the ways to transfer the message is through the signs and its application to the visual arts and poster will be examined in this research as the field of signs' transfer. We deal with an investigation into the semiotics of the relationship between form and content in theater poster in 1950s (1941-1951) in Iran. In this era, the posters are often typically copied from European ones, which are reproduced in stone and monochrome, with no signs of the designer name on themselves. This study seeks to achieve the main purpose, which is the main characteristic of the posters and the relationship between poster form and its content with the play content in 50s decade referring to its findings and studies in relation to the issue in question i.e. an investigation into the relationship between form and content in theater posters in 1950s. The research specifically addresses the issue about the women's trick theater poster (1950s).

Keywords: Theater Poster; Form; Content; Layered Semiotics; Women's Trick Theater Poster; Iranian Graphic History

1. Introduction

Poster is the first means of providing information for the communication between the message sender and the message receiver and became closely associated with the painting art more than any other arts in the first century of its life. The form and orientation of the painting art in the twentieth century was greatly influenced by the particular nature and limitations that existed in the

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advertising practices of that century. Poster is considered to be one of the powerful artistic and advertising tools in the theater, and when the show group devolves its poster design, which is one of the most specialized section in graphic, to a skillful designer, then they will witness a successful output. However, when this is done in an unprofessional way, the show poster depreciates at the level of a worthless advertisement in "visual" terms. Therefore, the show will be deprived of having a permanent visual effect, and this can be an inevitable end to a mortal art (Husseini, 1380:8).

Theater poster is one of the most important graphic branches, the production process of which involves encountering and accompanying two arts of graphic and theatre and its space is much more attractive than industrial advertising posters. Theater posters are tasked with informing and winning the audiences irrespective of visual registration of the show date. Theater posters are a window into the world of a play. However, it should also be noted that pedestrians never go out to see the posters, but instead the posters should attract the audience with all their thought and business concerns and convey their message and words in the best possible way as soon as possible.

In general, image and writing are the central element of the announcement and pose its existential character, it is fundamental and the main language of the announcement. The content in the poster is the meaning and main message of the poster in which form and image formats are used in addition to the writing element to express it. The content of theater posters has two parts: 1) theater advertisement; 2) play content. A theater poster is presented as the theater's birth certificate and introduces the name of the theater to the audience in its first move, then gives the audience an idea of what kind of theater the audience will go to watch and up next, announces the show time. The theater without poster would not be shared with its audiences. With these interpretations, two major purposes can be perceived for designing show posters. One is the theater promotion and the other one refers to the title and content of the theater and having proportionality and coordination with the theater title.

Nowadays, perhaps one of the biggest problems of our theater art is the lack of knowledge on the signs, because our awareness to the path and goals will be increased due to recognition of semiotics science in this art. Studying this science can help us to be aware of the signs' role and the role we and others play in establishing the facts of theater art. In the years 1940-1950, the theater was used to advance political and advertising purposes. Theater art was considered as a symbol of progress and intellectual growth during these years and due to the high illiteracy rate in the country, the press was not welcomed, and therefore stagy activities were well welcomed. The present study is about some part of Iranian graphic history. Since the theater art is popular, it is an art for the people, and graphic is the most popular art. Popular artistic investigation in a graphic format such as a poster can help us achieve the art that is rooted in our culture. It should be noted that not every poster is capable of attracting audiences, and viewing a poster does not mean more spectators for that theater. The present research is made out to study the posters (1950s) that have been performed in Iran and investigates them in terms of form structure of the content with regard to the semiotics science. Therefore, we are going to get involved in a case study of women's trick play poster (1943), one of the posters of 1950s in Iran in this study and to investigate it in terms of content and form structure in layered semiotics method with this particular type of content, based on the fact that which proportionality exists between form and content of women's trick theatre poster with theatre codes and signs in the play text. Two main questions of this study are as follows:

1- What are the main features of the women's trick theater poster (in 1950s)?

2- What is the relationship between the content of the women's trick play and the content of the women's trick theater poster?

2. Semiotics

We considered the semiotics as a theoretical framework theory. Semiotics is the science of studying sign systems (language, codes, etc.), interpretive processes, and research tool to understand the hidden truth behind the signs, mysteries, and cultural symbols and signs (Tajik, 2010: 7). It is the knowledge in which signs are studied, identified, and categorized. Putting an image in a frame transforms it into a text that takes on indicative and meaningful functionality and different layers could be explored (Jamali, Sheikhi, 2018: 72).

