

The role of collaborative perception in determining procedure priorities of reconstruction -Mosul old city

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Abstract

The call for post disaster reconstruction may look very elementary and naive, but the question is regarding, the common agreement on procedure priorities of this reconstruction, availability of sufficient premises, sharing and gathering of the available documentations of the destroyed sectors voluntarily, and to how extent may Mosul society accept 21st century technologies and built environment in reconstruction procedure, taking into consideration the local identity of the old city.

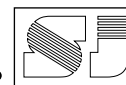
These questions may lead to the necessity for a concrete justification for any decision to be made, these decisions are to be acceptable by majority of Mosul city society, this can be done by detecting the collaborative unconscious perception for the matter of disastrous status of the destroyed old city, and available collaborative image for reconstruction procedures, to detect such an image, perception scales can be used, especially ones that were adopted to detect the rate of architecture vocabulary perception.

Finally the paper aims to be able to determine indicators that my help in establishing a road map for collaborative efforts (on both individual and institutional levels) that are accepted by the majority of Mosul People, the research started with building a theoretical framework by reviewing similar studies regarding perception, semantic differential scale and built heritage, the field survey was started by determining the survey society that represent various Mosul city social ranks, then this survey society was furnished with copies of the questionnaires, results of the survey were gathered, analyzed and discussed, coming out with a conclusion that, the results of this paper, represents indicators that my help in establishing a road map for collaborative efforts (on both individual and institutional levels) that are accepted by the majority of Mosul People.

Introduction

The call for post disaster reconstruction may look very elementary and naive, but the question is regarding, the common agreement on priorities and procedure of this reconstruction, “In

February 2018, the Director-General of UNESCO, Audrey Azoulay, launched the flagship initiative (Revive the Spirit of Mosul) as the Organization’s response for the recovery of one of Iraq’s iconic cities. Reviving Mosul is not only about reconstructing heritage sites, it is about



empowering the population as agents of change involved in the process of rebuilding their city through culture and education. It is with a strong message of hope and resistance to Iraq and to the world, a message that an inclusive, cohesive and equitable society is the future that Iraqis deserve, that the “Revive the spirit of Mosul” Flagship Initiative was born” (<https://en.unesco.org/fieldoffice/baghdad/revivemosul>) The UNESCO objectives targeted (empowering population, and inclusive cohesive and equitable society) the paper will argue to how extend the targeted Mosul society may collaborate in such (inclusive, cohesive, equitable) efforts, by raising questions regarding, the common agreement on procedure priorities of reconstruction, availability of sufficient premises, volunteering in sharing and gathering of the fragmented documentations of the destroyed sectors, and to how extent may Mosul society accept 21st century technologies in reconstruction procedure, taking into consideration the local identity of the old city.

Goal of the research

At the end the paper aims to be able to determine indicators that may help in establishing a road map for collaborative efforts (on both individual and institutional levels) showing to how extend suggested procedures are accepted by the majority of Mosul People

1- Theoretical framework (literature review):

1-1-Semantic Differential Technique in the Comparative Study of Cultures,

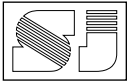
by Charles E. Osgood Institute of Communications Research, University of Illinois 1964 (P 171-199) This paper may be one of the old papers that referred to the issue of “the fact that nonmaterial traits must often be assessed through the medium of language” (Osgood et.al 1964) Osgood argues that the language may be a barrier but through semantics numerical values can be used to represent cultural phenomenon “These findings

enliven the possibility of constructing instruments for measuring these aspects of (subjective culture) comparably in diverse societies-in effect, circumventing the language barrier” (Osgood et.al 1964) also argues that the semantic tools that is able to measure to some extend people reaction, behavior and stand point “affective reactions people make to symbols and events are important determiners of their overt behaviors with respect to these symbols and events” (Osgood et.al 1964) the factors resulted out of using semantic tools are more reactive affective and connotative that means that filling the semantic polar adjective list will be an indicator the unconscious reaction rather than intentional on purpose decision “these factors are more reactive in nature than sensory, more broadly affective than discriminatively cognitive, and thus closer to connotative than to denotative aspects of meaning” (Osgood et.al 1964) since the 1960s many institutions and researchers have worked on developing and adopting lists of polar adjectives following Osgood approach, “it is only by virtue of this common frame of reference that differences between people for the same concept and between concepts for the same people can be specified” (Osgood et.al 1964) the paper will adopt this approach to indicate the reactive unconscious stand point of the survey society

1-2- Erbil City’s Traditional and Vernacular Architecture Disastrous Status (A Perception Survey using Semantic Differential Scale)

By Mahmood Khayat, and Binyad Kahazndar, Salahaddin University-Erbil ZANCO Journal of Pure and Applied Sciences, ZJPAS (2016) 28 (2); (P429-436)

This paper referred to the original reference to semantic deferential scale (Charles Egerton Osgood, University of Illinois 1957) , then built a scale that is composed of 22 pairs of polar adjectives as in Table 1: Polar adjective set (Khayat and Khaznadar et.al,2016) , that was tailored for the case of Erbil city, while in this case it is a different local, the same thing was



with direct questions approach that was followed but using questions related to the case of threads of the disastrous status of Erbil city vernacular sectors.

It is clear that the semantic polar adjectives can be adopted as per the subject and objectives of the suggested study, and it is clear it can be easily adopted for the sake of architectural and built heritage cases.

