





The Role of the Bonding Strategy in the Identity of Islamic Architecture

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ABSTRACT

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Contemporary Islamic production varies in its connection or separation from its Islamic identity, as the models varied within the single functional style, as an instance Mosque architecture, shows more than one form and characteristic in how it represent the principles and values that must be available within its spaces, but despite the diversity, there are lines or bonds connect this product with the basis from which architecture was launched, thus the research presents the strategy of bonding by linking the product with its origins and its role in showing the identity of Islamic architecture albeit this representation depends on the type of bonding, which the research presents in two types: a differential and a consensual bonding. In both types, the identity appears on one hand as well as the creative aspects of the production, which invoke a new language, and here we should mention the knowledge gap in lacking enough studies that define the role of bonding between the contemporary Islamic product and its original and basic sources due to diversity of presenting the products and the means of dealing with it in addition to its role in providing continuity via time and space. Thus, the Islamic production must be identified via its connection with its roots which provide its Islamic identity and manifest its character as an Islamic production. In that meaning, the study propose bonding as a strategy enables connection with dynamic and statistic, while the dynamic works on revive the intellect through a new generative form, the static represent both intellectual and formal revive that entails a high symbolic formal Islamic architecture. the research also mentioned that the importance of bonding strategy manifests the importance of its present in the contemporary Islamic production partially rather in total form, and its adaptation varies depending on its presentation by the designer more than being as objective aspects in control.

1. INTRODUCTION

Despite diversity, plurality and ambiguity of reading Islamic architecture production, architecture seeks its origins to adjust within the frame of dynamic and static because Islamic architecture is of unity connected with religious values represented in architectural features characterized as an architecture of fixed identity. The bonding thus is a strategy seeks to enhance the architectural identity and reading the product of contemporary Islamic architecture in the lights of bonding in order to frame and identify the product or outcome within such diversity and plurality. In accordance, the research propose that the Islamic identity manifested relatively as a unity despite the diversity in the production, in relation, many studies issued to represent the role of bonding strategy in achieving that connection.

2. LITERATURE REVIEW

Bonding is identified as a connection or relation based on common feelings or interests or experiences. Thus, the bonding is a function of connecting via a specific force that means a close and contentious relation through frequent or continuous bonding. The bonding in chemistry divided in two

types; Ionic bonding that entails the moving of an element from one place to another, and covalent bonding where interconnection with an element occurs in a common place. Thus, the bonding is a process of coordination between two levels different or alike [1], and according to this the research develop an approach where the bonding represents a space-time connection of the Islamic product with its past by which the product mainly tries to preserve its identity to continue bearing its originality, meanings and symbolic obtained from Islamic doctrine where some studies address this such as:

Fanjan and AL-Khafaji [2] study presents two relation identifies bonding as a continuation through space and time as an inverse correlation that the architectural product either gains new values, measurements and meanings enhance its moral presence and conceptual continuity and may replace the basic meaning in correlation with its formal features and enforce its singularity as monuments of moral and historical values; or see the laps of time cause a moral neglecting leads to dissolving and eroding regardless of the type of building, secular or religious, because it will fall within a different cultural medium where different concepts and ideologies being adopted and necessarily entails weak bonding as it appears as a new updating situation of the product. The second one is the positive correlation where the product gains other meanings and values enhance its moral presence despite formal

disappearance either through its connection to a historical event or specific form to represent an indirect historical and scientific reference for architecture which in turns represent a high timely bonding as it preserves the origins with minor modernization.

Abowardah and Almeligi [3] study presents four mechanisms to Islamic identity for the product buy presenting four types of bonding according to the mechanism of connection which are; sheer reviving mechanism as a source of spatial formation and fabrication that enforce cultural values and reject neo-ones. While in picking or collecting mechanism we see a partial bonding between the Islamic heritage and contemporary which represent a balanced mechanism between them and leads to achieve both static and mechanical identity. the other mechanism is the total and partial abstraction which works on reviving cultural and conceptual dimensions of Islamic heritage in a new formal language where the intellectual bonging is elevated while the formal bonding is weak and thus present a stronger mechanic identity than the fixed or static one [3].

The study conducted by Al-Dabbagh and Al-Sofee [4] aims to reinstate the importance of bonding in Islamic identity through the use of resources as references. This bonding is achieved through temporal affiliation via Islamic ages and spatial affiliation through areas that are formally connected with features like Archs, windows, and abstract ornamental elements, which are either adopted from Islamic products or intellectually based on principles, fluctuations, and openness. The study identifies the traditions as the generative Basis to dynamic identity that serves as the source of bonding. Furthermore, the study emphasizes the significance of craftsmanship or professionalism in achieving the desired bondage by adopting mechanisms such as simplicity, abstraction, adding, and deletion.