In addition, it can be said that the semiotic approach seeks to discover and read the relationships between systems and signs of work by relying on the text world and it's most important purpose is to discover the meanings of languages, codes and symbols (Jamali, Sheikhi, 2018: 53). One of the most comprehensive definitions of semiotics is the one of Umberto Eco in the book of The Principles of Semiotics: "Semiotics deals with everything that is considered to be a sign. In semiotics expert view, words, images, sounds, hints, gestures, and alike can be signs. Semiotics expert do not study the signs in isolation but they have focused on studying the formation and exchange of meaning in different texts and discourses at "synchronic" and “ditchronie” levels (Chandler, 2007: 85).

Semiotics will clarify for us what the signs are made of and what the rules dominant on them. (Emamifar, 2011: 3) Ferdinand de Saussure, the Swiss linguist, and Charles Sanders Pierce, an American philosopher, who lived more or less in one single historical period, are the main founders of what is currently called semiotics (Sojoudi, 2002: 83). Since the domain of the semiotics study is any textual domain that is based on codes or codes in production and exchange of meaning, so it becomes interdisciplinary in nature (Fayyaz, Sarafraz, 2011: 94) so, we decided to investigate the case study (women's trick poster) accordingly.

3. Image Semiotics

As of 1950s, semiotics has been a research method, which was especially used in two domains of cognition of indications and perception of communication mechanism (Shokri Kiani, and Kharrazian, 2014: 19).

The purpose of image semiotics is to discover the rules of reading the image and to understand its meanings through discovering visual elements or apparent face of the image, which leads to the analysis of the visual elements configuration and then the analysis of the shapes and discovering the meanings of the image model will be achieved (Shokri Kiani, and Kharrazian, 2014: 19).

Sometimes symbols and visual signs can convey information that words cannot. According to Bart, the image is more aggressive than the writing; the image is a more accurate sign. The model is several times closer to the subject. The image changes into a writing from the moment that signifies and in this way, it is called the unit of reading like the writing, however, what we know under the title of linguistic systems also contribute to the media and meaning production through intertextuality and sometimes give narrative connotation to the subject (Hassanvand et al., 2005: 98).

Drawing scenes, designs on the wood, fabrics, stone, picture, TV and cinema images can be perceived as images. In the visual arts, the imaginations of poets and artists are visualizations that get alive and the artists portray the meanings of the message from their point of view and two kinds of meanings are formed in the artistic works at this time. The first is the explicit meaning and the second one implicit meaning, each of which has a specific role in conveying the message from the speaker to the audience.

4. Layered Semiotics

Sign is an analytical concept, and the analyst first confronts the text anyway, and then he/she may resort to a tool called "sign" and how to associate it with other signs in other sign systems (Sojoudi, 1, layered semiotics is the result of the discovery of the close relationship between layers of association and multiple cultural codes. In layered semiotics, semantic and semiotics layers are searched and explored. ((Layer marks, as theoretical views that underlie typical applied semiotics, provides the ground for extensive analysis of texts in the context of an interactive and multi-faceted relationship between sign systems and text layers with a complex network of relationships)) (Sujoudi, 7: 2011). Layers form the text in association with each other. The significance and position of the layer semiotics is understood when it provides the examination of multimedia texts, and the picture has gained a prominent place in non-linguistic sections of life in the current era, and even the language itself has gained considerable visual aspect through the visual representation of writing, too. Indeed, it can be possible to evaluate all the different layers that create a multimedia text from the audio layers, which encompasses conversations, music, ambient sounds, and meaningful silence, through visual layers including line and picture and line’s sign possibilities with each other (Sujoudi, Farzan 2003: 87).

The text is sometimes a combination of multiple layers, some layers being the main ones. This number of layers causes to create different signs and special codes in the texture of the work. Investigating the association of the visual world and written text and examining the symbolic, indexical, and syntactic signs causes the reading of the layered signs (Hassanvand et. al, 2005: 97). Undoubtedly, layered semiotics signs can contribute to theatre, cinema and visual arts semiotics especially graphics (Shokri Kiani, Kharrazian, 2013: 34). In addition to responding to the implications of a text, layered semiotics provides the means to flourish the latent talents of the texts and to reveal its hidden implications (Jamali, Atefeh, 2018: 57-56). It is therefore possible to divide a work into several layers and according the analysis made, firstly to explain the work and then analyze and finally interpret it. These whole factors provide the analysis of an artwork and hence, we first introduce the ingredient layers of the work.

