Identity and Its Effect on Positive Design for Interior Space
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Abstract:
Most of thinking operations when planning for interior space depend on solving architectural problems and designing the space neglecting the side of positive feelings of the user that affects his needs and acceptance to the interior space and therefore belonging to it. Interior space is the basic place where human being spends more than 90% of his life and includes most of his activities. Interior space is variable and has various effects on human as he/she may feel uneasiness despite the presence of all comfort means. Human often cannot be able to determine the features of this feeling so it affects him negatively and consequently loses the feeling of belonging to the place. Interior space does not contain designs with symbols simulating the nature of human being and his/her beliefs; therefore, connecting human being with the interior space is the main concern for most of designers.

Hence, the problem of the research is “How to enhance identity by using interior design elements to achieve positive comfort for human being?” Consequently, the human can be in a place expressing the self, achieving his/her goals and enhancing thinking and creativity. The importance of the research is human needs for interior spaces that afford positive comfort. The research aims to access to an interior design enhancing positive feeling of belonging and achieving positive physical, and psychological feeling lead to a feeling of satisfaction and prosperity within the spaces. This is through an analytical study for interior space and designing bases that enhance identity and achieving the self.

Keywords: Identity – Positive comfort – Belonging to interior spaces.

الملخص:
إن معظم عمليات التفكير عند تخطيط الفراغات الداخلية تعتمد على حل المشكلات المعمارية وضع تصميم للفراغ مع اغفال الجانب المتعلق بالشعور الإيجابي لمستخدم الفراغ مما يؤثر على تلبية احتياجاته وبالتالي تقبله لفراغات الداخلية والإحساس بالانتماء له. ففراغات الداخلية هو المكان الأساسي الذي يتواجد فيه الإنسان بمتوسط 90% من عمره ويضم معظم أنشطةه وممارساته. الفراغات الداخلية متنوعة التأثير على الإنسان فهو قد يشعر في بعض الأحيان بالضيق وعدم الارتياح رغم توفر كافة سبل الراحة به، والإنسان غالبا ما يكون غير قادر على تحديد ملامح هذا الشعور فيثر عليه بالسلب ويقدد الشعور بالانتماء للمكان لعدم تأكيد الهوية حيث لا يوجد بالفراغ الداخلية تصميمات ذات دلالات ورموز تحاكي ماهية الإنسان ومعتقداته، وعليه، ففطاس الإنسان بالانتماء يعكر ما هو شئ مهم يسعى إليه المصمم.

من هنا تظهر مشكلة البحث "كيف يمكن تعزيز الهوية باستخدام عناصر التصميم الداخلية لتحقيق الراحة الإيجابية للإنسان؟" لينعم الإنسان بالإقامة في مكان يحتويه ويحقق له ذاته ويعزز من تفكيره وقدرته على الإبداع. يتكمل الهدف البحث في "حاجة الإنسان المحترف إلى فراغات داخلية باعثة للراحة الإيجابية. يهدف البحث إلى الوصول إلى تصميم داخلي يعزز الشعور الإيجابي بالانتماء لدى الإنسان وتحقيق حالة فسيولوجية وسياقية واجتماعية إيجابية للإنسان تؤدي لشعوره بالرضا الحياتي والازدهار داخل الفراغات"، وذلك من خلال دراسة تحليلية للفراغات الداخلية والآنسة التصميمية التي

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Interior design and human needs

Interior designs seek to achieve the balance among human and his functional and psychological needs and the surrounding environment elements in a way coping with his different activities. Human reacts with components and elements of interior space in a trial to achieve functional and psychological needs and merge with the surrounding environment elements in a way coping with his different activities and the result is either positive or negative. As a result, for the absence of interior space identity either in design style and used furniture and materials; here comes the role of interior designer to enhance interior spaces identity and develop all interior design elements to achieve the identity and reach a positive design with identity showing human, his needs and culture and increase the feeling of belonging. Human needs are represented in Maslo pyramid (figure 1)

Maslo pyramid is a psychological theory made by prof. Ibraham Maslo and it discusses sorting human needs as it starts with basic needs essential for survival then comes down in stairs form reflexing the importance of needs that starts with physical needs such as breathing, eating, drinking, balance, etc. (3)

The need of safety depends on the satisfaction of achieving physical needs; (4) they are important for individuals as they are always seeking to achieve safety and security (5). Human always tries to choose whatever makes him safe in his environment therefore he feels happy. He always works on avoiding what prevent him from feeling safe as achieving safety creates...
creation. Later comes social needs including social relations, family relations and acquiring friends.