1-3- Application of Semantic Differential Technique to Evaluate Kansei Image in Architectural Design

by (Tai-Fen Hung, Chih-Kao Nieh), *iasdr2009 Conference proceedings* (P 3155-3163) Oct. 18-22, 2009 Seoul- Korea

The research used semantic scale for verification of facade in Taiwan, the research took the Charles Egerton Osgood, University of Illinois (1957) as a base for their polar adjective list, the list was adopted as per the requirement of the paper ended with a list of 20 pairs of polar adjectives as in Table 2: Polar adjective set (Tai-Fen Hung* Chih-Kao Nieh et.al 2008 P3157) , adopting statistical tests they ended with a conclusion “We have conclude from these observations that impression rated by using Semantic Differential Technique (SD) structure in Kansei model demonstrates high valid and reliable measurements”

It is clear that the semantic can be used for various purposes and sets of polar adjectives can be adopted as per the required cases

1-4- Semantic differential analysis of the soundscape in urban open public spaces

by (J. Kang*, M. Zhang) *Building and Environment* 45 (2010) 150–157, www.elsevier.com/locate/buildenv

This paper adopted the semantic list to be able to test sound scape in urban sectors in the city of Sheffield in the United Kingdome, this paper showed that this scale is very adoptable as per the case and can measure the unconscious semantic response of the audience, this paper used the

seven grades scale with 3 positive and 3 negative in addition to neutral as in Table 3: Polar adjective set (J. Kang*, M. Zhang et.al 2010).

1-5- University students perception of lighting and preferences for the setting and social arrangement in contrasting dining facilities,

by Holly Sutherin, un published master thesis of interior design, University of Florida, 2005

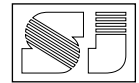
This Master thesis in university of Florida proofs that the semantic polar adjective scale is adoptive and can give accurate results regarding perception and also can be adopted as a scale for social issues, the significance of this paper was the using of photographs for assessment of perception, this approach of using photographs as a stimuli will be used in the practical of this research

1-6- Semantic differential scale for assessing perceptions of hospitalized patients about bathing,

by Juliana de Lima Lopes¹, Luiz Antonio Nogueira-Martins², *Acta Paul Enferm* 2011;24(6) (P815-20).

This paper as it is stated in its objectives “To construct and validate a semantic differential scale to assess patients’ perceptions in regarding bathing” (Juliana, and Luiz et.al 2011) that proofs the flexibility of the scale to be adopted as per various cases, this was highlighted in the conclusion “The scale can be considered a valid and reliable instrument for assessing patients’ perceptions regarding showers and bed baths” (Juliana, and Luiz et.al 2011)

As a result of the literature review it is clear that semantic differential scale is an suitable measurement for perception that was started by a 30 sets of polar adjectives by Osgood in 1957, then it was adopted as per the cases by choosing adjectives randomly or specifically in order to tell about peoples perception regarding certain subject, the results was tested in each of the above mentioned references by various statistical and



empirical methods, this paper aims to check the common agreement regarding disastrous status of Mosul old city, because of the limitation of the study, only 10 adjectives were selected for the list as in questionnaire sheet (1) and (2), in addition to that direct questions will be used regarding certain aspects, such questions were used in the above mentioned reviewed literature, in the case of this paper it will be used as direct explicit sets of questions regarding procedures suggested by the UNESCO project brief (<https://en.unesco.org/fieldoffice/baghdad/revivemosul>) as in questionnaire sheet (3), (4) and (5).

2-Field work

The (5) pages questionnaire was designed for the sake of this research, then 150 copies were prepared and distributed on the survey society that represent 3 social groups as follows:

- Randomly selected Mosul City academics (50 copies)
 - Randomly selected larger Mosul City inhabitants (50 copies)
 - Randomly selected Mosul Old City sector inhabitants (50copies)
 - The questionnaire was designed for the sake of this research as per the here under details:
- 1- Indirect test using semantic differential scale, that uses polar adjectives to detect unconscious standpoint of the survey society regarding certain subject (in this case it will be pre and post disaster images of certain land marks of Mosul old city), this may help to create an image about the status of society priorities to maintain the original status as a key factor for identity
 - 2- Direct questions questionnaire that may help to clarify the collaborative conscious stand point
 - Questions regarding voluntarily participation in gathering and offering fragmented (by individuals or institutions) documents regarding old Mosul city in order to establish

a comprehensive data base for the sake of reconstruction.

- Direct questions regarding, to how extends, the use of modern technology, and international organizations intervention in reconstruction, was supported by the surveyed people.
- Direct questions regarding Mosul society understanding for local and international legislations regarding reconstruction of built heritage.

As per the above, 150 copies of the here under questionnaire was prepared and distributed on the survey society the represents 3 social ranks: architects related to Mosul city, non-architect intellectuals related to Mosul city, and laymen lived and still living in Mosul old city.

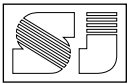
3- Result review

3.1. Indirect test using semantic differential scale, that uses polar adjectives to detect unconscious standpoint of the survey society regarding certain subject (in this case it will be pre and post disaster images of certain land marks of Mosul old city), this may help to create an image about the status of society priorities to maintain the original status as a key factor for identity.