Naim [5] study presented bonding intellectually by linking it with relativity and measurement identity where the later in state on the level of form, on the strength of the historical reservoir and its presence within the product through familiar formal elements, and depends on the level of meaning through the cultural background for each society from one side within the Islamic or other context in accordance to the language that defines the Islamic product in relation to the subjectivity and private local dimensions of each society. The relativity identity in other side assured that all historical elements that's defines the Islamic product are explanations efforts subject to change due to changes in forms and the power of techniques, economy and knowledge at its emergence and development. Finally, the meaning -relativity identity focus on how the world in the modern times look at the product or the outcome and how it will look at it in the future as a dynamic transformed identity expressing the zeitgeist, and thus why the resulting coordination status is being static and variable and provide changeable images [6].

The study of Hojratollah [7] presented mosque as a product or outcome, from one side, as a creator of the architectural identity and spiritual one from the other side and its role as a symbol in secular Islam which clearly appeared through basic features that must emphasize its presence within mosque design to preserve bonding through continuity with the history of architecture in accordance with formal features of the mosque by the potent present of the entrance where the ark at the portal refers to unlimited sky that separate the exterior (material space) and the interior (spiritual space) as symmetrical feature.

Mahmood and Elbelkasy [8] study state that the identity of Islamic architecture moves in two levels: namely the level of form and the level of meaning which represent the truth or legitimacy in preserving, forming and improving the identity because the identity it's not a thing or form to own or possessed as it achievement is happened through bonding with continuing formal bonding as each form merge between a form and a meaning and thus a spiritual, symbolic and semantic which simplify the reading the identity elements of the mosque in relation to urban view, the doom, minaret, open and close space, lights, directions, hierarchy, geometrical forms, etc. each of the various elements has its own applicable role and consist of hierarchical form of spiritual value that obtain its private expression in the abstract thought. These elements find its justification where it works as a toll to reach out the spirit in the material space and not as being objective.

Mohammed [9] study states the bonding appears when the Islamic architecture works as a liaison between past and present by dissolving all architectural patterns and extract all principles and values of architecture of all periods of times the diversity has went through. The Islamic architecture has established on the basis of total frame works on understanding all aspects of architecture and develops it through ages where the form that express community character and its cultural identity represent itself an intellectual implication and thus reflect the identity of Islamic religion in unifying the content and diversity in the patterns of architectural patterns and that in turns provide it with sustainability and continuity in the meantime as well as it represent an architecture that connects past, present and future.

Alamiri [10] study presented methods to retrieve the identity of Islamic architecture by connecting with origins where every method reflects a level of formal and intellectual bonding with the identity of architecture. the first method happened through a total bonding with the past by regenerating past buildings forms and decorations in somehow, while the bonding in the second method being parallel and partial in mixing and matching between historical patterns which anchored a fortune of architectural styles and traditions emerged through the history of Islam in single buildings. The third method depends on weak bonding with past and strong bonding with future buy erecting new architectural forms to absorb and accommodate for the social and religious functions of Mosque.

Gharipour [11] study states that identity is the bonding between past and present and that the Ego forms bonding with the origin where the ego of contemporary Islamic architecture found on the basis of common origins and features and through common features where the controlling system achieved and by the plurality and development in building technology then the reaching out of collective frame under the name of identity will obtained through the presence of traditions in the product or outcome as a point of contact that might collect the type under the semantic of Islamic architecture identity.

Studies indicate, despite their diversity, the importance of the existence of interdependence, whether at the formal level, through meanings, or through the design methods adopted by the designer. The fact that Islamic architecture is an architecture of thought, belief and moral unity in different dimensions of time and place must be emphasized through the production, but the studies did not specify on Which side does this synergy occur on and at what level and what kind is emphasized by the product of contemporary Islamic architecture, making it more diverse than the originals, and does this product carry an Islamic identity? Therefore, the research identified a complete methodology for how this

strategy works and the vocabulary that works within it, and this will be shown in Figure 1 and Table 1. on the basis of which those vocabulary is measured on the selected samples, and it is measured through the questionnaire and through a formal analysis by the researchers.

1) **Levels of bonding according to how to achieve the identity;** the levels of bonding represent in the way of bonding contemporary Islamic architecture with its identity as the

processes of moving, connecting, altering and adapting, according to this strategy, put architecture within the uninterrupted situation range with its origins. And thus find a new intellectual level obtains its legitimacy and privacy from the static or fixed as part of the formal and intellectual frame as well as an updating of Islamic thought because it's not disconnected new reality relations with the existing origin and by that we could divide bonding into the following levels [2].