Appreciation is related to self-respect and personal efficiency and respecting others. Feeling confident, appreciation and respect devote human’s self-respect. This need makes human feel how important he is and the importance of his abilities so he will be able to achieve his aims. Losing privacy and feeling that the society is not respecting his privacy creates a feeling of anger, rage and non-belonging and as a consequence selfishness and being self-centered that creates a will to destroy the society.

The pyramid ends with the need of self-achieve, the human tries to achieve and prove himself by using his abilities to achieve the greatest achievements, as example; the need of safety requires caring for the furniture he uses as raw materials should be environment friend and not harmful. But sometimes there is a need to add some materials or to make some modifications that have negative effects on health and environment so we have to make sure of these modifications and their effects to reduce their negative effects in order to keep health and environment. So, the designer is committed to achieve durability of the furniture so human will trust it and also uses technology so customer will feel comfort but without causing harm to health or environment.

Negative interior design: Means the design that does not fulfill human needs because of neglecting the sides that emphasize human belonging to the place where individuals’ characters, attitudes and tendencies are formed that decreases human’s communication with his needs and fulfilling his aims so he feels frustrated and bored and we can see the negative interior design in:

– Not caring for the difference in thinking for individuals and choosing designing attitudes that do not suit with individuals.
– Neglecting individual tendencies in interior designs as there are designing preferences for individual tendencies. (Figure 2) (6)

Criteria of designing preferences for individual tendencies

| Traditional | Sharpness | Ambiguity | Too much details | exaggeration |

Figure 2: Criteria of different interior design preferences according to individuals’ tendencies

(6)

– Neglecting individual hobbies and the difference in values and morals in interior design that affects individual behavior as the outcome is negative feelings whereas there is a strong relation between individual feelings and his behavior. (7)
– Not caring for functional sides is negatively affecting human comfort, also the narrow interior spaces blocks usage and movement. The narrow spaces regarding the number of individuals negatively affecting human activities also using dark colors affects human visual comfort especially in narrow spaces or Chromatography in interior design.
Figure 1, 2, 3 show using dark colours that affects human visual comfort especially in narrow spaces, also using interfering lines and sharp angles and camouflage in designing floors may affect human negatively especially in the places that require concentration in work. Despite trying to fulfil needs, interior design lacks the awareness of keeping human health. Picture reference: www.pinterest.com

Identity in interior design:
Identity is the process that distinguishes the individual from others, that is, the identification of personality, as well as customs, traditions, material, moral and social data that confirm the sense of identity. (20) It can be also defined in the interior design as the character or form expressing the personality of each space, providing designs with indications and symbols that mimic the identity of individuals and their beliefs.

The architect Hassan Fathy is considered one of the design pioneers for human and place identities. In his considerations, the clay material is an architectural element with a special ability that responds to the physical and psychological requirements of the human being, moreover, it achieves a state of compatibility with nature for human.