150 copies of the here under questionnaire was prepared and distributed on the survey population, that represents 3 social ranks: People of academy, Mosul city inhabitants, and old Mosul city inhabitants the results were represented in tables and bar charts as follows:

- Pre-disaster image of a portion of river bank of Mosul old city as in Questionnaire sheet (1) and bar chart 1:

There was common agreement on positive adjectives of (Beautiful, Touching, Artistic, and Vigorous) it can be clearly noticed as the high columns in the bar chart these shows the areas of possible communication with people, the low columns in the bar chart represent areas of weak and mild agreement, these adjectives were



(Delightful, Continuous, Orderly, and Brilliant) while the survey population felt neutral regarding the adjectives of (Respected and Urban)

- Post-disaster image of the same portion of the river bank of Mosul old city as in Questionnaire sheet (2) and bar chart 2:

There was common agreement on negative adjectives of (Ugly, sad, Neglected, Chaotic, Gloomy, and Dead), it can be clearly noticed as the high columns in the bar chart these shows the areas of possible communication with people, the low columns in the bar chart represent areas of mild agreement on adjectives (Vulgar, and Rural) while the survey population felt neutral regarding the adjectives (Touching, and Interrupted), a significant result was noticed for the group (people of academy) they totally agreed that the scene is (Touching and Rural) this shows a passionate stand point and understanding.

3.2. Direct questions questionnaire that may help to clarify the collaborative conscious stand point regarding voluntarily participation in gathering and offering fragmented (by individuals or institutions) documents regarding old Mosul city in order to establish a comprehensive data base for the sake of reconstruction as in Questionnaire sheet (3)) and bar chart 3

Discussion

- a) 98% of the survey population supported the idea of establishing a specific Data base for Mosul old city reconstruction efforts.
- b) 86% of the survey population agreed that the reconstruction of Mosul old city is one of the priorities of the comprehensive plan of grater Mosul revitalization plan
- c) 43% of the survey population do keep documents (maps, drawings, property documents....etc.) that may be useful for the old Mosul city reconstruction, mainly people of academy and old city inhabitants.
- d) 66% of the survey population agree to voluntarily participate the documents they

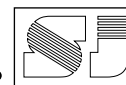
keep, these people were people of academy and the old city inhabitants

- e) 61% of the survey population support the idea of letting the united nation NGOs to be responsible for the intended data base, while 32% supported the idea of letting local governmental bodies to be responsible for the intended data base
- f) In bar chart 3 there are only 3 high columns, these columns are for Q1, Q2 and Q4, which means that the old city is a priority and there is a need to establish a data bank for gathering data and information and that there are good amount of data and information that can be gathered form local institutions and individuals.

3.3. Direct questions questionnaire that may help to clarify the collaborative conscious stand point regarding supporting the use of modern technology, and international organizations intervention in reconstruction as in Questionnaire sheet (4) and bar chart 4:

Discussion

- 1- 96% of the survey population support using up to date technologies technology during the procedure of, data collection and field survey
 - 2- 94.5% of the survey population support using up to date in the procedure of design and planning for the reconstruction
 - 3- 97% of the survey population support using up to date technology in the procedure of capacity building of technical team and skilled workers to participate in reconstruction
 - 4- 90% of the survey population support change of land use and creating new functions for reconstructed structures.
- 5-1- 58% of the survey population support the use of the old materials out of the ruins, mainly old city inhabitants
- 5-2- 67% of the survey population support the use of new materials similar to the ones used in old



buildings (gypsum, lime stone and Mosul Marble (FARESH))

5-3- There was rejection for the idea of using new artificial materials that looks like the old ones
In bar chart 4 there are only 4 high columns, these columns are for Q1, Q2, Q3 and Q4, which means that there is a common agreement on using up to date technologies during the stages of data collection, planning and construction.

3-4- Direct questions questionnaire that may help to clarify the collaborative conscious stand point regarding, Mosul society understanding for local and international legislations regarding reconstruction of built heritage as in Questionnaire sheet (5) and bar chart 5.

Discussion

1-71% of the survey population support that reconstruction works to be as per local antiquity and artifacts authority legislations

2-42% of the survey population support that reconstruction works to be as per Mosul city municipality legislations

3-95% of the survey population support that reconstruction works to be as per UNESCO legislations

4-62% of the survey population support that decision-making priorities to be for the opinion of Land lords, former inhabitants, People of academy and researchers

5-there was no common agreement on creating committees for decision making.

In bar chart 5 there are only 2 high columns, these columns are for Q1 and Q3, which means that the local legislations of state organization of antiquities and UNESCO legislations are accepted by the majority.

4- Conclusions and recommendations:

4-1- Conclusions:

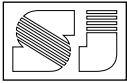
1- The unconscious conception image regarding old Mosul city before destruction is unclear and confused, there was no common

agreement on most of the positive values on the semantic scale.

- 2- The unconscious conception image regarding old Mosul city after destruction is clearer towards negative values, including few weird and odd answers
- 3- There is a chance for establishing a central data base for the sake of reconstruction of the old city under the control of UN
- 4- The up to date technology is accepted publicly
- 5- UNESCO legislation regarding reconstruction are accepted by the majority

4-2- Recommendations

- 1- Concentrated efforts are required for enrichment of the unconscious conception image for the majority inhabitants of Mosul city regarding the importance of the old city as cultural heritage that can be regarded as high priority premise for any future development
- 2- Polar adjectives that got high rate of common agreement can be invested as key elements in any future development that require social common support.
- 3- Establishing specific data base for the reconstruction of documents and documentation to be regarded as high priority
- 4- It is recommended to follow up to date fast track technologies in reconstruction procedure
- 5- It is recommended to follow UNESCO legislations and recommendations in reconstruction procedure.
- 6- It is recommended to do further researches on larger survey population, using statistic correlation coefficients, that make that the survey sample accurately represent the case and that the results are true
- 7- It is recommended to make use of the results of this study during decision making process or determining of variables, in the process of reconstruction of old Mosul city, this may



help that the intended plans can get an acceptable common agreement rate.