Table 1. A table showing the questionnaire prepared for experts

Bonding levels according to how identity is achieved	Formal bonding	Adopt variety in a single formal language		A1
	Intellectual bonding	Adopt unity in multiple formal languages Unity can't be read in all levels		A2
Type of bonding according to identity presence	harmonic bonding	Affiliation with approved references	A complete intellectual affiliation with the past Mixing intellectual references between the past and the present Contemporary references	A3
	differential bonding	It is related to the objective and formal aspects	Adoption of fixed form templates for the same functionality Adopting the same Islamic elements for another closely related job Adopting new changing items Adopting local quotes from the production context Adopting processors that combine an Islamic reference with the subjectivity of the designer in their formulation Adopting fuzzy self-processors	A4
The characteristics of bonding strategy	continuity	Continuity through matter	Adopting local materials Adopting contemporary materials processed in a way that approaches its traditional image Adopting new contemporary materials	A5
		Continuity through shape	A perfect evocation of the traditional Islamic form Evoking Islamic formal particles and assembling them in a contemporary way, but preserving their reading Evoking Islamic formal particles and concealing them behind contemporary reading	A6
Bonding mechanisms	Pairing	Type of pairing	Pairing with a formal reference Contracts and brackets Orientation inward high geometry direct meanings indirect meanings Triple pairing (form, property, meaning) binary pairing single pairing	A7
		pairing with a formal property Pairing with a specific meaning pairing strength		A8
Bonding mechanisms	clear reviving mechanism	geometry property	Fixed unit geometry grids Variable unit geometry grids Hybrid grids (geometry -Organic)	A9
		Symmetry property	Symmetry at the level of the scheme and general composition Partial Symmetry Plane Level There is no symmetry	A10
Bonding mechanisms	collecting mechanism	hierarchical property	Moving from public to semi-public to private Moving from the general to the intermediate space and then the private Direct transfer to base space	A11
			Revival of an explicit Islamic form Reviving an explicit meaning in different forms and formulations Generate new meanings	A12
Bonding mechanisms	Abstract mechanism		Show traditional elements compared to contemporary Equal to show the power of the elements Show the strength of contemporary elements compared to traditional	A13
		Adopting technology to show formal abstraction	A complete manifestation of the identity of the traditional forms Partially showing the identity of the shapes behind the technology with a partial change to it Complete concealment of the identity of forms with the power of technology	A13

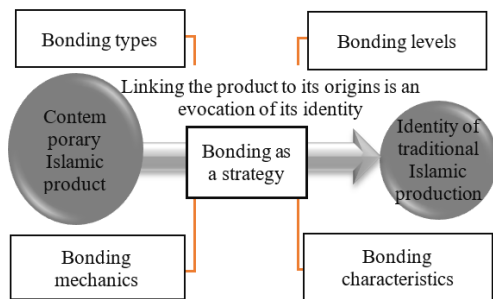


Figure 1. Shows the vocabulary that has been reached

- **Formal bonding:** this level sees the importance for the product or the outcome to move with all its various forms and multiple language shapes according to the technical and formation followed by the designer within the frame of formal unity totally or partially.
- **Intellectual bonding:** this level connected with the importance that these intellectual references adopted by the designer in producing the outcome should achieve affiliation in meaning and form; which means preserving the presence of the product identity and providing at the same time a high flexibility in relation to the designer diversity, context, technology and the ego, in reforming some symbolic and formal meanings and elements [2].

2) Types of bonding: the Islamic product based mainly on spiritual foundations derived from Islamic jurisprudence and law which paint the Islamic outcome with similarity and repetition in types of solutions and formal features but, the new or contemporary outcome deal with these basics in different various levels based on Islamic principles relating to building and others connecting with re explaining the meaning that the basic formal elements have such as the square or the circle or the domes and minarets which lead to two types of bonding [12].

- **Harmonic bonding:** these present elements and formulations as it is by making simple artificial alterations but still or keeps its readings understood and familiar by the recipient and thus identified with a fixed Islamic identity as a result of high objectivity of the designer in translating the thought of Islamic architecture product [13].

- **Differential bonding:** this type is highly connected with the liberal ego of the designer in opposite to high objectivity in the designer dealing with recalling the fundamentals of architecture outcome and here the dealing with moral levels is greater than the dealing with formal ones.

- **The characteristics of bonding strategy:** the strategy shows two characteristics [14] as follow:

- **Continuity,** which is the most important in achieving bonding which represent the importance of space or time continuation or both which either be through the form or the type of material in use [15].

- **Pairing works** on transforming one or more than one common features, which is important to obtain bonding, and pairing could be either a form or meaning or certain ideological believe or recall more than one source to increase linking the outcome with its appeared identity [16].

- **Bonding mechanisms:** every strategy to be achieved there must be some available mechanisms, each works on representing architecture identity to a certain degree and these mechanisms are as follow;

- **Copying mechanism:** this mechanism relies on sheer formal repetition and considered the strongest degree of bonding in manifesting the identity of Islamic architecture in

the present time on both formal and moral levels [17].

- **Clear reviving mechanism** which relies basically on connecting the familiar with the past though the techniques used are modern, which resulted in clear and plain Islamic architecture identity [18].

- **Collecting mechanism;** works on selecting elements from both past and present and connecting them with familiar or generative formulation [19].

- **Abstract mechanism;** which is considered the weakest degree of binding in relation to connect the outcome with the identity where such mechanism provides high formal variety inside the same function or form [18].

4th feasibility study; we reached the main vocabularies and possible values of the feasibility studies as outlined below.