Home represents a mirror in which residents have a sense of belonging. Hassan Fathy residences stemming from Islamic heritage and Egyptian Nubian environment, their internal spaces affirming the identity of human being.
The figure shows a contemporary design vision in which elements were used to serve the contemporary trend unconjugated with identity achievement. Picture reference: https://www.google.com

The figure shows an example of a contemporary design that achieves identity. It is a residence in the "Qurna village" of the architect Hassan Fathy. Picture reference: https://alkhaleejonline.net

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<th>Philosophy</th>
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<td>Colour</td>
<td>Colours used to serve the modern trend</td>
<td>It correlates the human being with the place identity through color which is inspired by the surrounding environment</td>
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<td>Material</td>
<td>Diversity of using modern raw materials, whether natural or synthetic, without focusing on environmental raw materials.</td>
<td>To complete the achieving of identity, Hassan Fathi used materials in the surrounding environment, affirming his words, &quot;Look under your feet and build&quot;</td>
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<td>Elements and symbols affirming identity</td>
<td>Symbols and icons of identity were not used, also fundamentals of architecture of the ancient civilizations were not clear in this contemporary design.</td>
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Table 1: By the researcher

Positive interior design:
The design that fulfills all functional, aesthetic, psychological, environmental and technological sides and also fulfills physical needs and safety and assures the belonging to interior spaces, also human beliefs, traditions and habits that affect human realization for spaces and also the positive behavior and his interaction with interior spaces that creates a feeling of comfort and belonging and this is through interior design elements that has a positive result on human and self-achievement.

Figure 3: Shows the positive interior design effect on human and confirm identity (by the researcher)
In old ages the main interest was human comfort; the ancient Egyptian cared for interior spaces coordination in a way fitting human needs either aesthetically or functionally and also cared for assuring individual’s identity especially kings. He cared for designing furniture with suitable measures for human body, he also took into consideration psychological side in design. For instance, Rituals chair owned by Tut Ankh Amoun. Figure 8

We can see that the chair is perfectly designed and accurately executed, this shows how the ancient Egyptians could understand the dimensions of human body and how to achieve the highest comfort rate during sitting with an advanced skill in using different materials and achieving colour balance. (8) the Horizontal projection shows a bending in upper crown that achieves comfort for the back.

At the feet of the king there is a platform made for king’s feet and it is decorated with foreign countries prisoners (Nine arches) that achieves feet comfort during sitting.

Figure 8, Rituals chair owned by Tut Ankh Amoun 1333-1323 B.C

The used materials are natural such as; ebony, cornelian, lapis stone, turquoise, glass, gold, and ivory and that showed the natural beauty of materials.

The ancient Egyptian cared for psychological dimension for the user that is king Tut Ankh Amoun; as he used symbolic dimension for the components of ancient Egyptian decoration based in all decoration units, design and colour. It was designed in a symbolic way to serve the religious beliefs of ancient Egyptian. One of these dimensions is putting the enemy at the king’s feet platform as victory sign as if they are under his feet. And we see in the upper part of the back we see the God as an eagle with its spread wings to protect the king’s names written in the Royal cartridge and also the symbol of uniting Egypt was put (Sima – Tawi).

Feeling the equality and identity among the parts achieves balance depending on Axis in the vertical direction. (9) The axis was made of wood mixed with ivory, and ebony and painted with colours simulating tiger colour that shows power. Using lapis stone and its blue colour reflects sky or water, also suing gold and brown adds richness to the furniture. (10) They also used decorations showing human bodies or parts of them such as larynx, and lungs as a symbol of (Sima- Tawi) and it is fixed at the lower part of the chair and it shows the unity of Egypt under one ruler since the start of families age that assures the concept of unity.

The surrounding nature was the first inspirer of decoration elements that assures his attachment to the nature and the feeling of belonging. Designs assured the care for human comfort and confirming his identity.

Considerations for achieving positive design in interior spaces:
Interior design plays a vital role in enhancing positive contact between human and interior spaces as human will be able to perform his activities and fulfill his physical needs in addition to safety and belonging and self-achievement and also enriching interior designs with features reflecting individuals’ beliefs, thoughts and identity.
Design process differs from one society to another and from one environment to another due to the difference in cultures and also differ as a result of life styles, habits, and traditions whereas the interior and exterior environments are different. They also differ according to exterior environment effects and the needs of interior environment.