The constituent layers of a work are:

- *Context (designer's main elements)*: All the elements used in the work to convey the concept including the writing, color, composition, image, visual textures etc. are collectively referred to as "context" semiotics.

- *Message*: The message and meaning in a work are expressed in both explicit and implicit ways. The explicit meaning refers to the relationship between a word with the audience's experiences or in relation to the non-linguistic object. Explicit meaning is a meaning that is more prominent in the vocabulary of the audiences among the multiple meanings of a word, and the implicit meaning can be understood as a concept and meaning farther than the explicit one.

A: Explicit message B: Implicit message

Layer: Each of the constituent elements of the "context" has its own special segmentation. Generally, the layers existing in an image can be named in this way.

Writing (text) layer: This layer contains all the texts existing in the layout including lyrics, text, numbers etc. and the type of the writing and line used whether calligraphy or typing, the textual attribute of the writing(for example, if a particular concept is emphasized in the text) will be fully described.

Image layer: Images used in work includes photography, illustration, painting, etc. are introduced, and its details such as form, extent, meaning, etc. are introduced.

Color Layer: This layer introduces the colors used in the work separately along with the meaning of the color according to the work and is also measured in composition section in terms of breadth.

Composition Layer: It includes the design fundamentals' principles such as: types of rhythm (alternating rhythm, non-alternating rhythm), contrast (color contrast, size contrast, direction contrast, etc.), composition etc (Shokri Kiani, Kharrazian, 2014: 34-35).

Case study: women's trick theater poster

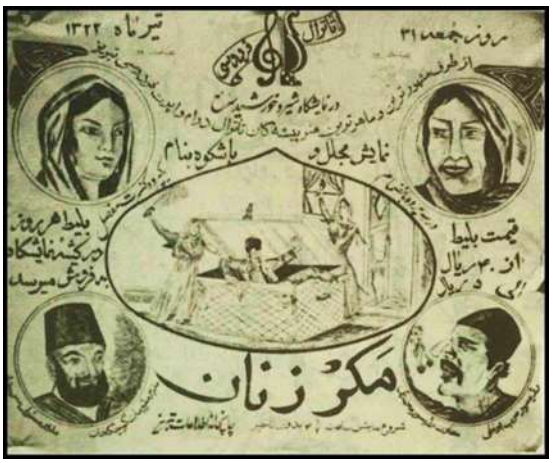

Fig 1 Women's trick representation (play), Year: 1943, Quarterly of Theatre for theatrical Researches, No. 4 and 5.

Poster description: Picture (1) of the play announcement (women's trick). This announcement was published at Tabriz Information Printing House on 1943. The show was performed on Friday, July 23, 1943 at Lion and Red Sun Exhibition by Ferdowsi Theatrical Actors, magnificent and glorious show of women's trick in three scenes, including a detailed concert scene directed by Arab Oghli, deputy director: Mohammadi, director in charge: Sarhaddar.

This poster was designed to represent women's trick on 1943 and was published in Tabriz Information Printing House. This poster was printed in black color on straw Alvan paper. The printing house name was put in some place of the poster (mainly at the footer of the poster) that probably either was a signature, that is, they put the printing house name to emphasize their professional identity so that everyone would know in which printing house the poster was adorned or likely had an administrative aspect namely police, municipality, finance office or any other public organization be able to observe print works and identify potential violators, due to these reasons it was approved that the name of the printer be engraved at the bottom of the printing work. There is no information of the poster designer. The announcement is horizontal and the organizer's logo is shown at the top of the page and the day and month are mentioned around the logo. A combination of picture and writing are used in this announcement and different sizes of writing are applied on the announcement and have taken up the picture of more space of the announcement screen. In the announcement of women's trick, the image is dominant on the writing at the page and the writing has less visual value.

A story is about to be narrated in the middle of the design, with two female portraits on top and two male portraits on the bottom of the narrative. The frame's blank spaces are filled with the text between the pictures, and the title is seen larger than the other texts with the Nastaliq line at the bottom of the frame.