3. RESEARCH METHODOLOGY

The research aims at detecting bonding strategy and its role in enhancing the identity of Islamic architecture despite variety and plurality where in this research we chose 5 samples that's reflect 5 Islamic centers of various and interlocking functions (religious, cultural, educational) where vocabularies divided into 3 potential values. **The closest value** to be achieved given (2), and **the farthest** (0) while **the middle one** given (1). In addition, the way of measurement divided into two types Figure 2. one measurement executed via a questionnaire handed out for a group of (10 experts) in the field of Islamic architecture to infer vocabularies according to the attached samples with the questionnaire by which we can reach to percentage of each achieved value where these percentages divided into:

- **high percentages (66.6%-100%)**
- **medium percentages (66.6%-33.3)**
- **low percentages (33.3-0)**

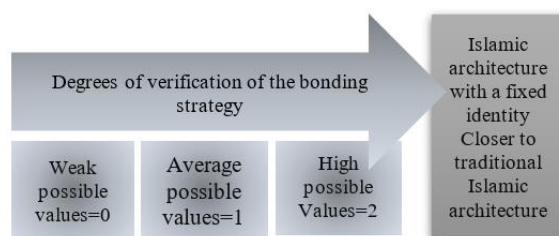


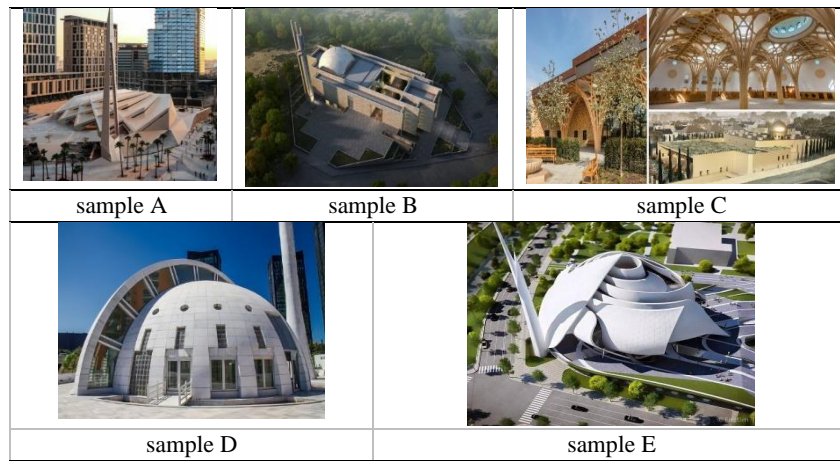
Figure 2. Shows the measurement ruler used in evaluating the results

The second measurement is the morphological analysis through analyzing plans where the percentages calculated according to the achieved values (approaching, balance, alienation) and the discussion and analyzing of the results lies on inferring of the bonding strategy according to the (5 samples).

4. THE CRITERIA FOR SELECTING THE SAMPLE

Where five samples were elected, reflecting a contemporary Islamic product. The samples were represented by mosques and Islamic centers with overlapping activities, and different in their planning patterns with the adoption of the Prophet's Mosque as a control sample that reflects the identity and values of Islamic architecture. It is the mosque that reflects the synergy between the past, present and future, these samples are shown in the Table 2:

Table 2. Shows the pictures of the selected samples



- **KAFD Grand Mosque** constructed in Riyadh in 2019 on floor are of 10.760m which represent a landmark within a forest of skyscrapers and represents the spiritual center and serve as a Juma'ah mosque as well. The design connects between the crystal cavern of the interior and the shape of the desert rose of the exterior. The intersecting crystal plates of the desert rose represent the source of inspiration and the unique geometrical base and the mosque is landmarked with two sculpted minarets of 60m long. The development of the design involved a series of complex parametric arrays and metal structures to create a simple and dynamic mass that eventually represents an abstraction of the desert rose [20] (Sample A).

- **Yasamket Mosque**, called also as the Islamic center, the construction starts in 2009 and finished in 2011 on an area of 2685m. The formal frame of the mosque depends features and plans (plots) adopted in traditional Islamic plans on the level of linear extension, portals or entrances and inner pace. The construction adopted modern local materials reflect the traditional values and sustainability as well as adopting the concrete in designing the Doom [21] (Sample B).

Cambridge central mosque built in 2019 and considered the first eco-friendly in Europe to meet the needs of the Muslim community by facilitating good practice in faith, community development, social cohesion & interfaith dialogue. This mosque, which has been designed by Marks Barfield Architects in London, win the most prestigious architecture prize (Stirling). The design inspired by a paradise and water is the source of life to create a tranquil oasis. The building achieves a sustainable ego design with near zero carbon emissions where local materials being used from the area treated with digital technological processes [21] (Sample C).

- **Yesilvadi mosque** built in 2004 on area of 3700m serve as a place where can come together of pray as well as a center for information, education and disputes settlements. The mosque and its courtyard servers as a city square to a represent mosques as places or centers social interactions. The idea of the design is based on geometrical shapes where the circle represents the sky and unity as well [22] (Sample D).

- **The white rose mosque** built in Tirana in 2014 on the area of 9500m which being as a place for the Muslims to come together for pray and a place for tourists' attractions. The mosque should interact with the entire city, with the entire community and it's not only serves as spiritual place for Muslim worshipers bust also as a magnetic landmark force to bring people closer to God, religion and the universal values of humanity. Thus, a place for worship, knowledge and culture to become a center of Islamic culture. The construction based on metal structures and digital technology [23] (Sample E).