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دور الإدراك الجمعي في تحديد اولويات واليات اعادة الاعمار- المدينة القديمة في الموصل

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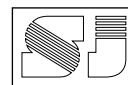
المستخلص

الدعوة لاعادة الاعمار واعادة التاهيل قد تبدو بديهية، ولكن هناك تساؤل على مدى الاجماع حول الاليات والاولويات، وهل ان الادوات المتاحة وافية بالاضافة الى دور المجتمع الطوعي لتوفير ما يمتلك من خزين مبعض من التوثيق، ومدى تقبل الجديد من التكنولوجيا لتوفير بيئة تنتمي الى القرن الواحد والعشرين مع الحفاظ على الهوية المحلية.

هذه التساؤلات تقود الى توفير المبرر الموضوعي لاتخاذ القرار، لكي يكون القرار مقبولاً بشكل جمعي من قبل المجتمع، هنا تبرز اهمية تقصي الاوعي الجمعي للمجتمع قيد البحث (المجتمع الموصل) حول مأساة الدمار والصورة الذهنية الجمعية لاعادة الاعمار واليات، للوصول الى هذه الصورة الجمعية يمكن اللجوء الى المقاييس الادراكية التي تم تطويعها في حقل العمارة لتشخيص مفردات الصورة الذهنية الجمعية.

يسعى البحث الى تحديد مؤشرات تساعد لتأسيس خارطة طريق للعمل الجمعي على مستوى الافراد والمؤسسات يحظى بالمقبولية من قبل غالبية المجتمع الموصل، ولأجل ذلك تم البدء بعملية بناء اطار نظري من خلال استعراض بعض الدراسات المماثلة الخاص بمواضيع (ادراك ومقياس التباين السمانيكي والابنية التراثية او التراث العمراني) ومن ثم القيام بالدراسة العملية التي بدأت باختيار عينة البحث ومجتمع العينة الذي يمثل شرائح اجتماعية مختلفة من مدينة الموصل وبعدها تم توزيع استمارات الاستبانة وجمع نتائج الاستبيان ومن ثم القيام بمناقشة النتائج والخروج باستنتاجات تؤكد ان نتائج هذه الدراسة تعزز بناء خارطة طريق من خلال توفير مؤشرات تساعد على تحديد اولويات اجراءات اعادة الاعمار من خلال العمل التضامني الطوعي على مستوى الافراد والمؤسسات والتي تحظى بمستوى معقول من المقبولية لدى مجتمع مدينة الموصل.

الكلمات المفتاحية: مدينة الموصل القديمة، الدمار، اولويات الاعمار، الادراك الجمعي.

**Table 1: Polar adjective set** (Khayat and Khaznadar et.al,2016)

Simple	Neutral	Complicated
Beal	Neutral	Ugly
Passive	Neutral	Active
Strong	Neutral	Weak
Rational	Neutral	Tate
unique	Neutral	Common
ambiguous	Neutral	Clear
Exciting	Neutral	Calming
Pisa	Neutral	Ornate
interesting	Neutral	Boring
Delicate	Neutral	Rugged
Good	Neutral	Bad
Gloomy	Neutral	Cheerful
Permanent	Neutral	Temporary
Welcoming	Neutral	Forbidding
chaotic	Neutral	Ordered
Uncomfortable	Neutral	comfortable
Revolutionary	Neutral	Reactionary
annoying	Neutral	Pleasing
Straightforward	Neutral	Contradictory

Table 2: Polar adjective set (Tai-Fen Hung* Chih-Kao Nieh et.al 2008 P3157)

No.	Adjectives	No.	Adjectives	No.	Adjectives	No.	Adjectives
A01	Urban Rural	A06	Grand-Trifling	A11	Deticate- Rough	A16	Individuatized-general
A02	Beautiful-Hideous	A07	vigorous-Dead	A12	contemporary-Classical	A17	orderly-Chaotic
A03	Brilliant-Gloomy	A08	Attistic-Vulgar	A13	Dynamical-Static	A18	Steady-Unsteady
A04	Glowing.Naive	A09	Newfangled-Superannuated	A14	Symmetrical-Dissymmetrical	A19	Sliding-Twisting
A08	Transparent-Closed	A10	Concise-Complicated	A15	Gorgeous-Simple	A20	Magnificent Undersized

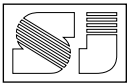
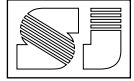


Table 3: Polar adjective set (J. Kang*, M. Zhang et.al 2010)

	Very	Fairly	Little	Neutral	Little	Fairly	Very	
Agitating	3	2	1	0	-1	-2	-3	Calming
Comfort	3	2	1	0	-1	-2	-3	Discomfort
Directional	3	2	1	0	-1	-2	-3	Everywhere
Echoed	3	2	1	0	-1	-2	-3	Deadly
Far	3	2	1	0	-1	-2	-3	Close
Fast	3	2	1	0	-1	-2	-3	Slow
Gentle	3	2	1	0	-1	-2	-3	Harsh
Hard	3	2	1	0	-1	-2	-3	Soft
Interesting	3	2	1	0	-1	-2	-3	Boring
Like	3	2	1	0	-1	-2	-3	Dislike
Meaningful	3	2	1	0	-1	-2	-3	Meaningless
Natural	3	2	1	0	-1	-2	-3	Artificial
Pleasant	3	2	1	0	-1	-2	-3	Unpleasant
Quiet	3	2	1	0	-1	-2	-3	Noisy
Rough	3	2	1	0	-1	-2	-3	Soot
Sharp	3	2	1	0	-1	-2	-3	Flat
Social	3	2	1	0	-1	-2	-3	Unsocial
Varied	3	2	1	0	-1	-2	-3	Simple
Beautiful	3	2	1	0	-1	-2	-3	Ugly
Bright	3	2	1	0	-1	-2	-3	Dark
Friendly	3	2	1	0	-1	-2	-3	Unfriendly
Happy	3	2	1	0	-1	-2	-3	Sad
High	3	2	1	0	-1	-2	-3	Low
Impure	3	2	1	0	-1	-2	-3	Pure
Light	3	2	1	0	-1	-2	-3	Heavy
Safe	3	2	1	0	-1	-2	-3	Unsafe
Steady	3	2	1	0	-1	-2	-3	Unsteady
Strong	3	2	1	0	-1	-2	-3	Weak