5. Semiotics Analysis of Women's Trick Poster based on Layered Semiotics

5.1. Layers Existing in the Image

Text Layers: The text in this image contains two sections.
A) Textual written with Nastaliq line in fine and sometimes change in thickness of lines

Fig 2 Women's trick representation (Authors, 2018).

(B) Title of "women's trick" poster written in Nastaliq script.

Image Layer: The image layer in this announcement contains three sections.
A) Portrait and figurative

Fig 3 Women's trick representation (Authors, 2018).

b) Forms

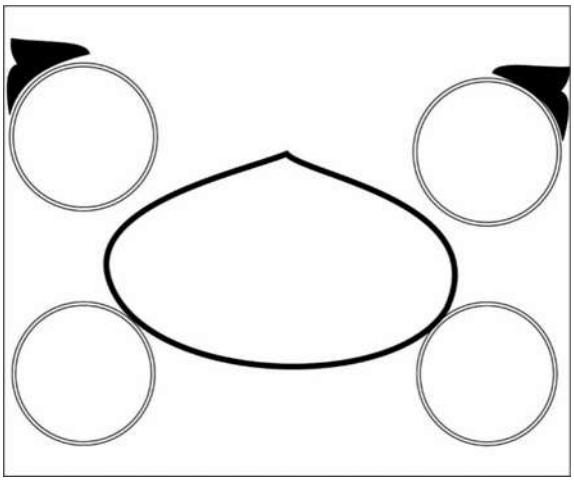

Fig 4 Women's trick representation (Authors, 2018).

(C) The logo of the organizer center

Color layer: During these periods, the announcements were often printed in monochrome (black).
Composition layer: The composition in this announcement is symmetrical. In this poster, the visual and written elements have occupied the entire space. The main visual element that narrates the story is centered in the frame. The text’ s layout is accompanied by angle change, which rotates the viewer's eye across the page and draws the eye to the main element of the design, which is centered. Proportions are not abided in the announcement. The settings are approximate, the forms are not exactly aligned

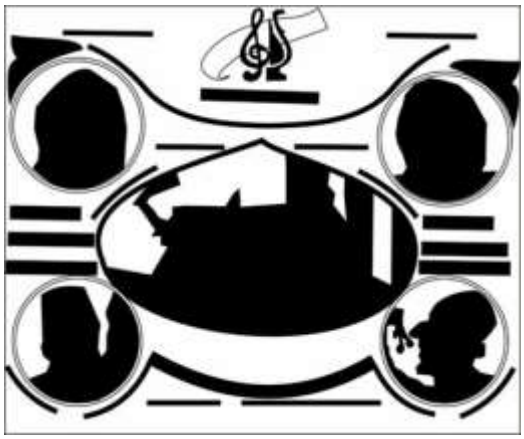

Fig 5 Women's trick representation (Authors, 2018).

5.2. Analysis

In this poster, the designer has combined the text and image with each other. In this announcement, the designer has considered the announcement message, which includes the signal received from the play, in the center of the box in the center of the audience view because of its importance. In the above announcement, it seems the announcement designer has designed the announcement with a full awareness based on the playwright and signs received from the playwright. It is as if the designer depicts the main characters of the play on the page in the structure of the announcement and uses a circular form, which is complete shape and represents movement, repetition etc. At that time, the artist used the portrait of the actors in a drawing style inspired by the painting art with regard to the type of illustration of that period. By simplifying, or so-called "stylizing" the image, they began creations, the similarities with the subject of which is still distinguishable for the public in all their simplicity and briefness.

At the very simple iconic level, there are signs in each play that bring about a similar mindset in the mind of the theatre actors from a director to actors and costume and scene designers and ultimately to the poster designer and the designer can communicate with the audience by considering these signs in the announcement and make them happy to see the show. The designer has used iconic signs in this announcement, which would be immediately recognizable, are the direct image of the subject. These "icons" can be both realistic and photographic or very refined. The very important point in this announcement, which can be mentioned, is the story of the script, which deals with the women's trick that is evident well in the image at the center of the announcement. The designer has put the picture in an almost oval frame, which is centered and is focused on the inside and associates a balanced situation, referring to the infinity and infinite concept that is perfectly consistent with the women's trick, which is permanent and infinitely compatible.

