

**A MULTI-DISCIPLINARY APPROACH IN DOCUMENTING DESTROYED HISTORIC CENTERS
IN THE EVENT OF WAR
A CASE STUDY FROM THE PALESTINIAN TERRITORIES,
NABLUS HISTORIC CENTER 2002-2005**

To be presented in parallel session 1

Nurhan. Abujidi, Han.Verschure

Postgraduate Centre for Human Settlements, Department of Architecture, Urban Design and Regional Planning,
Katholieke Universiteit Leuven, Kasteelpark Arenberg 1, B-3001 Heverlee, Belgium

Armed conflicts and wars change significantly historic centre's identity, producing different patterns of transformation over the physical and spatial built environment. Normally documentation of this damage focuses on specific cultural artefacts and buildings¹. This paper aims in introducing the multidisciplinary approach² that has been elaborated in documenting and analyzing the damage that inflicted Nablus historic centre during the frequent Israeli military invasions 2002-2005. This approach is designed from different structured question forms and inventory tables. These forms are formed from first, inventory tables and questions that reflect the value, historical significance and nature of the destroyed building. The second form is damage assessment table that aims in documenting the scale and the nature of the damage³. The third form aims in documenting and assessing the ongoing renovation projects⁴. Documentation was not only meant for buildings, it also extended to the inhabitants⁵. The city user group's evaluation and perception about three topics was the focus of the field work. First, question form about the city and its importance for the inhabitants as main elements of their cultural identity. Second, question form about their reflections on the damage and destruction that have significantly affected their city and finally their opinion about the ongoing renovation projects.

The use of different software for data entry and data analysis were used, for example AUTOCAD was the main graphic software to produce different documentation data from the field work, like location of destroyed buildings, level of damage (severe, medium, or light.. etc). Adobe Illustrator was used as second graphic software for representing data in readable image forms. Finally SPSS software⁶ was

¹ In Bosnia for example the main inventory for damaged cultural heritage focused on religious buildings of churches and mosques. It further documented some public buildings like libraries. This type of documentation doesn't reflect the scale and nature of damage to the overall fabric of historic cities and sites that is necessary for fund rising procedures and for post war reconstruction projects plans.

² They are obtained from the fields of architecture, planning, social geography, and environmental behavior.

³, for example ratio of damage to the total area, level of damage, location of damage, type of damage if it is structural and in which structural elements

⁴ For example, what type of project has been applied to the building (renovation, maintenance, rehabilitation, and so), what are the building materials that have been used and where they were used. It further document if new structural or architectural elements have been introduced to the building beside other information.

⁵ 134 interviews with semi structured questions were conducted with the main user groups (inhabitants, vendors and visitors) in Nablus historic center in the years 2003 and 2004.

⁶ SPSS is a comprehensive statistical software package used to explore, analyze and display data in graphs and tables and many other forms.

used to enter and organize all data collected from the field and was later used in assessing and processing the information and results needed for the purpose of the research.

Introduction

Study Context

Nablus is located 65 KM north of Jerusalem; it is the biggest city in the West Bank. Its strategic location made it a remarkable focal linkage between a number of Palestinian cities and villages. The city is the trading centre for the region and the economic capital of Palestine. *Map (1)* The area of Nablus was inhabited since the fourth millennium B.C. The old historic center dates back to Roman times where it was first established in 76 AD, it has been furnished with the public and religious buildings of colonial Roman city. Many successors inhabited Nablus from the Byzantines, crusaders, , ayyobid, Mammluks, and Ottomans whose rule stretched over 400 years of time, later in 1917 Palestine was under British Mandate till the 1948 war between Israelis and Arabs, leading to the occupation of Palestine till the moment. Occupation and the two uprisings (*INTIFADA*) have significant impact in changing and transforming the Palestinian historic cities, among which, Nablus was the most affected, especially in the 2002 Israeli invasion and destruction of the city's urban fabric.

