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Rehabilitation of the Traditional Dwellings: A Strategy for Alleviating Housing Dilemma

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ABSTRACT

Ancient cities have a great cultural heritage in which the residential buildings form a proportion of up to 60%. These cities are characterised by meeting living population needs. However, the socio-economic and cultural developments occurred in the Palestinian society prompted many residents to abandon their traditional homes as they did not respond to the renewable community needs. The research aims to highlight the systematic rehabilitation of the heritage houses in Hebron old city (as a case study), and measure the satisfaction level of the residents through survey questionnaire. The research finds that traditional housing can meet the modern requirements through rehabilitation and achieves high degree of people's satisfaction.

Keywords: *Rehabilitation, Traditional Dwellings, Housing Dilemma, Hebron*

INTRODUCTION

Since the arrival of the Palestinian national authority, in line with the Oslo Accord, 1.5 million refugees came back after diaspora. Then a big quandary in Palestine has arisen with respect to housing problems (Hammer, 2009). The problem has exacerbated after 1994 due to various reasons: The population increase in the West Bank and Gaza Strip is doubling every 25 years (PCBS, 2010); the shortage of acreage for housing use; the

expansion of Israeli settlements. These factors led to crucial situation and high population density, which has attained in some vicinities 6913 people/km² (Ibid).

Nevertheless, the recovery of old vicinities is disregarded under the ruse of expenditure, inadequate experience, and not fulfilling the present requirements as the focus are normally on overcoming the housing dilemma by forming new buildings and cities. Yet the case of the old city of Hebron proved that it is capable of solving most of the crisis and that it accommodated in excess of 800 families at a minimum cost, considering the future needs of the inhabitants.

LITERATURE REVIEW

Many believe that rehabilitation of heritage residential districts needs copious amounts of money and efforts and yield few returns (Brebbia & Binda, 2011; Rizzo & Mignosa, 2013). In the light of this conviction, many countries develop new residential areas at the expense of agricultural land, and neglect the heritage residential districts. However we should look to a rehabilitation concept broader of material and moral, because it serves multiple benefits (a lot of references): (1). Afford the housing, upgrade and improve its conditions, which is considered the direct instantiation of the State's interest and move the population and their settlement activities, also proceed the construction wheel, (2). Conserve the heritage houses and benefit from them in affording the housing that will support the development and save money, (3). Rehabilitation changes the city features and assist in the implementation of housing plans, (4). Reduce the competition for land, especially with farmers, (5). Avoid turning the farmers into the city, and worsening the housing crisis (Aubert, Marcom, Oliva, & Segui, 2014; Omar & Syed-Fadzil, 2011).

Humanitarian Requirements at the Level of City and Housing in Arab Countries

Humanitarian needs of today and yesterday should be considered so as to implement a policy of restoration as a strategy for overcoming the housing dilemma. The degree and amount of receptive events for these needs differ between one community as shown in Table 1 and Table 2.

Table 1: Humanitarian Needs for Districts and Neighborhoods

Requirements	Previously	Recently
Accommodation	residential tower house for extended family	Residential houses, villas, apartments for separated families
Work	Market, field, service buildings, army, (few administrative)	Trade, industry, agriculture, administration, military, education, health, services
Comfort	Orchards, squares, plenary	Cultural buildings, recreational areas, tourist areas, green areas, public service buildings
Transportation	streets with Primitive means (donkeys, mules, camels)	Streets with modern transport
Services	Hammams and souks	Social, cultural, health, educational
Requirements for pre-school	Koranic schools in (Jame'e) grand mosque	Nursery, Kindergarten
Education	Mosque and Islamic schools	Schools, colleges
Health services	Exorcism, cupping (old Arab medicine) in house doctor	Health centers, dispensaries, primary health care centers, hospitals
Social services	mosque	Social and cultural centers
Business services	Souks	Markets, shops, business centers
Social Activities	Squares, mosques	Squares, piazzas, public centers
Green areas	Orchards	Public parks and small gardens distributed to the general plan
Cultural services	mosque	Cultural centers, public libraries, theaters
religious aspects	mosque, Jame'e	mosque, Jame'e
Parking	-----	Designated parking
Children's play areas	Squares, fields	Squares, parks and some of the buildings earmarked for children (schools)
Places strengthens social relations	Squares, mosques, souks	Squares, mosques, markets, social and cultural centers and institutions