Representation of the theater scene for interaction between the viewer and producer of the image is made as well in this announcement. Women's image being placed at the top of the announcement refers to the ideal position or real essence and in terms of ideality of an element, it means that the element is in an ideal position or general essence of the reality, so placing the women’s image at the top makes us near to the title of women's trick show, which is an intrinsic trick and this part of the image is ideologically the most prominent part of the image. And the men's image being placed at the low part is real and very close to the terrestrial data and goes away from the divinity (that is why we write "In the name of God" at the top and center of the page). Using the writing elements at the top and below has semantic implications for the importance of lower text: (terrestrial), high (heavenly) relative to the image. The image element has been imaged and designed to further emphasize the title and to fully serve the content of the announcement. Choosing the proper color is a major contributor to the effectiveness of the poster and success in its informing task, but what is certain is that the past artist was involved in printing limitations and inevitably used monochrome announcements, which was often prepared in stone and lead printing method. Because printing technology in Iran had not advanced as much as today and the proliferation of posters was limited to the incumbent possibilities, the designer took the responsibility of communicating with the audience, taking into account the limitations and irrespective of many visual effects such as (using color diversification).

All the elements existing in the frame including the image (face, figure), writing (all fine and big writings), color (black) and white background are symmetrically combined in the above announcement to convey the concept of the subject (announcement) with the audience (viewer). Explicit implications in this announcement is actually detailed description of the main character of

the announcement, which includes the women around the box and a man hiding in the box, with four faces consisting of two women and two men on four sides of the frame. "Women's trick" is written in Nastaliq, which represents the Iranian spirit and culture and has delicacies and soft circulations in movements and shape of the letters so that it represents the spirit and taste of Iranians' art in the best way and exhibits an excellent picture of civilization and experience and is recognized as a symbol of Iranian art.

5.3. Interpretation

The way of expression in this work is in visual and written form and the main concept of the design is expressed explicitly. The designer used the letter highlighting and confined some sentences for greater emphasis and attention. In addition to the visual points, what is important in a theater poster, is to win the viewer's attention. The designer and director has tried to highlight some parts of the announcement paying attention to the implicit indication of the words such as "luxury, glorious and prestigious show", referring to the place where the ticket is sold "ticket will be sold at the exhibition counter every day", "the ticket costs from 5 Rials to 40 Rials" and could indeed come close to its intended meaning indication by getting help of the iconic signs.

6. Conclusion

This study was conducted to better understand the study of the poster form and content in theater posters in Iran during the 1940-1950s. During this period, poster was applied as a media to attract audiences to theater salons due to the financial problems and lack of current facilities. We have selected the theater posters as an advertising medium in this study. Then, we examined the form and content of the theater posters (case study of women's trick, 1943) with regard to the research title using the layered semiotics method. The data applied in this research will be tested in layered semiotics method and its application in artistic texts' analysis of Farzan Sojoudi. According to the theoretical issues and theories of the present study, it can be said that the most prominent feature with regard to the time of this poster's design and the limitations existing in the printing industry is that it is monochrome. In that era, the announcements were proliferated in the form of stone printing. The symmetry of the elements existing in the plate is evident in this announcement. Symmetry and monochromatic are among the features of the posters of the 20s and 30s in Iran.

The results showed that the signs existing in this poster communicated with their own audience using the signs familiar with their cultural environment at that time with the most familiar expression (simple expression) and tried to keep the story up to date and used the actors portrait's design method in women's trick announcement utilizing the printing facilities available at that time to form images while following the textual signs using the incumbent visual signs. All the elements and layers were formed interacting with each other and within the context of that era. Studying the visual signs and their correspondence with textual signs has led to the discovery of deeper layers of the concepts and has made the achievement of the probable intended goals possible. In this work (women's trick poster), the writing layer includes Friday of July 23, 1943, Ferdowsi Theatrical at Red Sun and Lion Exhibition – on behalf of Tabriz' most famous and skilled actors of Tabriz Ferdowsi's opert and drama theatrical – famous, luxury and glorious show in three screens including one screen of detailed concert- Ticket cost from 5 rials to 40 rials – The ticket will be sold daily at the exhibition counter – women's trick- director: Arab Oghli – vice director, Mohammadi – the start of the screening will be on 4 1/2 o' clock without delay - Tabriz Information Printing House - Kouchak Khan Press manager – Head in charge, Sarhaddar, the