Questionnaire sheet (1) (The researcher)

المجموع summation	سكان المدينة القديمة Old city inhabitants					سكان الموصل Mosul city inhabitants					الاكاديميين People of academy					No.				
محايد Neutral	Neutral محايد					Neutral محايد					Neutral محايد									
Dead ميت 5	Gloomy كئيب 10	غير متحضر Rural 12	مبتذل Vulgar 7	فوضوي Chaotic 13	غير مستمر Interrupted 6	Neglected مهمل 15	Sad محزن 6	اعتيادي Normal 4	قيح Ugly 1	37	63	8	42	62	70	69	70	39	17	1
Vigorous حيوي 108	Brilliant متاف 77	متحضر Urban 56	فني Artistic 101	منظم Orderly 75	مستمر Continuous 74	موقر Respected 66	مبهج Delightful 74	مؤثر Touching 107	جميل Beautiful 132	77	70	74	101	75	74	66	74	107	132	2
Dead ميت 13	Gloomy كئيب 18	غير متحضر Rural 33	مبتذل Vulgar 7	فوضوي Chaotic 9	غير مستمر Interrupted 16	Neglected مهمل 25	Sad محزن 21	اعتيادي Normal 15	قيح Ugly 5	33	33	33	7	21	25	25	21	15	5	3
Vigorous حيوي 37	Brilliant متاف 32	متحضر Urban 17	فني Artistic 43	منظم Orderly 41	مستمر Continuous 34	موقر Respected 25	مبهج Delightful 29	مؤثر Touching 35	جميل Beautiful 45	32	34	29	43	41	25	25	29	35	45	4
Dead ميت 2	Gloomy كئيب 4	غير متحضر Rural 4	مبتذل Vulgar 3	فوضوي Chaotic 5	غير مستمر Interrupted 3	Neglected مهمل 5	Sad محزن 3	اعتيادي Normal 1	قيح Ugly 1	4	3	3	3	5	3	3	3	1	1	5
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Vigorous حيوي 35	Brilliant متاف 23	متحضر Urban 17	فني Artistic 24	منظم Orderly 14	مستمر Continuous 15	موقر Respected 17	مبهج Delightful 21	مؤثر Touching 33	جميل Beautiful 42	23	15	21	24	14	17	17	21	33	42	5
Dead ميت 3	Gloomy كئيب 6	غير متحضر Rural 8	مبتذل Vulgar 4	فوضوي Chaotic 8	غير مستمر Interrupted 3	Neglected مهمل 10	Sad محزن 3	اعتيادي Normal 3	قيح Ugly 5	11	3	3	4	8	3	3	3	3	5	5
11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Vigorous حيوي 36	Brilliant متاف 22	متحضر Urban 22	فني Artistic 34	منظم Orderly 20	مستمر Continuous 25	موقر Respected 24	مبهج Delightful 24	مؤثر Touching 39	جميل Beautiful 45	22	25	24	34	20	24	24	24	39	45	6
36	22	22	34	20	25	24	24	39	45	22	25	24	34	20	24	24	24	39	45	6
10	9	8	7	6	5	4	3	2	1	10	5	3	2	1	3	2	1	2	1	10

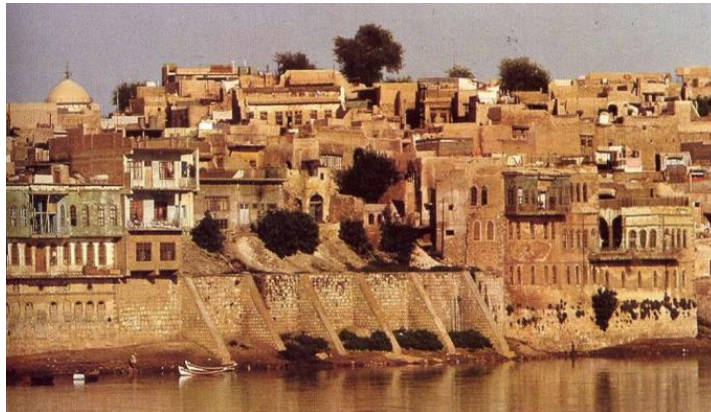
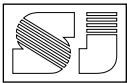


Image of Questionnaire sheet (1)

Photo: (<https://gabsworld.com/photo/cities/mosul/03/>)