The existing structure of the historic centre of Nablus city is a characteristic feature of typical old Arabic Islamic city. This is clearly manifested in the structure and form of its streets, alleys network, domes, vaulted houses and souqs. Nablus is famous for its cultural heritage embedded in the public buildings spreading over its six traditional quarters. For example, Nablus has 9 *Hammam* (Turkish baths), 60 *Sabaneh* (traditional Soap factories, 30 still working), 9 mosques, 2 *Khans* (Caravanserais), 4 traditional Hotels, 5 big palaces, and 63 *Hush* (extended family houses). Nablus historic centre has a substantial international historical and architectural significance, therefore on 2004 General assembly meeting, the UNESCO recommended Nablus's old town to be classified as a Cultural Heritage Site.



Figure 1. Nablus Site Map

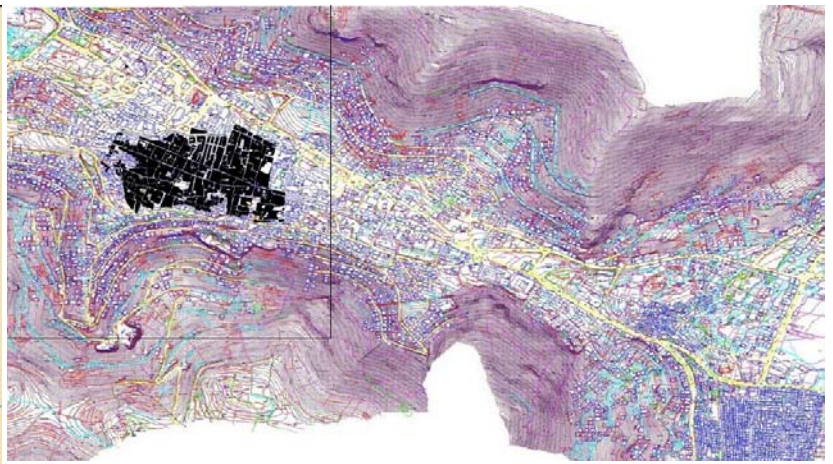


Figure 2 Nablus Historic center boundaries within Nablus Municipality



Within my research interest and Doctorate work on “Historic centers at war; urban morphology changes and post war reconstruction strategies”. A structured field work in the Occupied Palestinian Territories was implemented to investigate the impacts of the Israeli military occupation and operations on the Palestinian cultural identity imbedded in Historic cities, taking Nablus as case study. The Doctorate research is revolving around different issues, city identity is the major point of investigation. Taking the city as an object of human experience tied to the perception of inhabitants, and the formulation of their cultural identity. With the assumption that architectural identity is an important part of people’s cultural identity, here in terms of collective memory. The purpose of this investigation (the research and the filed work) is mainly to distinguish the key identity and reference features of Nablus historic center (its visual essence) prior and after the Israeli invasion to the city and its destruction. To test and figure out the impacts of damage and destruction during military invasion in the period 2002-2004, over the city identity and how this change is perceived by user groups, in order to reinforce its legibility and sense of place in the future reconstruction strategy. The survey was not focused solely on listed monuments; the survey was primarily a damage assessment. Limitations on our time and resources and the difficulties of access to some sites (due o military operation taking place at the moment of survey) prevented us from making a more detailed study of some important destroyed buildings. Our survey database has 200 entries including 97 buildings with detailed survey, in addition to 134 interviews with sketch mental maps.

DESCRIPTION OF SURVEY DOCUMENTS:

Two types of survey were implemented to reach the research’s assigned objectives. First the objective one that deals with the physical reality of the surveyed buildings, while the second deals with the subjective part concerning user group’s perception and assessment of different issues.