5. RESULTS

We will discuss the results according to each and every vocabulary as follow:

5.1 Bonding levels

The results under discussion in relation to obtained outcomes in Table 3, Figure 3.

1) Formal bonding A1. within parallel values with medium degrees achieved with medium percentage in comparison with the approaching and alienation values which were weak.

2) The intellectual bonding A2. achieved highly within the parallel values in relation to mixing the intellectual references between past and present in comparison with the values of approaching and alienations.

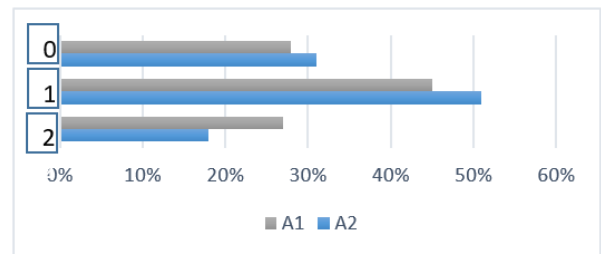


Figure 3. Shows the discrepancy in the results obtained

Table 3. Shows the results obtained

Variables	Sample A			Sample B			Sample C			Sample D			Sample E			Result		
	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0
A1	0	35%	65%	55%	40%	5%	35%	65%	0	30%	65%	5%	15%	20%	65%	27%	45	28
A2	10	35	60	40	50	10	10	40	50	15	70	15	15	65	20	18	51	31

5.2 Bonding types

The results under discussion in relation to obtained outcomes in Table 4, Figure 4.

1) The results showed in terms of the types of bonding that the samples showed an emphasis on the harmonious bonding (A3), which gives a degree of complete formal bonding with the formal images in a medium percentage, while the non-harmonic bonding appears in a very poor percentage.

2) The results showed an emphasis on the partial and complete difference bonding (A4) in terms of relying on quotations from the local context or compiling an ancient Islamic reference with a contemporary one at a medium rate. On the other hand, the incomplete differential cohesion appears in a weak percentage in terms of the designer's reliance on vague, unexplained formal references that give distortion to the contemporary Islamic production in terms of its cohesion with its origins. This means evoking both types of

synergy, and this obeys a degree of diversity, but it is due to a moderate reading in terms of defining it as an Islamic product and thus preserving the identity of Islamic architecture over time.

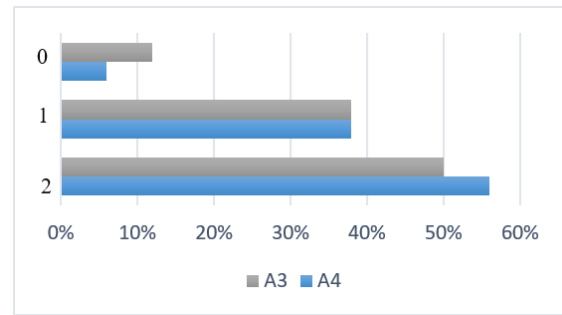


Figure 4. Shows the discrepancy in the results obtained

Table 4. Shows the results obtained

Variables	Sample A			Sample B			Sample C			Sample D			Sample E			Result		
	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0
A3	50	50	0	70	20	10	65	20	15	40	60	0	15	40	45	50	38	12
A4	50	40	10	70	30	0	60	40	0	50	40	10	50	40	10	56	38	6

5.3 Bonding characteristics

The results under discussion in relation to obtained outcomes in Table 5, Figure 5.

1) The results emphasized the characteristic of continuity through material and form. In terms of material (A5), the production showed an emphasis on the values of balance and distance more than the values of approach. Thus, an average bonding, while in terms of (A6) the results emphasized the values of closeness and balance more than the distant values, that is, the bonding through the material is stronger in affecting the product than the formal bonding.

2) Pairing feature results A7 emphasized on the pairing more through the meaning and form than the pairing through the feature in addition, shows the single and binary pairing more than triple one A8. It can be concluded that the bonding strategy shows its effectiveness by the formal and moral coupling together more than what is shown by the borrowed

characteristic, and the coupling is medium binary or weak unilaterally, and there is no complete coupling that gives a high match between the level of the two productions, contemporary and old.