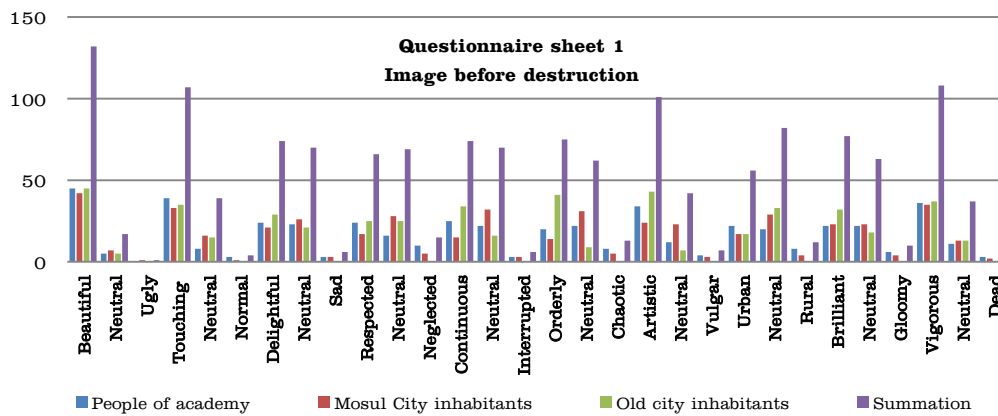
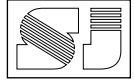


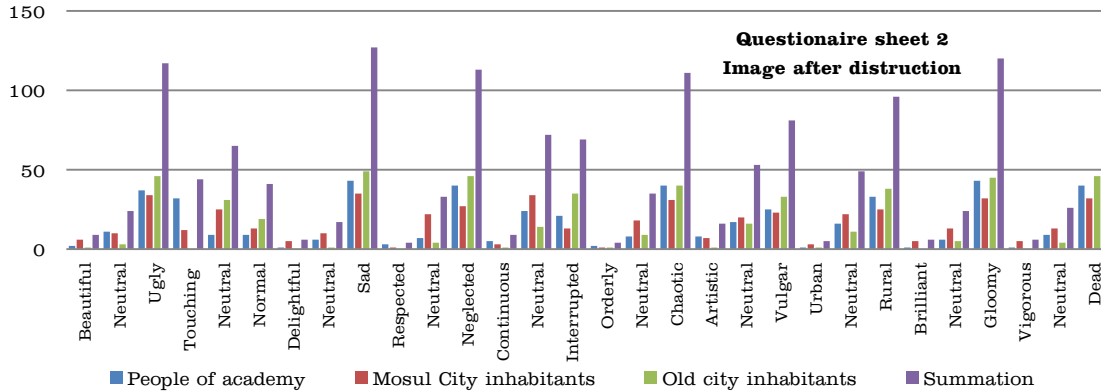
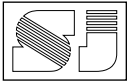
Image of Questionnaire sheet (2)

Photo: <https://aawsat.com/english/home/article/1225656/after-isis-defeat-iraq-scouts-make-comeback-mosul>



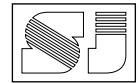
Questionnaire sheet (2) (The researcher)

المجموع summation		سكان المدينة القديمة Old city inhabitants		سكان الموصل Mosul city inhabitants		الاكاديميين People of academy		No.
محايد Neutral		محايد Neutral		محايد Neutral		محايد Neutral		
Dead ميت	118	Dead ميت	46	Dead ميت	32	Dead ميت	40	10
Vigorous حيوي	6	Vigorous حيوي	4	Vigorous حيوي	5	Vigorous حيوي	1	9
Gloomy كئيب	120	Gloomy كئيب	45	Gloomy كئيب	32	Gloomy كئيب	43	6
Brilliant منانق	6	Brilliant منانق	6	Brilliant منانق	5	Brilliant منانق	1	1
متحضر Urban	5	متحضر Urban	5	متحضر Urban	3	متحضر Urban	1	8
غير متحضر Rural	96	غير متحضر Rural	38	غير متحضر Rural	25	غير متحضر Rural	33	8
مبتذل Vulgar	81	مبتذل Vulgar	33	مبتذل Vulgar	23	مبتذل Vulgar	25	7
فني Artistic	16	فني Artistic	16	فني Artistic	7	فني Artistic	8	6
منظم Orderly	4	منظم Orderly	4	منظم Orderly	1	منظم Orderly	2	5
غير مستمر Interrupted	69	غير مستمر Interrupted	35	غير مستمر Interrupted	13	غير مستمر Interrupted	21	4
مستمر Continuous	9	مستمر Continuous	9	مستمر Continuous	3	مستمر Continuous	5	3
موقر Respected	4	موقر Respected	4	موقر Respected	1	موقر Respected	3	2
مهمل Neglected	113	مهمل Neglected	46	مهمل Neglected	27	مهمل Neglected	40	3
محرزن Sad	127	محرزن Sad	49	محرزن Sad	35	محرزن Sad	43	4
مبهج Delightful	6	مبهج Delightful	6	مبهج Delightful	5	مبهج Delightful	1	3
مؤثر Touching	44	مؤثر Touching	44	مؤثر Touching	12	مؤثر Touching	32	2
جميل Beautiful	9	جميل Beautiful	9	جميل Beautiful	6	جميل Beautiful	2	1
اعتيادي Normal	41	اعتيادي Normal	19	اعتيادي Normal	13	اعتيادي Normal	9	8
قبيح Ugly	117	قبيح Ugly	46	قبيح Ugly	34	قبيح Ugly	37	1
محايد Neutral	24	محايد Neutral	3	محايد Neutral	10	محايد Neutral	11	