Table 2: Humanitarian Needs for the Houses

Human requirements	Spaces provided by the traditional house	Spaces provided by the modern house
Movement Spaces	Courtyard entrance, entrance hall Distribution (vestibule), the distribution of motion in the lounge decks, stairs (staircase)	The movement of the vehicle: car parking with service. Population movement: patio, halls
Economic and service spaces	Livestock Stable and granaries, a space dedicated to the beasts and feed, fattening sheep barn, storage rooms, toilets ...etc.	Kitchen, stores, lounge with dining, Maid room, laundry and clothes room
Living and recreational space	Room (Diwan) for talking and discussion, intermediate rooms used for living and daily activities for the whole family	Family sitting room, reception room with W.C., Office room specified for the House owner
Resting and sleeping spaces	Bedrooms are mostly rectangular differentiated in the area, and distributed in the middle and upper floors	Guest bedroom, bedrooms for boys and girls, master bedroom with private bathroom
Economic productivity spaces	Confined only in residential buildings adjacent to the souks or which lies on the their edges, and have their own external doors to serve, which is in the form of shops	Nothing

METHODOLOGY

The researchers follow several methodologies to achieve the goal; (1)- inductive approach to know the reality of housing in heritage cities, predict the future of these cities, and identify the contemporary needs, (2)- descriptive analytical approach to explain the case study, benefit from the advantages, avoid disadvantages, and try to disseminate the experiment, (3)- Survey questionnaire to find out the satisfaction degree of the inhabitants about their houses after 10 years of rehabilitation.

Hebron Old City (case study)

Hebron is proclaimed as one of the oldest and most sacred cities in Palestine. Situated 32km south of Jerusalem, Hebron is an important centre for three of the world's great religions; Islam, Judaism and Christianity (Platt, 2012). Hence, it was listed in the tentative list of UNESCO's World

Heritage Site on 2nd April 2012. Thousand and five hundred of Hebron's total population of 126,000 reside in the old town, according to 1997 survey. Before the military invasion, the population of the old town totaled 10000 in 1967. The outcome of Israeli's policy that hinders people from residing there caused a severe decrease in the population with the departure of 35% of the households there. The owners and tenants were forced away by these events from the old town, which still keeps 99% of its old buildings (Ibid).

It was vital to attain numerous goals through the immediate restoration of the town; to overcome the ever-growing housing dilemma there, to thwart the pressure from the Israeli government to vacate the old town, and to avert becoming a bull's-eye for Israeli settlements. It is proposed that this be achieved by creating the old town to be inhabitable once more with an aggressive programme of restoration that would elevate the residences up to existing standards of living. This is meant to motivate the coming back of the previous inhabitants and other people who are displaced currently. This is to be achieved by taking into account the value of the old town and its worth as ethnic property. The project commenced in two parts of the town. It encompasses the recovery and restoration of the current residences and separates bigger houses into smaller apartments which can be utilised by various families while at the same time, offering the fullest possible solitude. (Thomas, 2010)

The number of apartment units that had been built was 800 units. The two or three-story buildings, which do not follow to any planned volumetric, but demonstrate an organic development perpendicularly, are sub-separated in each case as the particular building permits. There are normally two or more spaces expanding to the small courtyards; numerous stairs rise from the courtyards to the levels on top, offering entry to small groups of rooms. To the extended family, this is vital, as open cooking areas and amenities are not present in each unit. The rooms are not so big; a star vaulted residing area is around 24-30 m². This means that the wedded son of a family inhabits an area of 70-90 m², consisting of a half-open ventilation space and sometimes, a reduced storing area (Ibid). Running water services are constructed in the half-open areas if they are spacious enough; if not, a smaller room is separated between the WC, shower, and the kitchenette. In cases where there were already such changes, they were retained if they were not unpleasant.

The buildings do not pose extreme construction issues. Cement mortar covers small cracks in the wall or vault surfaces. The wall is demolished and done once more (scucio-cucio technique) when a big structural fissure is discovered in a wall. Metal ties are placed into the parallel features when there is a severe opening in the floor and walls. This results in noticeable pyramidal caps on both end walls. The technology of constructing a cross or star vault is complicated and hence circumvented. In several instances, these open areas are on two floors, making stairs the sustained from below with strengthened concrete arches instead of being mended or redone.