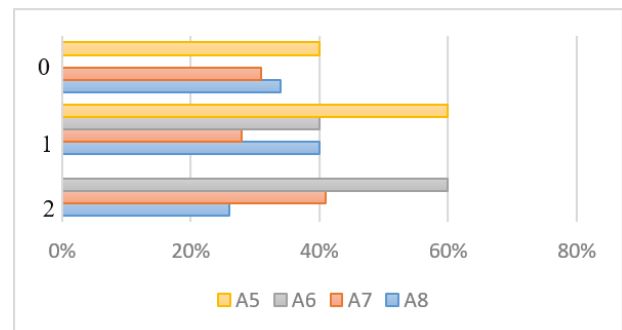


Figure 5. Shows the discrepancy in the results obtained

Table 5. Shows the results obtained

Variables	Sample A			Sample B			Sample C			Sample D			Sample E			Result		
	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2
A5	0			1			1			1			0			40	60	0
A6	1			2			2			2			1			0	40	60
Variables	Sample A			Sample B			Sample C			Sample D			Sample E			result		
A7	10	30	60	60	20	20	60	15	25	60	35	5	15	20	65	41	28	35
A8	5	40	55	50	40	10	60	25	15	15	70	15	0	25	75	26	40	34

5.4 Bonding mechanism

The results under discussion in relation to obtained outcomes in Table 6, Figure 6.

As related to geometrical feature the pairing results (A9) showed the depending more on static and changeable geometrical grids than the mixed grids while as related to symmetry features (A10) showed the depending of symmetry in parts more than total symmetry or asymmetry. As for the hierarchy feature (A11) the analyses results show the

importance of moving from public to semi- public space then to the private space more than direct moving to it (Figures 7-9) mechanism of sheer reviving (A12) the results shows the emphasize on balance value obtaining medium value in comparing to other values while the results of the collecting mechanism(A13) emphasis on balance and alienation values more than on approaching ones, and the abstraction mechanism (A14) emphasize on balance values to a medium level in comparing to other values which showed low percentages.

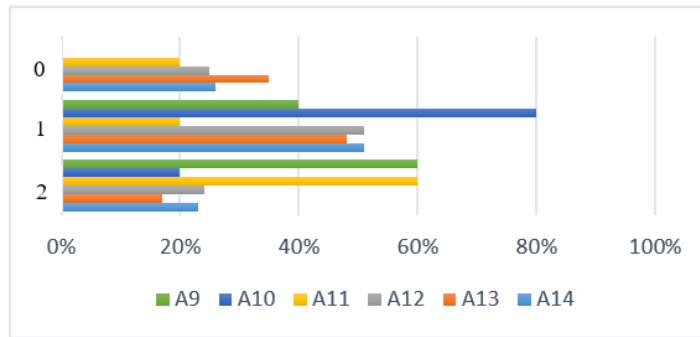


Figure 6. Shows the discrepancy in the results obtained

Table 6. Shows the results obtained

Variables	Sample A	Sample B	Sample C	Sample D	Sample E	result												
						0	1	2										
A9	2	1	2	2	1	60	40	0										
A10	1	2	1	1	1	20	80	0										
A11	0	2	2	1	2	60	20	20%										
Variables	Sample A		Sample B		Sample C		Sample D		Sample E		result							
A12	2	1	0	2	1	0	2	1	0	2	1	0	2	1	0	24	51	25
A13	0	40	60	30	65	5	50	50	0	25	65	0	15	35	50	17	48	35
A14	0	40	60	30	65	5	35	65	0	40	55	5	10	30	60	23	51	26