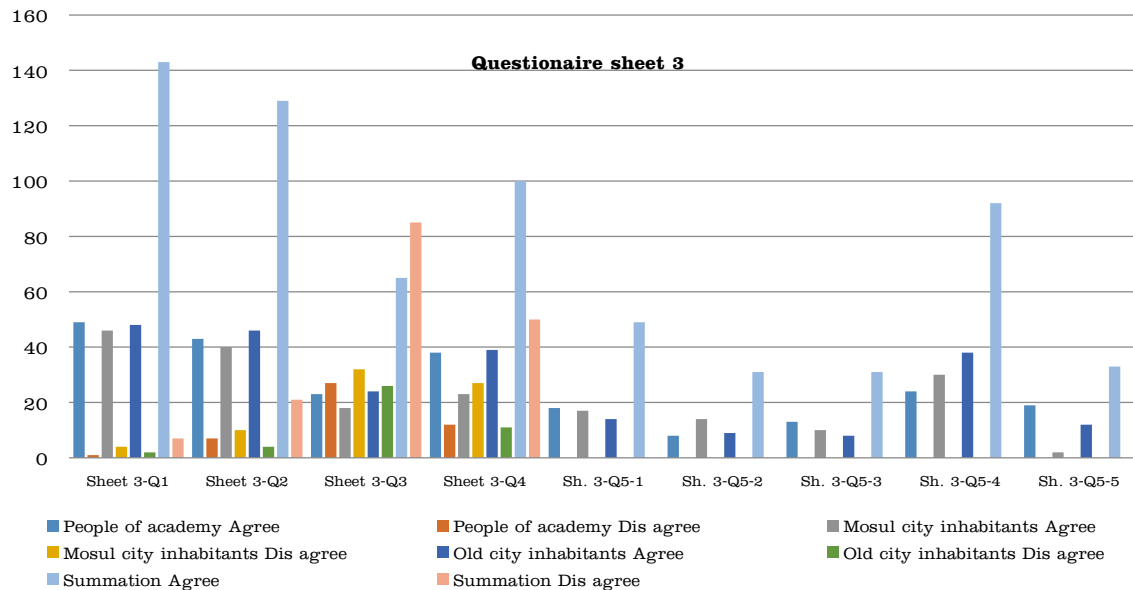
Questionnaire sheet (3) (The researcher)

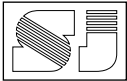
لا اوافق Disagree	اوافق Agree	السؤال Question	
		هل تؤيد تاسيس قاعدة بيانات بما يخص مدينة الموصل القديمة لتكون اساسا لعملية اعادة الاعمار؟ Do you support establishing specific data base regarding old Mosul city, to be the basis for the reconstruction activities?	1
		هل تعتقد ان اعادة اعمار مدينة الموصل القديمة من اولويات جهود اعادة تاهيل مدينة الموصل Do you regard the reconstruction of the old Mosul city as one of the priorities of the comprehensive plan for grater Mosul city revitalization?	2
		هل لديك (شخصيا او المؤسسة التي تعمل فيها) معلومات موثقة (خرائط . مسوحات . سندات ملكية و غيرها) ذات صلة بعملية اعادة اعمار الموصل القديمة Do you (personally, or work body) keep documents (maps, drawings, property documents....etc.) that may be useful for the old Mosul city reconstruction?	3
		هل لديك (شخصيا او المؤسسة التي تعمل فيها) الرغبة في المشاركة الطوعية بالمعلومات التي تمتلكها (خرائط . مسوحات . سندات ملكية و غيرها) بما يخص مدينة الموصل القديمة لتأسيس قاعدة بيانات مركزية لاعادة الاعمار Are you willing (personally or work body) to voluntarily offer the information you keep (maps, drawings, property documents....etc.) regarding old Mosul city, to be used by the intended central data base for reconstruction efforts?	4
		هل تؤيد ان تكون قاعدة البيانات الخاصة باعادة الاعمار بمسؤولية: 1. الجهات الحكومية 2. المنظمات الغير حكومية المحلية 3. المنظمات الغير حكومية العالمية 4. منظمات الامم المتحدة 5. اقترح تشكيل جهة مشتركة تتكون من الجهات التالية:	5
		Do you agree that the intended data base be in the responsibility of: Governmental bodies 1. Local NGO.s 2. International NGO.s 3. United Nations NGO.S 4. Suggestions for participating bodies in the intended team	



The results were as follows:

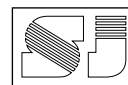
المجموع summation		سكان المدينة القديمة Old city inhabitants		سكان الموصل Mosul city inhabitants		الأكاديميين People of academy		ت No.
لاوافق Disagree	وافق Agree	لاوافق Disagree	وافق Agree	لاوافق Disagree	وافق Agree	لاوافق Disagree	وافق Agree	
7	143	2	48	4	46	1	49	1
21	129	4	46	10	40	7	43	2
85	65	26	24	32	18	27	23	3
50	100	11	39	27	23	12	38	4
	49		14		17		18	1 5
	31		9		14		8	2
	31		8		10		13	3
	92		38		30		24	4
	33		12		2		19	5





Questionnaire sheet (4) (The researcher)