Figure 1: The Existing and Proposed Urban Profile of Hebron Old Town
Source: (Marchettini, Brebbia, Pulselli, & Bastianoni, 2014)

Recipients of the Programme

The project profited the whole town of Hebron because the revival of the old centre accommodated housing for more than 800 families, restored the town and assured the Palestinian presence in it. The owners and the renters make up the dwellings' users. "Owners" mean in excess of fifty people for every building; a single room possessed by some members of a

bigger family (Irving, 2011). This numerous ownership design functions associate directly to the usage and separation of the clusters. Also associated to this design is the variety in the quantity of open areas and the floor built-up of the inhabited units. The buildings are separated into smaller leasing units when there are excessive members of the binuclear family still residing there or who are prepared to come back. There are some cases where the part owners residing in the houses will pay some lease to other part owners, at the conclusion of five years. In instances where there is a chief landlord residing in the house and there is no issue within the family, his binuclear family utilises the entire building the way it was customarily used.

The landlords are permitted to use their houses as solitary private houses if the houses are not very big. At the moment of choice, it is logical to presume that this also relies on the ownership arrangement. Houses that have excessive landlords normally end up being utilised by renters if the members of the family circle cannot come to an agreement to permit one or two basic families to reside there. To lease a property, the concurrence of 51% of the landlords is sufficient enough. In the choice to separate a building, landlords of the houses are given precedence. The proportion of landlords to renters is 2:1; this indicates that the ancestral quarter of Hebron remain populated by 67% of those who possess property there (Seraj Al-Deen, 2007). With the aid of a questionnaire distributed by Muhawi and Amiry (2008), the renters were selected from among the applicants. Applicants were normally lesser paid government staffs, armed forces, or employees. Favoured were young marrieds with small children. For the initial five years, the renters did not pay any lease, after which point, lease at current prices was to be settled if they intend to reside in their houses. To assure this, a contract was engaged with the renter presuming that a lease of USD 3500 per year was to be settled if the requirements of the contract were not met. For every month at zero cost, each unit was provided with 100 KW electricity and 8 m³ water (Nigro & Taha, 2006).

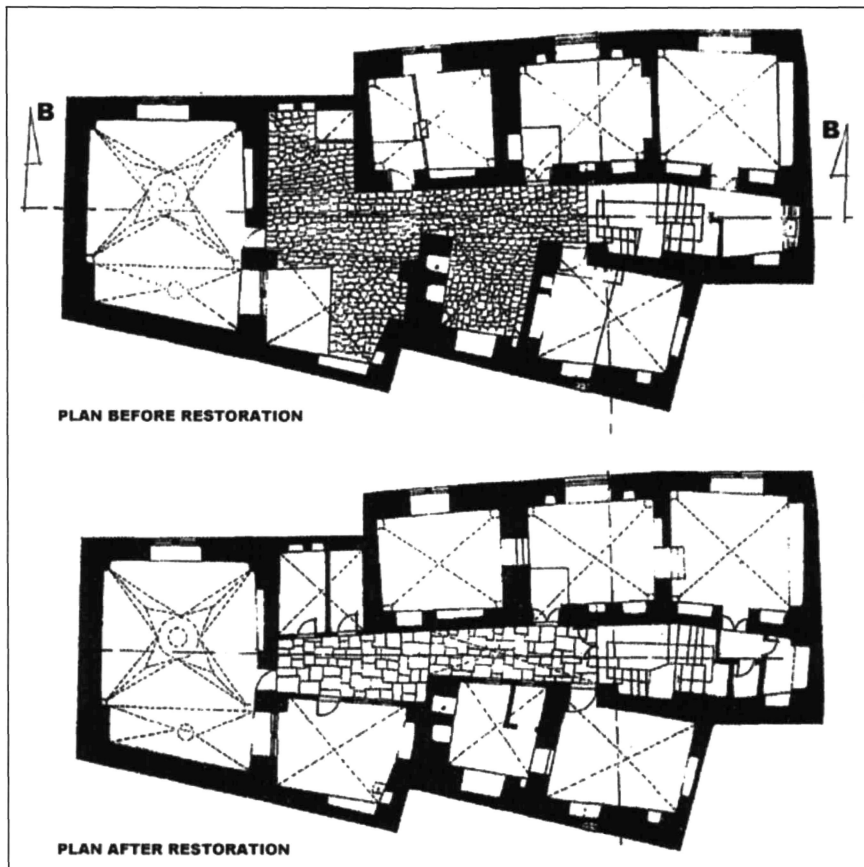


Figure 2: House Entrance Before and After Rehabilitation
Source: (De Cesari, 2009)