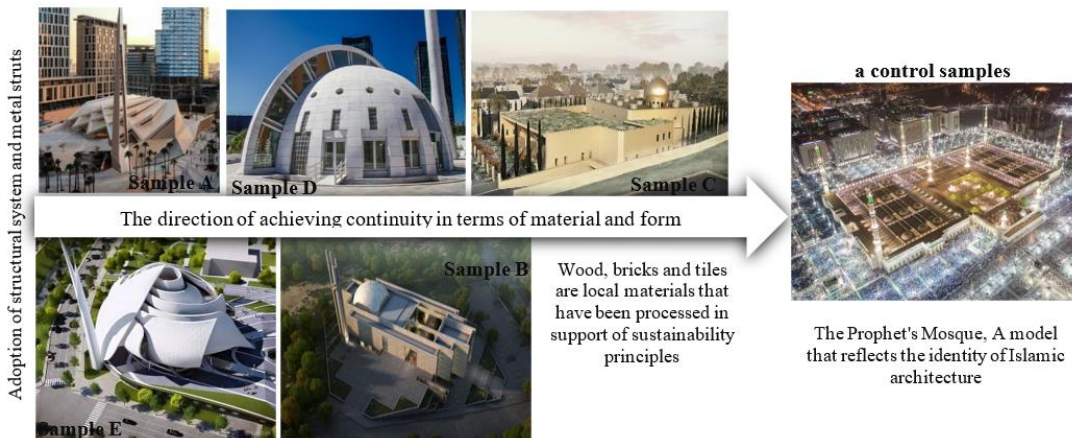


Figure 7. Shows the analysis of samples according to the type of material used

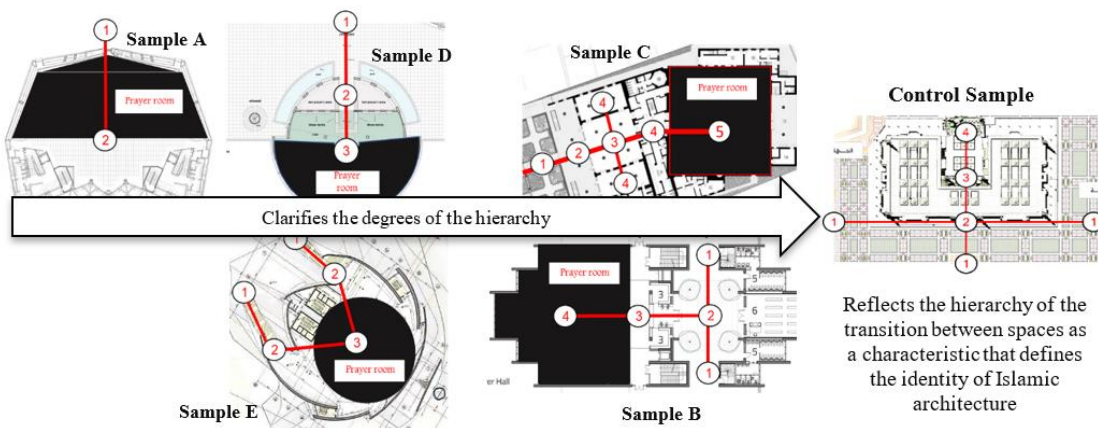


Figure 8. Clarifies the degrees of the hierarchy by moving from the public space to the private space

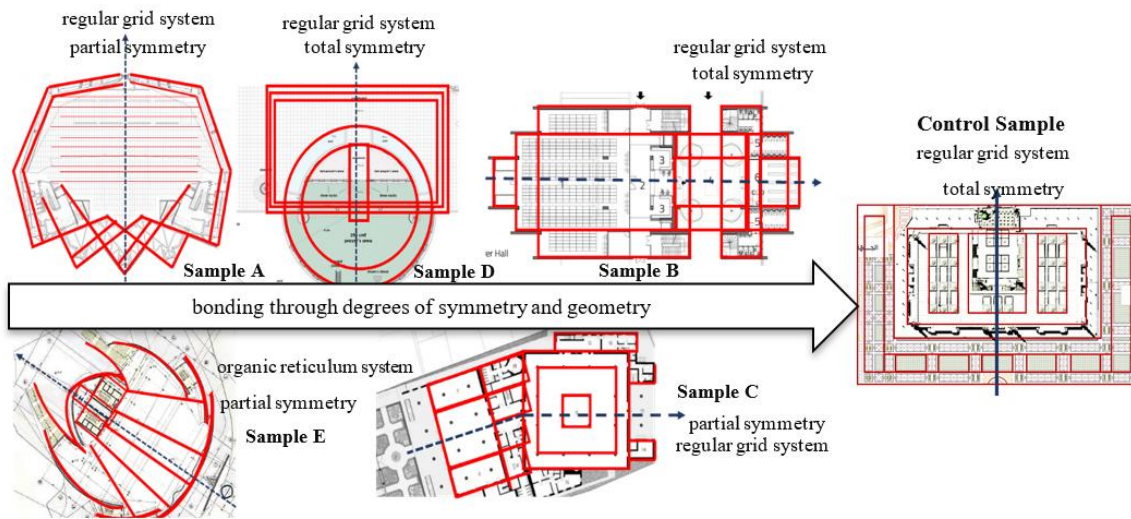


Figure 9. Shows the analysis of samples according to the geometric property and symmetry

6. CONCLUSIONS

Bonding strategy is one of the most important strategies the contemporary Islamic outcome or product adopt intentionally to preserve its recognition within its Islamic identity that reflect its connection with the origins as if they are imaginary lines presented by the designer and the requirements of the society mainly as traditions, customs.

There are two types of identity according to its relation to bonding via form and meaning. The static identity which considered the strong one in relation to symmetrical bonding force while the changeable one emphasizes the changeable bonding force due to the strength of the reality affiliated systems and its role in make changes on the product or outcome.

The contemporary Islamic products shows bonding in its two forms formal intellectual but the emphasize on the intellectual is more than the formal which leads to a highly various products and formal languages connected with the designer ego in the way of translating Islamic prototype and thus the presence of the Islamic identity stay within the moral connection with the origin.

Contemporary Islamic product shows intellectual bonding of high flexibility by recalling references from the past affiliated with spiritual and sacred dimensions and its role in forming the product but its mix with the meaning of the present that provide this dimension away from total similarity while from the other side the contemporary Islamic product shows a formal bonding that reflect a high variety adopting different formal languages in opposite to partial presence of the static formal unit.

Although contemporary Islamic products are multiple, differential and various but it ultimately emphasizes on the two types, where the total consensual bonding emphasize on recalling static or fixed formal casts as forms that reflects the symbolic meaning marks the identity of Islamic architecture as for the dooms, although formed differently, its recall stay of importance in identify mosques building as an example as well as using same Islamic elements for other close function keep it within its defined frame.

The second type, the differential bonding, appears in the importance of adopting local quotes from the context of the product which relates to its tradition and customs or its

environment context which provide high belonging to its Islamic identity, this bonding also emphasizes on the importance of processing founding an Islamic reference as well as the presence of designer ego in remodeling which give a form to that variety in Islamic products.