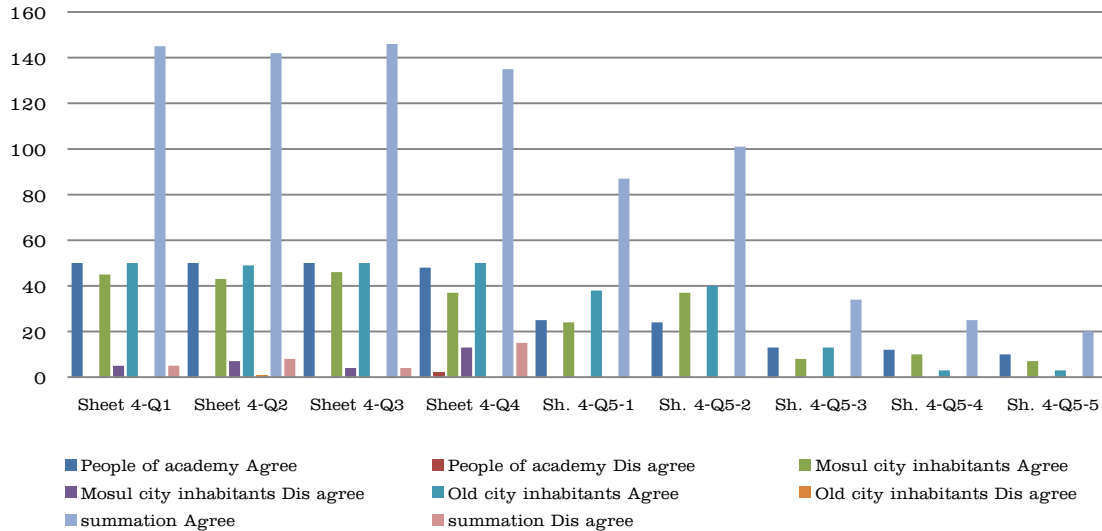
المقترح	لا اوافق Disagree	اوافق Agree
1		اؤيد استعمال التكنولوجيا الحديثة في عمليات جمع المعلومات والمسوحات الميداني Do support the use of up to date technology during the procedure of, data collection and field survey
2		اؤيد استعمال التكنولوجيا الحديثة في عمليات وضع الخطط والتصاميم لاعادة الاعمار Do support the use of up to date technology in the procedure of design and planning for the reconstruction
3		اؤيد استعمال التكنولوجيا الحديثة في عمليات تاهيل كادر فني متخصص في الصيانة واعادة الاعمار Do support the use of up to date technology in the procedure of capacity building of technical team and skilled workers to participate in reconstruction
4		اؤيد استعمال التكنولوجيا الحديثة والطرق السريعة لاعادة الاعمار باسرع وقت Do support the use of up to date technology and fast track procedure that the reconstruction be done as fast as possible
5		اؤيد Do support 1- استعمال المواد القديمة المستخرجة من مخلفات الانقاض 1-The use of the old materials out of the ruins 2- استعمال مواد منتجة حديثا من نفس المواد السابقة (جص .حجر. فرش) 2-The use of new materials similar to the ones used in old buildings (gypsum, lime stone and Mosul Marble (FARESH)) 3- استعمال مواد صناعية سريعة الانشاء مشابهة من حيث الشكل للمواد القديمة 3-The use of new artificial rapid construction materials that looks like the old materials that was used in old buildings 4- تغيير استعمالات الارض واستحداث وظائف جديدة 4-Change of land use and create new functions for the reconstructed structures 5- اقترح تشكيل لجنة من المختصين العاملين في (الجهات التالية :) للمفاضلة بين الخيارات السابق 5-Suggest creating a committee of experts that can choose the suitable alternative, members of he committee to be representing the following bodies

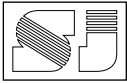


The results were as follows:

المجموع summation		سكان المدينة القديمة Old city inhabitants		سكان الموصل Mosul city inhabitants		الاكاديميين People of academy		ت No.
لا اوافق Disagree	اوافق Agree	لا اوافق Disagree	اوافق Agree	لا اوافق Disagree	ذاوافق Agree	لا اوافق Disagree	اوافق Agree	
5	145	-	50	5	45	-	50	1
8	142	1	49	7	43	-	50	2
4	146	-	50	4	46	-	50	3
15	135	-	50	13	37	2	48	4
	87		38		24		25	1 5
	101		40		37		24	2
	34		13		8		13	3
	25		3		10		12	4
	20		3		7		10	5

Questionnaire sheet 4



**Questionnaire sheet (5)** (The researcher)

المقترح	لا اوافق Disagree	اوافق Agree
1- Reconstruction works to be as per local antiquity and artifacts authority legislations أؤيد ان تكون عمليات اعادة الاعمار موجب ضوابط دائرة الاثار والتراث		
2- Reconstruction works to be as per Mosul city municipality legislations أؤيد ان تكون عمليات اعادة الاعمار بموجب ضوابط بلدية الموصل		
3- Reconstruction works to be as per UNESCO legislations - أؤيد ان تكون عمليات اعادة الاعمار موجب ضوابط اليونسكو		
4- Decision making priorities to for 1- الجهات الحكومية 2- المالكين والسكان السابقين 3- المنظمات الغير حكومية المختصة 4- الأكاديميين والباحثين 1-Goveronmental bodies 2-Land lords and former inhabitants 3-NGOs 4-People of academy and researchers		
5-Suggest a committee of representatives of the following bodies to authorized for decision making - اقترح تشكيل لجنة من ممثلين للاطراف التالية () وفق ضوابط () تكون مخولة باتخاذ القرارات		
الملاحظات:	NOTE:	

The results were as follows:

ت No.	الاكاديميين People of academy	سكان الموصل Mosul city inhabitants	سكان المدينة القديمة Old city inhabitants	المجموع summation
	لا اوافق Disagree	اوافق Agree	لا اوافق Disagree	اوافق Agree
1	11	36	18	107
2	32	24	28	64
3	2	45	-	143
4	21	27	46	94
5	9	1	30	40
	5	7	36	48
	7	11	6	24
	4	4	11	19
	4	18		18