Design processes for interior spaces are these ways used to achieve positive atmosphere for human with the presence of social, environmental, natural and functional circumstances. There are many considerations should be done to achieve visual, audio, thermal, psychological, and physical comfort besides achieving functional comfort and adding positive energy to the spaces and emphasizing belonging and identity such as:

**Figure 4: Considerations of positive design in interior spaces (by the researcher)**

**Achieving visual comfort**
Positive interior design achieves visual comfort in:

**Lighting:** trying to depend on natural lighting as much as possible, decreasing dependance on artificial lighting with allowing sun rays to enter houses for not less than one hour daily as the presence of sun in interior spaces provides variation due to lighting ratio change and colours change, this contrast and variation adds a dynamic side for the space and this is hard to achieve by artificial lighting. This is with considering using the suitable lighting type that does not create heat or radiations and also using non-direct lighting, also lighting degrees should be suitable for the activity to achieve eye comfort.
Figure 9 shows the distribution of non-direct artificial lighting in stairs and walls with considering functional side to achieve eye comfort

Figure 10 shows the trial to depend on natural lighting that achieves visual comfort in the space

Picture reference: https://www.pinterest.com

Colour: caring for the relation between colour and activity type inside the space as vision becomes better by using the right colours for walls, floors and ceilings. It is preferred to use light colours as they reflect 70-80% of the light falling on them so it achieves visual comfort. Caring for the relation between colour and lighting and colours contrast and variation affects for eye comfort.

Also using plants as an aesthetic aspect with regarding visual characteristics such as size and colour. Plants shapes variation inside the space and using different types that give nice smells spreading with air affects human`s psychological state.

Figure 11 the effect of using light colors on eye comfort

Figures 12, 13 the variety of using plants in interior spaces

Picture reference: www.pinterest.com

Line and shape: lines and shapes give different impressions affecting human, they also differ according to activity as activities that require tranquillity and isolation such as sleeping spaces prefers square shapes that give the feeling of stability and balance, also curved lines, on the other hand broken lines gives the feeling of tension. places that require mental activity or kitchens prefer straight lines and also broken lines but with limited rate. (6)
Figure 14,15 show kitchen space and using straight lines and in figures 16,17 we can see use square shapes and the variety of straight and curved lines to give a feeling of tranquility.

Some studies proved that organic shapes give positive effect comparing to engineering shapes and curved shapes but sharp shapes give negative feelings (11).

Figures 18,19,20 show the design of shoes shop designed by Zaha Hadid and located in Hong Kong owned by the designer Stuart Faitsman and they show that organic lines give positive feeling.

Picture reference: https://www.pinterest.com

We can use the coherence between lines and light in interior spaces as Hollow longitudinal lines help in penetrating light forming shadows on the floor that look like shadow areas and lighted areas (positive and negative) and we can see it in figure 21. This contrast gives the feeling of the presence of different tissues and positive feeling.

Figure 22: penetrating sun rays into interior space forming shadows confirming the various tissues inside the space

Picture reference: https://www.pinterest.com

Figure 21 penetrating sun rays into interior spaces forming shadow and light areas

Picture reference: https://www.pinterest.com
Achieving audio comfort

Interior space should achieve audio comfort in accordance with activity type. Human’s comfort is affected with noise rate inside the space, also music raises positive emotions and we should take into consideration individuals’ different respond to sounds and the change of audio ability by the change of age.

Human is used to natural sounds that range from noisy sounds to calm sounds, these sounds may cause physical changes and affect his health or activity. These sounds may be giving power and action or may be driving to relax and comfort. Also, the stillness of sounds becomes boring. These still sounds may affect negatively if they are more than the accepted level and may be a source of positive energy as they reduce blood pressure and keep him calm. Very loud sounds may cause physical effects such as physical and mental exhaustion and some health problems such as high blood pressure, anxiety, headache, vomiting, and decreasing mental abilities. (12)

Spaces can be distributed by separating spaces that require loud sounds from spaces that require tranquillity and comfort to achieve audio comfort and we can also use plants for sound distraction to decrease noise. (13)

Achieving thermal comfort:

Human needs specific range of temperature to stay alive but his comfort is in definite range of humidity, temperature and air movement. If they are not available, it will cause real damage to human health.