Reaction to Project

The researcher had the chance to converse with many of the renters and landlords. Even though some indicated a need for additional rooms, none of the renters had serious complaints. As their houses were refurbished, they had basic facilities, and were residing contentedly; nearly all of the landlords were satisfied. These are the key aspects in persuading the other landlords to come back to the old town. When the project was concluded in 2002, the researcher disbursed a questionnaire to an arbitrary sample of dwellers of homes that had been restored. This was to measure the contentment with

the new houses, and later, repeat the exact questionnaire in 2012 (i.e. after 10 years), and the outcomes were as follows:

The sample was 125 houses that represent 15.6% from the 800 houses had been rehabilitated; the respondents were 94 persons (75.2%). The distribution began in 21/10/2013 and continued for three days. The percentages of the samples from diverse age groups were: 15-20 years (1.9%), 21-30 years (8.1%), 31-40 years (35.6%), 41-50 years (34.4%), 51-60 years (13.2%) and more (6.8%). Males constitute 89% of the samples whilst 11% are females. The family constituents were made up of young married couples only (7.1%), single parent with children (5.6%), couples with children (53%), three generations (33.3%), and others (1%). ownership of Houses ranged from owner resided (70.1%), company (5.0%), public leased (9%), and private leased (15.9%). The tenures of occupancy were under two years (3.5%), 2–4 years (7.4%), 4–8 years (19.2%), 8–12years (50.3%), 12–18 years (4.8%), and above 18 years (14.8%). The academic level of the Head of the family ranged from uneducated (15.5%), lower than high school (26.8%), bachelor (47%), master (8.3%) and PhD (2.4%). Typical daily income for the inhabitants; below 10\$ (10.6%), from (10-25\$) (39.4%), from (25-50\$) (28.7%), from (50-100\$) (13.4%), and above 100\$ (7.9%).

Table 3: The Measurement of Satisfaction Using the Most Five Important Factors

Criterion		2002			2012		
		Satisfied	Neutral	Dissatisfied	Satisfied	Neutral	Dissatisfied
House Design	Space	73.2%	8.7%	18.1%	69.9%	10.1%	20.0%
	Area	75.0%	6.9%	18.1%	68.7%	11.5%	19.8%
	No. of rooms	69.3%	13.9%	16.8%	60.1%	18.0%	21.9%
	Rooms arrangement	77.9%	4.5%	17.6%	75.0%	12.2%	12.8%
	Ease of housework	74.6%	9.0%	16.4%	70.4%	1.9%	27.7%

Average		74.0%	8.6%	17.4%	68.8%	10.7%	20.4%
Safety	Disasters	53.0%	7.0%	40.0%	65.8%	4.7%	29.5%
	Criminals	88.8%	2.9%	8.3%	87.0%	7.8%	5.2%
	Cleanliness of air	69.9%	16.6%	13.5%	61.6%	25.0%	13.4%
	Noise/ vibration/odor	80.5%	17.2%	2.3%	70.8%	6.6%	22.6%
	Nature abundance	67.7%	9.9%	22.4%	67.3%	0.0%	32.7%
Average		72.0%	10.7%	17.3%	70.5%	8.8%	20.7%
Convenience	Transportation	68.2%	18.3%	13.5%	68.0%	17.0%	15.0%
	Shopping	65.0%	13.9%	21.1%	75.8%	13.0%	11.2%
	Commuting	71.0%	18.8%	10.2%	81.9%	6.6%	11.5%
	Welfare facilities	67.9%	9.0%	23.1%	78.1%	19.4%	2.5%
	Accessibility	80.4%	11.1%	8.5%	75.0%	10.9%	14.1%
Average		70.5%	14.2%	15.3%	75.8%	13.4%	10.9%
Climate performance	Ventilation	73.4%	20.7%	5.9%	68.5%	18.8%	12.7%
	Lighting	69.1%	21.1%	9.8%	71.0%	2.9%	26.1%
	Heating and cooling	66.0%	22.0%	12.0%	60.9%	14.1%	25.0%
	Cleanliness	80.8%	14.8%	4.4%	70.1%	9.6%	20.3%
	Beauty	73.9%	19.8%	6.3%	64.0%	11.0%	25.0%
Average		72.6%	19.7%	7.7%	66.9%	11.3%	21.8%
Social factors	Relation in house	85.5%	5.6%	8.9%	71.0%	12.0%	17.0%
	Neighbors relation	81.0%	5.3%	13.7%	68.8%	10.0%	21.2%
	Gardens	69.0%	3.0%	28.0%	57.9%	9.9%	32.2%
	Children playground	71.0%	12.6%	16.4%	66.6%	17.0%	16.4%
	Cost	70.7%	13.8%	15.5%	80.7%	9.7%	9.6%
Average		75.4%	8.1%	16.5%	69.0%	11.7%	19.3%
Overall satisfaction rate		72.9%	12.3%	14.8%	70.2%	11.2%	18.6%