1-Types of survey information

The inventory, interviews and question’s forms that were used in the field work can be divided in different data category depending on type of data needed in the survey:

- *Profile data*

Which refers to the characteristics of the surveyed buildings and population, e.g history of building, number of rooms, floors, occupation of household, number of inhabitants and so. This data can help to see patterns of relationship between the targeted buildings and inhabitants, as well as to show who inhabit the city, who uses the city, what type of changes occur over patterns of land use.

- *Environmental data*

Questions dealing with the environment describes the circumstances in which damage occurred, e.g concentration of damage was it in residential or commercial areas? Typology of damaged buildings and settings.

- **Behavioural data*

There is a gamut of relevant changes in social behaviour (as indirect and direct impacts of Israeli military invasion) that can be surveyed before and after the invasion, e.g

-where are the most popular places in the city people visit and shop in, and if this pattern of city use is sustained or if it changed after the several Israeli military invasions to the city (insecurity consequences).

-patterns of habitation and migration around damaged areas

- **psychological data*

Data from this category cover a broad area of psychological information including opinions, preferences, attitudes, awareness, motives and expectations, e.g:

-opinion about invasion and its impacts over people's lives and environment

-opinion and assessment of renovation projects.

Type One-Objective survey

Form one: Building profile and settings

This form is being used to briefly document the location, date, and type of historic setting in the Old Town.

Form Two: Damage assessment

Damage documentation and assessment: document damage spread over the entire historic urban fabric (both spatial and physical) of Nablus city. Inventory forms for damage assessment has been prepared, to investigate, levels of destruction, type of destruction, typology of damaged buildings, and so. This part is based on personal observations in the field and on interviews with inhabitants inside the old town and outside the old town. This data is supposed to help in analysing the impacts of the Israeli military occupation over the identity of Nablus historic centre. See Annex

Survey work

-documentation of destruction by graphs, drawings, photos and damage assessment inventory forms with specific information like:

1-location of destruction

2-Degree of destruction (slight, medium, sever..)

3-type of destruction (public building, housing, infrastructure, open space....)

4-typology of targeted building (Mosque (Religious), fountain, Hammam (recreational, street,))

5-Documentation of forced routes, to locate the houses in which internal walls were blown up between attached houses to create passages for soldiers.

6-document significant changes in land use

Documentation and survey were not limited to physical structure, it expanded to the level of the urban spatial structure such as public spaces, streets nodes and so, beside the actual visible destructed buildings, the same layers and elements investigated in the first part will be examined and documented after destruction to explore patterns of changes.

Form 3- Documentation and evaluation of post war reconstruction and renovation project in historic Nablus

Objectives of this investigation are;

-to investigate the indirect, long term impacts of Israeli invasion, through the new renovation projects/

-Evaluate the ongoing projects and their impacts over the city identity

-Explore the future possibilities and opportunities of urban regeneration projects the city need to sustain its identity.

-to examine the hypothesis, that normally the impacts of post-war reconstruction projects are as influential and significant as the action of war, since they are entirely seen as a series of short term, quick fix projects, carried out under emergency conditions, and imposed by central government to serve hidden agenda.

For this purpose, renovation projects assessment forms have been prepared beside specific question to see people's opinion. (Inhabitants of the old town, inhabitants outside the old town, professionals in the field of cultural heritage) see form

Documentation of projects will be through collecting master plan proposed for renovation projects (if there is one) and plans of individual projects, photographing the real implemented projects and compare if what is planned (if they are planned) is what is implemented. To examine this hypothesis part of the survey will be documentation of renovation projects through list of questions using renovation projects assessment forms beside some focused interviews with inhabitants and key persons in Nablus city, to examine people's opinion about these projects and their future vision about Nablus. To examine the impacts of the renovation projects on the city identity by documenting:

-restoration building materials

-architectural elements

-structural elements

-building types, and styles

-cityscape

Part Two-Subjective

Form Four: value, meaning and people's perception of Nablus historic centre

Objectives of this survey are:

-To investigate the key elements of Identity and impacts of occupation: to investigate the reference features of the identity of historic Nablus (its visual essence, to reinforce its legibility and sense of space). First to explore the impacts of occupation over this identity, second to explore different possibilities and option in the future renovation projects. A mental map of the city before the invasion and after the invasion should be prepared and drawn by the different target groups inhabiting and using the old city. Beside some key question prepared to explore people's perception and feeling about their city and the changes it is going through. (See form)

-explore future vision of Nablus city: by exploring how people see Nablus future through SOWT analysis of strength, weaknesses, and opportunities. This question has been added to the identity evaluation and perception forms.