image layer includes (actors' portrait and geometric shapes), color layer (black), composition layer (symmetrical). The artist in the past has attracted the attention of the audience by considering factors such as size in the creation of visual and writing elements, the artistic utilization in place or the appropriate change of the font in a way that it could associate more emphasis and attention to the women's trick theatre poster. The women's trick poster is composed of image and texts, and the designer has highlighted some parts of the poster for more emphasis and attention and has confined some statements. The results showed that there was a relationship among the women's trick theatre poster, pictorial signs and the content of women's trick play.

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Available online at www.ijapas.org

IJAPAS
International Journal of Applied Arts Studies

International Journal of Applied Arts Studies

IJAPAS 4(3) (2019) 67–74

Designing Costume for Circus Performers Considering the Special Capabilities of the Cloth

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Received 14 January 2020; revised 04 February 2020; accepted 05 February 2020

Abstract

This paper on designing circus performers' costume, has been written based on a play in which animals costumes are used instead of the real animals in order to protect them. In this paper costume of five main characters has been designed creatively. They are: The Turtle, the about to extinct Salamander, the Ant, the plant and the circus chief. They have been characterized through costume designing. The circus chief character because of his dominant presence has been designed based on the circus games style and the plant character is a symbol of growth while the Ant completely evokes the image of knowledge. Water and fire are the essential elements of the circus therefore, in this descriptive-experimental paper Titanium Silicate and Zirconium have been used in order for the costumes to be both fire and water resistant enough to provide the performers with better comfort.

Keywords: Circus; Cloth; Costume Designing; Illustration

1. Introduction

The essence of the circus is intertwined with glamorous costumes. The acrobats, jugglers, illusionists, ropewalkers, the circus chief etc. all of them wear corona, highly happy color costumes. They mostly use red, golden and metallic in their costumes which catches the audience's attention easily. (Cambridge dictionary, 1995) The circus would not be attractive enough without the costume and it would not be magical in that case. These costumes play an essential role also in terms of making the audience trust and applaud at the end of the show.

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Nowadays there many different kind and forms of circus but in the past it was only circular and because of what this word means in English, it changed during the time to Circus which refers to a circular movement(Janet,2002) Ella Storm One of the successful circus performers says:

As a circus artist I feel the power and magic of the circus when I wear my costume and this is so interesting and dramatic how the cloth, color, texture and its brilliance can so dramatically make me appear at the present moment and blossom. They invite me to make dreams and when I wear my costume I actually awaken a different part of myself which completely changes my mental attitude and even leads my focus towards the stage. George Speaight in the history of circus writes "the history of circus is a story of physical capabilities of human beings and instructing the animals happening in a circle (Ring) as big as 13 meters square with the audience seated around this ring. This ring is of course bigger than 13 these days" (Speaight, 1980; Antony, 1956).

This popular circus which we know today was performed in England for the first time including some performative movements by animals like horses. These trained animals together with men, used to travel from town to town for amusing people. The advent of modern circus was almost earliest days of the twentieth century. Many people used to enjoy amazing shows including lots of animals on the stage while they did not think of the backstage. Misbehavior with the animals and bad, low-standard care was among the usual things. They used to get injured during the show or training and while their health was in danger, their wounds was so risky for the people around them too. Poor animals which used to spend 96% of their lives in chain and shackle and cage. They used to travel eleven months of the year while being kept in boxes and cages with no fresh air or enough sleep and good food. Animal rights protection organizations finally could change this and removed them from the circus shows (Encyclopedia Britannica, 2014; Michael, 1997; Oana, 2017).

Now based on these findings, researchers have demanded more distinct rules of better comfort for animals in circus. Government of the Netherlands in 2012 banned using animals in circus and all other countries did the same after from then on.

During the twentieth century circus costumes have rapidly altered from form-fitting designs to forms that had considered the new banning rules. That is to say, before the twentieth century form, shape and color were the only considered elements but after twentieth century they start to design more practical costumes. Safer, more comfort costumes based on the characteristics of every single show. One of the most amazing costumes were of Leotard (Stoddart, 2000).