RESULTS AND DISCUSSION

When studying and examining the earlier table, it showed that the degree of general contentment for the population was commendable in 2002 because they were part of the involvement in planning, observation and support. However, because a number of neighbourhood inhabitants had transformed and they were not part of the involvement in the project, this degree reduced somewhat after 10 years. We discovered that the populace contented tremendously on the rooms' condition and their disbursement; and vicinities where an earlier questionnaire had been disbursed to them before the project execution. Also, their views and needs were taken into consideration for the planning of housing, but in the last questionnaire (2012) the satisfaction has decreased because of the need for more rooms and areas, this is confirmed by the report of Palestinian Central Bureau of Statistics (2010) which indicates that the "average number of rooms in the housing unit in the Palestinian Territory is 3.6 and the average housing density in the Palestinian Territory in general is 1.6 person per room". It had previously been a tremendous quandary for the inhabitants with respect to the safety factor, chiefly, assaults of Israeli settlers and army. For instance; during the restoration of the city, work was halted 103 times and 416 workers were detained (Elnokaly & Elseragy, 2013). However, these assaults had decreased in 2012 due to the presence of such political answers, while the situation based on the crimes were less in 2002 because the character of the tribal-led population of most city inhabitants as well as rituals and cultures prevented any attacks.

However, lately, communal associations have reduced and many outsiders are residing in neighbourhoods which have further lowered the level of safety. Accessibility has grown with the passing of time and there is simplicity in movement and transportation concerning comfort; this is what the high rate of population contentment indicated, which surpassed three quarters. A vital role in enticing people to reside in the old city is the environmental aspects, but the drastic weather alterations decreased the competency of houses. That is the reason why the percentage fell from 79.6% to 68.7% in a period of 10 years. Palestinian society is integrally intelligible with respect to social aspects but the political and economic situations lower these at times, and lastly for the expenditure, the inhabitants (mainly the renters) pay equal amounts since the conclusion of the project in 2002

and thus far, in spite of the tremendous land costs, growth in the demand for housing, and the high expenditure of living; i.e. The survey's results of PCBS (2010) indicated that the average monthly rent paid for a housing unit in the Palestinian Territory was USD 400 and the residents have still paid USD 3500 yearly. This is what results in the inhabitants' contentment degree on cost increase in which they find it extremely appropriate compared to other aspects.

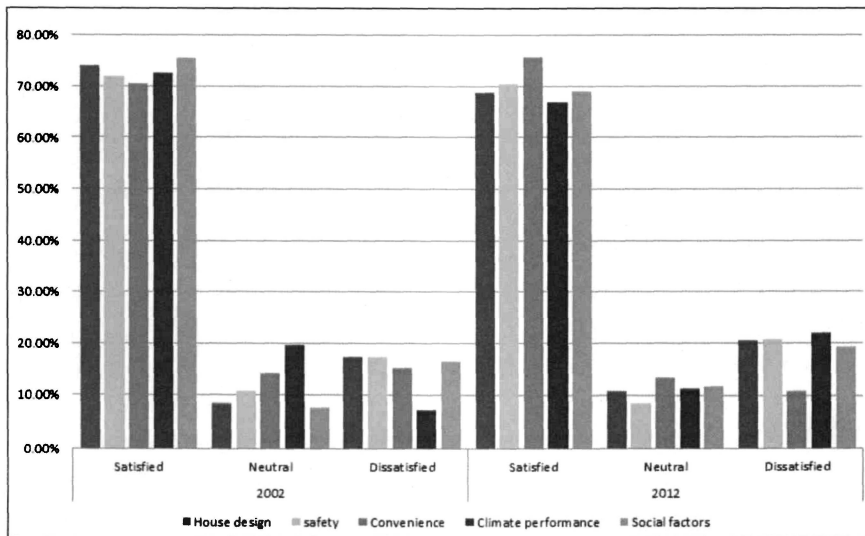


Figure 3: Comparison of the Percentage of Housing Satisfaction between 2002 and 2012

CONCLUSIONS

If we can apply the Hebron project throughout Palestine, it will surely deliver extraordinary outcomes in the housing area and offer a great answer in the housing dilemma, particularly, there are based on Riwaq (2007) 50,320 historic buildings in Palestine, almost half of the historic buildings are either empty or only partly being used; 4,447 buildings (8.84% of the total) were partially used and 18,216 buildings (36.20%) were empty. The housing crisis should be dealt with effectively so as not to worsen and become a major dilemma difficult to resolve, especially in light of increasing population

growth and lack of land; by way of example, not exhaustive enumeration, the findings of PCBS (2010) for Housing Conditions Survey shows that 71.6% of households in the Palestinian Territory need to build new housing units during the next 10 years, which prompts us to ring the alarm bell.