Human feels thermal comfort with the change of air periodically and letting natural ventilation to enter and move inside the building whereas negative ions are important for human (12) and these ions are available in natural exterior environment especially around waterfalls, mountains tops and green areas. Human seeks to transfer them through design by entering element of water and plant to achieve human comfort. Human body needs thermal balance as he needs to keep human body temperature stable as any change can harm body’s organs and tissues so he loses thermal comfort (14)
Achieving social sides
Design has an effective role in affecting social relations among individuals, it has been proven that cities planning affects attaching or detaching people and as a consequence interior space affects these relations as it plays an important role in limiting or decreasing these relations or increasing them in accordance with human nature and needs to keep his privacy and this defines: Space should provide individual and group privacy and should achieve the link between individual and his environment to feel his membership and belonging, design process should keep interior privacy with all its types; audio, visual and psychological to control individuals’ interior relations.
Inside the space there should be places to practice social activities; places for family meetings for dialogues and discussions. This space should be cheerful and it should have attraction elements in order to enhance social relations inside the space, there should be cultural accordance to its occupiers as building style and used materials should reflect occupiers’ identity. It should express their life style. Rabubort says” Home is just a social cultural space reflects different forms of life”

Confirming identity
It means an interior environment designed in a way coping with individuals’ culture and beliefs. It is necessary to have a design plan for interior design elements reflexing traditions, habits, creed, culture, attitudes, mind, morals and behaviours in addition to symbols and icons aiming
at representing individual’s identity through designs showing their nature and mind taking into consideration colours, lines, and details and the suitability to environment and time. Shape is related to beliefs as example skull reminds with death so designer should take this into consideration.

Figure 33 the shape is away from symbols affecting human as skull is related to death so it affects human negatively. Picture reference: www.pinterest.com

Figure 34, 35, 36, 37 show interior spaces designs carrying different cultures reflexing the used mind that differs according to mind, tendencies, and attitudes in a way confirming identity and affecting human positively. Picture reference: www.pinterest.com

Achieving psychological needs:
Interior design has a role in achieving human’s psychological comfort inside spaces, space should be suitable for human’s psychology as human is attached with psychological links to his spaces that include a group of feelings such as:
Human feels that he has his own suitable unique spaces makes him feel safe inside spaces, he also belongs to spaces and feels satisfied about interior space and this has a positive effect on human and the role of interior design is:
The general outline for interior space should be designed to achieve safety in order to facilitate practicing social life in a safe and stable way, also there should be spaces to practice hobbies and entertainment and also for religious rituals and worships.
Interior space should express the occupiers and their memories and tendencies to achieve psychological coherence between him and his interior space there should be satisfaction about the place.
Interior space should be attractive and cheerful as human loves beauty and this beauty will not be achieved by exaggeration and too much decoration but by simplicity as little simple items can make great beauty.
Spaces should have technical facilitations to help in doing different activities without emotional or mental exhaustion, also design should keep the place always clean and away from chaos and also the used materials for building and finishing must satisfy the occupier and should accept the colour, texture and nature.

Colour: you should choose colours that help in achieving psychological comfort as colours have great psychological effect depending on cultures and beliefs. Psychological effect is divided into:

- Direct effect such as feeling cheerful, depression, sadness, active. Vitality, coldness and heat or emotional effect resulting from personal experiences.

Using modern technology to cope up with the modern age as using smart and interactive systems during designing the interior space enhances individuals’ comfort. Individuals will have positive feeling as they will feel luxury, safety and comfort so they will belong to the space and they will feel the support of the space to fulfill their needs.