Jules Leotard was a French gymnastics who in 1859 characterized this costume for the first time and performed his movements on the stage while wearing this costume. Women's clothing was at the same time being changed like men's clothing during the twentieth century. They start to become more tight-fitting especially the costume of the realists and acrobats which had made them freer in action and more practical. Plastic, tight clothes which let women to do the movements much easier. Nowadays, Leotard's costumes are considered as a revolution in the fashion world because they became a pattern for clothes such as swimming suits, ballet and thousands of others though it all started from circus (Peta, 2010; Parker, 2011).

In this paper, a play was selected and costumes were designed for its characters.

Cotton is the most plentiful and popular biopolymer in the world. It is the most valuable raw material in the world of textile industry. Cotton fibers and fabrics have been used from ancient periods. Owing to its plenty, biodegradability and some physical properties such as high humidity absorption, glossy, high stability, alkaline resistance and amorphous structure, cotton is an extremely great renewable resource for the improvement of environment friendly, exactly separate from its traditional and great use in paper manufacturing and textile industry (Yadav, 2006; Yuranova, 2006). Cotton fibers present a symmetric surface intercommunicated with the

hydroxylated nature of the organizing anhydroglucose units. This property caused to high hydrophilicity of cotton, provide the formation of powerful hydrogen bonding between cotton fibers and the organization of three-dimensional fiber-based structures (Goncalves, 2009; Subramanian, 2009; Li, 2006). In this paper we use cotton fabric in order to designing circus clothes.

2. Materials and Discussion

The clothes were first washed in distilled water and then were immersed in Silicate Titanium / Zirconium solution for 12 hours and then the processed clothes were dried at ambient temperature. Considering the removal of animals from circus around the world there are many factors that should be noticed including the artistic design. Most of the today's modern circuses perform their shows with a dominant focus on: Play writing, stage designing and the performance therefore, a surreal play has been written based on this notion to design the characters and costumes. Below you will read a summary of the play:

An extra-terrestrial creature comes to a mysterious planet named Earth by accident through a magical clothe which is in a memories-box and gets involved in the animals of the planet's adventures. Sahrook the antagonist of the play, who is also the circus chief using the black magic has made some of the animals to work in the circus. Two of these animals are of endangered species, Eagle-snout Turtle (Olaku) and the Lorestan Salamander (Machkul) whom Shrook has used their power to spell the other animals. The extraterrestrial character with the help of a wise ant named Mirizh and a magical tree named Titi starts a battle with Sahrook and etc.

There are two reasons for applying different dialects from around Iran in this play: 1) to make the audience feel an emotional bond with the story. 2) to make the people know this heritage to help protect it.

The designer's first task is to create the antagonist since there won't be any drama without it and any protagonist needs an antagonist in other words, there's no meaning for the evil without the good. The character is an essential building block of a story who is like a real human being. It is a model of his / her society. The character of Sahrook is based on the inspiration from real people in society who are eager for power such as the dictator, the mean or animal-torturer.

For designing Sahrook, the anatomy of an octopus has been a source of inspiration who's always been shown as the scariest marine creature in animations or the insidious, evil, greedy character of the science fictions. They are mysterious creatures who are able to do color-shifting. In the face of this character the antichrist's eye has been used which is known as a part of talismans, fortune telling rituals and … the mustache has been used to make it look even meaner though some people think it make one to look mysterious. In order to make Sahrook look like a mysterious dictator an overcoat and a top-hat have been applied. Black and purple have been applied as colors for the body and costumes. The purple color which is a mixture of red and blue is neither warm nor cold and it is the first secondary color made by human being. This color has got a selfish, ambitious, leader characteristic. It has got power and has been used usually as a symbol of the magic, wealth or the magical rituals. This character's eyes have been designed in green to imply its seductive, hypnotic characteristic to make it complete. An Octopus arms have been used as a model to design Sahrook's hands and legs with a bit of a touch of exaggeration to intensify him being an animal-torturer; hands that look like a lash and can harm animals.