The experience of the rebuilding of the old city of Hebron surpassed the domestic level to locate for answers which possess a vital symbolic quality; hence the domestic public had been involved competently, and in the process aiding the nearly overwhelming environment into a wonderful communal open area, and the architectural exercise turned out to be a philosophical and communal social activity. Some delicate problems, for instance: acreage, proprietorship, personality and ethnic and ancestral consciousness were essential to be confronted. This explains, in spite of the break of 10 years on the project, a high overall contentment rate was observed of the residents (70.2%) from their homes. The significance of the rehabilitation policy for housing buildings lies not only in restoration, but also in giving back those buildings to their landowners and afford them the freedom to dispose of or how to utilise them within a particular system for lease to accommodate the proportion of renters to landlords.

The experience of Hebron, as mentioned in the report of the Committee for the Aga Khan award, is taken as excellent in that it signifies leaving the usual flairs and tendencies in restoration and the potential to regain communal open areas within a deteriorated surrounding, together with the labours and involvement of the populace that have survived under the Israeli blockade. The project won Aga Khan Award in 1998, Yasser Arafat Prize for Achievement at 2008, and the World Habitat Award in 2013.

REFERENCES

- Aubert, J.-E., Marcom, A., Oliva, P., & Segui, P. (2014). Chequered earth construction in south-western France. *Journal of Cultural Heritage*(0). doi: <http://dx.doi.org/10.1016/j.culher.2014.07.002>
- Brebbia, C. A., & Binda, L. (2011). *Structural Studies, Repairs and Maintenance of Heritage Architecture XII*: WIT Press.

- De Cesari, C. (2009). *Cultural Heritage Beyond the "state": Palestinian Heritage Between Nationalism and Transnationalism*: Stanford University.
- Elnokaly, A., & Elseragy, A. (2013). Sustainable Heritage Development: Learning from Urban Conservation of Heritage Projects in Non Western Contexts *European Journal of Sustainable Development*, 2(2), 31-54.
- Hammer, J. (2009). *Palestinians Born in Exile: Diaspora and the Search for a Homeland*: University of Texas Press.
- Irving, S. (2011). *Palestine*: Bradt Travel Guides.
- Marchettini, N., Brebbia, C. A., Pulselli, R., & Bastianoni, S. (2014). *The Sustainable City IX: Urban Regeneration and Sustainability (2 Volume Set)*: WIT Press.
- Muhawi, F., & Amiry, S. (2008). The Rehabilitation of Historic Centers and Buildings in the occupied Palestinian territories *Cultural heritage: a tool for development* Palestinian territories: Riwaq: Center for Architectural Conservation
- Nigro, L., & Taha, H. (2006). *Tell Es-Sultan/ Jericho in the Context of the Jordan Valley: Site Management, Conservation, and Sustainable Development*: La Sapienza Expedition to Palestine & Jordan.
- Omar, N. A. M., & Syed-Fadzil, S. F. (2011). Assessment of Passive Thermal Performance for a Penang Heritage Shop house. *Procedia Engineering*, 20(0), 203-212. doi: <http://dx.doi.org/10.1016/j.proeng.2011.11.157>
- PCBS, P. C. B. o. S. (2010). Hebron city *Housing Conditions Survey*. Ramallah: Palestinian Central Bureau of Statistics
- Platt, E. (2012). *City of Abraham: History, Myth and Memory: A Journey through Hebron*: Pan Macmillan.
- Riwaq, r. (2007). Database for the historic buildings in Palestine Retrieved 17/5/2013, 2013, from <http://www.riswaqregister.org/en/default.aspx>

Rizzo, I., & Mignosa, A. (2013). *Handbook on the Economics of Cultural Heritage*: Edward Elgar Publishing, Incorporated.

Seraj Al-Deen, I. (2007). *Renewal and rooting in the architecture of Islamic societies: the experience of the Aga Khan Award for Architecture*. Egypt: Library of Alexandria.

Thomas, A. (2010). *Israel and the Palestinian Territories*: Lonely Planet Publications.