-to investigate the intentionality factor: the main part of the research hypothesis is about the intentional destruction of the old city by Israeli forces in order to weaken the Palestinian cultural identity.

This part is the difficult part of this research as far as we can't reach the military document about the military operations. Several steps should be done to investigate the hypothesis:

1-document the forced routs inside the old town, their location, their direction to see if its really military necessity!!!!

2- to explore people's feelings and opinion about this issue, interviews with people both intellectuals and normal Nablus inhabitants is prepared, and more essential is the interviews with Israeli intellectuals who know and have some documents about the Israeli policy in occupied Palestine.

3-trace the Israeli destruction policy in occupied Palestine in chronological form in different cities and villages.

-To Investigate the Mental Image of the Old Town

This can be achieved by drawing mental cognitive maps of Nablus historic centre, Perception of Nablus identity by user groups. In this part, a survey through interviews and questionnaire and mental maps drawings will be implemented about the identity of Nablus historic centre, and how it is perceived by its inhabitants. This survey is used first to reveal users group reconceived mental picture of Nablus identity (local values), moreover to explore what changes has occurred to their preconceived picture after the invasion.

Interview forms were designed with the help of experts in the filed of urban geography. The forms include specific set of questions about the city identity and how it is perceived by the Nabulsi people before and after the invasion.

2-Sampling design (target groups)

As mentioned before there are the objective part of survey concerning the physical objects of the urban fabric, and the subjective one concerning human beings.

1-The visual survey will include selected sample of the damaged buildings and sites inside and outside the old town. This has been indicated during the scanning field work on 2003. it depended mainly on site observations, degree of damage and location of damaged buildings were crucial factor for selection. 200 buildings were subject to the survey. 97 buildings from the 200 were subject to detailed survey covering the 4 forms of questionnaires and inventory tables while the rest of the buildings were subject to form one and tow.

2-interviews with people who use or inhabit the city:

- Inhabitants of the damaged buildings inside the old town, this already based on the maps provided by municipality. 97 interviews

-Vendors (merchants) in the old town, a shop from 20 shops along the main commercial streets (casaba) on each side will be interviewed, to investigate who uses the city, and changes on socio-economic patterns. (See figure 3) A total of 30 vendors were interviewed

-Shoppers in the old tow, interview people shopping inside the old town, one person among 10 passing by on the main nods inside the old town and on its main entrances will be interviewed. (See map) A total of 15 persons were interviewed

-Palestinian Professionals and intellectuals who are interested in the field of cultural Heritage. Total of 20

-Israeli intellectuals and professional interested in the field of cultural heritage and Israeli policy in occupied Palestine. Total 20

3-Question forms design

Question forms are constructed in two basic modes the open ended and closed ended inquiries depending on the type of data required in each type of forms.

4-Data gathering method

The survey was structured mainly around mixed mode of

1-face to face interviews with different target groups inside and outside the old town of Nablus.

2-telephone interviews with Palestinian intellectuals in other Palestinian cities, when it is impossible to reach them due to Israeli closures.

3-E-Mail Questionnaires for the Palestinian and Israeli intellectuals when it is impossible to reach them either personally or by phone.

4-Direct observations and recording by sketches, photographs of physical data with a list of required data, this mainly focuses on damage assessment, renovation projects assessment, and so. For this type of survey six students of the fifth year from the department of architecture were trained to help in the filed work especially in the last two

weeks. The Old town was under curfew for 10 days in the second field work, as far as the planned number of buildings to be surveyed was large; the need of the student's help was foreseen.