Table 1 Characteristics of the leading and supporting roles of the play

	Characteristics of the first role	**Characteristics of the second role**
Name	Sahrook	Machkul
Meaning of the name	The chief (Kurdish)	Salamander (Mazandarani dialect)
Character	The antagonist	One of the main characters
Applied technique	Hand-drawing & sculpture	Hand-drawing & pasty sculpture
Used colors	Black purple green	Yellowish orange black

Fig 1 Sahrook

The designer has applied two animalistic characters for designing the supporting role in order to imply echological concerns, one of which is the Lorestani Salamander. The close relationship between man and animals comes from the old ages which we can see its trace as drawings in pre-historic caves. Animals have always been important and vital for human beings and for this they are the best tool to make the audience involved. The animal's basic structure and anatomy has been kept intact while at the same time its face and appearance has been altered surrealistically to be both attractive and sympathetic thus, some wrinkles are on his face and a bit of a bent in his waist to make him look a bit sad and depressed while his big black eyes refer to a high intelligence though they are full of silence and sadness at the same time.

Fig 2 Machkul

One of the other characters is the turtle. Here the theme has been its fatigue and desperation because of cruelty human beings. For this reason, its body and shell have been designed separately. This turtle leaves his shell and stops trying for survival. Hear again, big wide eyes have been

applied to show the fatigue and sadness of the character. Olaku the turtle has been personified through hung eyelids, forehead wrinkles and a bent spine. Blue is cold, passive and introvert as a color therefore, it has been used for this character based on his temper.

Fig 3 Olako

Table 3 The characteristics of the third to fifth roles of the play

	Characteristics of the Third Role	**Characteristics of the Forth Role**	**Characteristics of the Fifth Role**
Name	Olaku	Mirizh	Titi
Name meaning	Turtle (Gilaki Dialect)	Ant (Lori Dialect)	Blossom (Gilaki Dialect)
Character	One of the main characters	The Protagonist's Assistant	Tree, Magic Mushroom
Technique applied	Hand-drawing and Sculpture	Hand-drawing and Sculpture	Hand-drawing and Pasty Sculpture
Colors used	Blue, Brown	Black, Blue	Light Green, Orange, Blue

The protagonist's assistant is a wise, smart, determined, knowledgeable and sharp person with a tiny body. Ants are among the oldest creatures on earth which date back to 110 to 130 million years ago, the age of dinosaurs. They are one of the most interesting mysterious creatures on planet earth. On an ant's head there are two antennas which move on a constant basis to detect smells, tastes and even sounds. These antennas and the ant's anatomy have been applied in an exaggerated manner to make the character look somehow like a satellite receiver. This makes the character to find a solution for any issue at any moment just like the internet. The ants' society is run based on team-work, interaction between the members and the complex problems solving-abilities.

Fig 4 Mirizh

The designer has applied a magical plant for the fifth character to be both simple and imaginatively evocative. Mushrooms are among the oldest plants on earth dating back to 3.1 billion years ago. There are many different kinds of them and they have been always a part of magical rituals like the Portobello mushroom (magic mushroom) thus, it is an appropriate choice to imply magical powers of the character.

There have been two reasons for designing a tree-like trunk for the character. First, in some mythological anecdotes the tree is considered as a magical plant which is the cause of immortality, healing, renewal of the youth power or achieving wisdom and knowledge through eating its fruit. In designing the character of Titi wisdom and magical knowledge have been considered.

Second, a rectangle-like shape has been applied for designing his body as a symbol of order, intellect, safety and strength and also to make it easier to be worn. The mushroom's stalks have been designed in a moving vertical form to imply the essence of being dynamic.

Titi has got a young, kind, gracious, helper and wise character therefore, its color is green which reminds us of nature, wisdom and knowledge, peace and friendship and kindness while the light green implies hope, youth and joy. For mushrooms, orange which is a secondary warm color has been applied and the blue parts are a sign of power and knowledge.

Fig 5 Titi

Fig 6 Olako, Mirizh, Machkul, Titi and Sahrook in circus

3. Conclusion

In this paper, a play related to circus animals was written and costume designing was done for its five main characters. We tried to design costumes based on the pre-determined traits of the characters to make them effective enough to influence the audience. We also tried to consider ecological environment protection and the endangered animals. The two characters of Salamander and turtle have been designed based on the color and design principles in a way that clearly shows them being endangered. The chief is fully based on the circus games considering his dominant character and the plant character which is the symbol of growth. The ant also has been designed in a way to imply the characteristic of being wise and finally, the cloth used for the costumes could be of the kinds which based on the scientific experiments are resistant against water and fire which are the two essential elements of circus, this way they will be comfortable and safe enough for the performers.

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