Due to the two types of Bonding, two levels of Islamic identity appear within the contemporary Islamic products which is:

An identity emerged from differential bonding which is achieved through close parts in binding the static and variable another one emerged from consensual bonding which resulted from high value of the known constants of the Islamic product with small present of the acquired variables from the reality.

Despite high variety in contemporary Islamic product, it shows copying mechanism that achieves bonding with approaching and balance more than alienation and non-bonding. This mechanism appeared not only from recalling all its features (geometrical, symmetry and hierarchy) but also through one or two of them to assure the mark of Islamic product identity with using new treatment that provide bonding and belonging to its present time and designer ego.

The contemporary Islamic product reflect its identity by using the reviving mechanism of meaning that reflect high symbolism but also show it formally different somehow as the minarets, for example, that reflect the orientation towards the sky through different expressing shapes and that in turns shows the high flexibility in translating the fixed or static meaning and perceiving the bonding with the origin at the same time.

The contemporary Islamic product show both collective and multiple collective mechanisms where the collective mechanism shows either an equality in the strong contemporary formal elements with the traditional and this equality could be in frank meaning with contemporary form or the vice a versa and thus the Islamic products stay variant though within the limits of bonding.

The abstraction mechanism emphasize the contemporary Islamic product shows partially the Islamic identity formally or intellectually behind the advance technological processes where the indication of forms might disappear partially due to these techniques but still present somehow or in part by its strong indicators and its position in the product.

7. RECOMMENDATION

The research emphasizes on the importance of bonding strategy as it binds the Islamic product in coherence with origins and Islamic identity, and this obtained through activating both formal levels by launching multiple formal languages with the necessity of confined it within the expressing and indicating unit which keeps the mosque readable or perceivable by its symbolic indications.

The intellectual is emphasizing on the importance of keeping the belonging of references and not to cast away from its social and religious values and connect it with intellectual levels of the designer and time updates to become in course with present and bonding with its originals.

The search recommends to work on recalling both consensual and differential types partially because the first provide the state of similarity and pairing with origins while the latter provide creativity and singularity within the frame of privacy and identity in Islamic architecture product where it works on both intellectual and formal levels.

The research emphasis on the importance of using copying strategy partially within the basic formal features because achieving geometry for a specific level requires recalling the non-geometry on other level, or recalling a traditional feature like the dome is done by new single way, in other words, the mechanism will not be fully recalled in the product to achieve the balance in binding the product to its origins and a culture and provide new picture for the future by creating new creative aspects.

The research recommend a balance using both collecting and abstracting strategy as it is a critical strategies that may cause the product to stray or deviate away from binding to non-bonding and leads to separating the product from its identity so we should keep the force of all traditional and contemporary elements equal in relation to collectivity mechanism, as well as preserving the partial appearance of the elements as well as partial hiding behind new or modern techniques and technologies.

8. FUTURE RESEARCH PROSPECTS

The bonding strategy, in both its harmonious and difference types, can be adopted as a design strategy based on finding Islamic products that have that doctrinal dimension associated with its identity as an Islamic architecture.

It is possible to investigate the impact of the synergy strategy in finding the connection between the local heritage and the development of contemporary production within Arab societies.

The bonding strategy can be explored to find the intellectual connection between the orientation of thinkers interested in the field of architecture.

In order to reach the intellectual levels according to which it can be transformed into Islamic products that endorse its present and past and shed light on the ideas of future architecture.

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APPENDIX

A table showing the questionnaire prepared for experts

Code	Questions	2	1	0
A1	Do the presented models give diversity within the unit or vice versa according to the formal languages	Adoption of diversity within a single formal language	Adoption of the unit within multiple formal languages	The unit cannot be read at all levels
A2	Assessing the references' belonging to thought between contemporary production and its bonding with its identity as an Islamic product	A complete intellectual affiliation with the past	Mixing intellectual references between the past and the present	Contemporary references
A3	Do you read the identity of contemporary production through?	Adoption of fixed form templates for the same functionality	Adopting the same Islamic elements for another closely related job	Adopting new changing items
A4	Do the treatments adopted in the formulation of the building show objective or subjective aspects?	Adopting processors that combine an Islamic reference with the subjectivity of the designer in their formulation	Adopting local quotes from the production context	Adopting fuzzy self-processors
A7	How to achieve the conjunction between the contemporary product and its identity as Islamic architecture	formal conjunction	conjunction with a specific feature	conjunction with a specific meaning
A8	conjunction strength	triple	couple	single
A12	The revival methods adopted in linking production to the contemporary with its Islamic identity are:	Revival of an explicit Islamic form	Reviving an explicit meaning in different forms and formulations	Generate new meanings
A13	If the product is formally analyzed into parts, how can its identity be read as an Islamic product	Show more traditional elements than contemporary	Equal to show the power of the elements	Show the power of contemporary elements more than traditional
A14	Adopting technology to show formal abstraction	A complete manifestation of the identity of the traditional forms	Partially showing the identity of the shapes behind the technology with a partial change to it	Complete concealment of the identity of forms with the power of technology