Designing places for family meetings makes a feeling of intimacy and motivates them to speak and exchange ideas and to make cultural and entertainment activities that will be reflected positively on individual’s behaviour and their link and cooperation and their ability to make and support relations around them. (6) Picture reference: www.pinterest.com
Achieving physical needs:
Interior space will be ready to practise activities effectively in their times. Also it will coordinate between practice and the available suitable space for the activity and this appears in not wasting spaces and defining places for practising different hobbies as each person will have his own space so he will be emotionally attached to the place and will feel warmth and missing that place, also he will feel privacy and enjoy his own place.

Achieving functional sides:
There should be breaks between various tasks inside the space as the coherence inside the space between activities and space is important, working spaces should be separated from the rest of places as it will lead to losing comfort.
Coherence among interior design elements, achieving comfort and privacy, using furniture units according to the activity inside different spaces.
Respecting the used materials by using them properly to make the best use of them, regarding occupiers’ bodies dimensions with considering different genders and ages. As the Egyptian body dimensions are differen't from the Italian one than the Japanese also the man is different from the woman.
Also it should cope with different age stages as child’s room is different from young man’s man than an old man’s.

They show the different age stages starting from a child room in figure 45 then a young man in 46 than a main room for a couple in 47 in a way achieving functional sides and respecting human mentality.

Picture reference: www.pinterest.com

Regarding health state during designing interior space is important; as example the handicapped needs a bigger area to move with the wheelchair but allergic people need special environment also people with blood pressure problems are affected with getting high or low according to earth level.
Using furniture in a way coping with the activity type is very important as spaces should be arranged to find a relation between them to achieve human comfort with regarding environmental effects in arranging and distributing activity places inside the home, and also respecting the materials by using them at the best way.
Coherence with positive energy
Achieving positive energy inside spaces gives individuals the power to practise their daily life and lead them to think positively consequently achieve success and happiness that makes an atmosphere full of happiness.
Interior design has a role in affecting body power; in human body there are power centres where power is located taking circular shape and it is called Chakras (15). Human body contains hundreds of them but there are seven main Chakras and they are located along the backbone and its base and reaches the top of the head and they are totally connected to the organs and glands and if there is any disorder in one of them, human gets sick. The energy is transferred in routs from Chakras to the whole circle surrounding the body. Through modern sciences such as biogometry human power can be influenced as it studies the relation between shape, power and profession. (16)
It cares for studying the relations among things, among all elements of the universe and life and their effect on life type that human lives and how to improve it. It uses shapes, colours, motions, and sound to make balance in all power levels inside spaces. The type of space is also affected by the type of the air and also shapes and angles used in the design. It is the science that studies the effect of shapes, and geometrical angles on human power and there are solutions to the negative effects and it enhances positive effects.

Figures 48, 49 Reverso group for a table and a chair that are designed using biogometry science and using definite angles to influence human power. (16)

The effect of positive design confirming identity on human behavior and the feeling of comfort:
Interior design has the ability to affect the behaviours negatively or positively; the interior designer has abilities and skills enable him to direct the users to definite behaviours using his own tools including interior designing elements then recognizing users’ behaviour to confirm his tendencies and attitudes to confirm identity. (17)
The interior designer should make a suitable environment to form the behaviour through exchanging good feelings with others and achieving a good level of psychological needs such as safety and privacy and enhancing human interaction. There is a relation between human activities, and physical spaces and any change in one of them will affect the other consequently. (18)
Positive interior design cares for understanding the mentality of the users as he will be able to form the way of response to the wanted changes in the design, he should understand how the
user sees his new interior design so as he can reach a point in the design where he can affect in changing behaviour.

Directing human sides for the users using art as a tool for arising their feelings is one of the best ways to modify the unwanted behaviours especially if it is done with motion and sound effects.

**Research results:**
1. Interior space design should cope with human’s culture and identity in order to achieve comfort and joy inside his home.
2. Human’s positive comfort and belonging to interior space does not have fixed basics but differs according to individual and his traditions, habits and all what is related to confirm his identity.

**Research recommendations:**
1. The research recommends with the necessity of adapting all the elements of interior design to cope up with the occupiers’ identity to have an inner space fulfilling individuals’ needs that has a great positive effect on human.

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