5-Information Processing

The data collected will be analysed by using:

*SPSS software for closed ended inquiries

*Ranking method for open ended inquiries

*for mental maps analysis will be based on the frequency of mention of the five elements specified by Kevin Lynch, while introducing some modification in response to the specificity of the study case. This detail will be set in later stages after the maps are prepared.

6-Survey phases

The survey will be divided into four study trips and phases:

1-Phase one

Scanning field work, implemented on OCT. 2003, in which case study and samples have been decided.

2-Phase two

In which the question forms and inquiries have been prepared to full fill objective 1,2,3,4 ,

1-documentation and assessment of damage and renovation projects.

2-opinion survey about the damage, renovation projects and meaning of the old city of Nablus among inhabitants of damaged areas, inhabitants, vendors, and visitors of the old town.

3-mental mapping of the old city before the invasion among the inhabitants of the old city.

4-mental mapping of the old city after the invasion among the inhabitants of the old city. (this part will be implemented after three weeks of conducting point 3)

5- Study of the intentionality of destruction among inhabitants of the old city, document forced routes, along with the opinion survey on the same point.

This phase is expected to be implemented on Aug. – Oct. 2004.

3-Phase three

The same opinion survey (question forms) used in phase two will be used in the stage

1-opinion survey about the damage, renovation projects and meaning of the old city of Nablus among inhabitants outside the old town along the main axis.

2-mental mapping of the old city before and after the invasion among the inhabitants outside the old town.

3-survey of the main commercial street (casaba), by drawings and photographs.

DATA ENTRY AND PROCESSING

For both the Objective and subjective parts SPSS is the main software that has been used for data entry, SPSS is a software package used for conducting statistical analyses, manipulating data, and generating tables and graphs that summarize data. Statistical analyses range from basic descriptive statistics, such as averages and frequencies, to advanced inferential statistics, such as regression models, analysis of variance, and factor analysis. SPSS also contains several tools for manipulating data, including functions for recoding data and computing new variables as well as merging and aggregating datasets. SPSS also has a number of ways to summarize and display data in the form of tables and graphs. Each question in the forms with its answers will have certain codes to be entered in the software⁷.

1-Data Analysis & interpretation

Different information can be obtained from the entered data for example

-Location of destruction, (edge central)?

- Concentration of destruction (commercial or housing area, near city entrance around public building, or public space....; WHY, how far it is affecting the urban fabric and the spatial structure (*examine links between location and concentration of destruction*))

-Degree of destruction, how much in percent of the building the destruction was, compared to other damage rate to other buildings. Also is the damage permanent or temporal? How far does it affect the artefact itself and the nearby environment? And where it is concentrated more, in public buildings (religious, recreational,;;;) or in housing? (*Examine links between degree of destruction with location of destruction and typology of destruction*)

-what types of buildings or artefacts where targeted, how far they are affecting the socioeconomic conditions, and the whole urban fabric in return the cultural identity of the city?

-spatial structure changes, with the new empty spaces as result of erasing buildings complexes, changes over street network system, and changes over main nodes.

-forced routes,

*their location in the building itself (near window, near door, near kitchen, bed room) near structural elements

*their location in relation to the surroundings (near public stairs, near garden or open space)

*degree of damage

*type of damaged elements (structural)

*degree of structural problems (short term and long term)

*direction of the forced routs (to central area, to the edges)

⁷ For more info please visit <http://www.utexas.edu/its/rc/tutorials/stat/spss/spss1/index.html#section%202>

Another important issue that SPSS offers is providing orders to compute correlations and cross tabulations between multi-entries, for example, (*Examine links between location, degree of destruction and whole structural system of the city*). Examine if they were necessary for security reasons? Or deliberate to destroy the infrastructure and create serious long term impacts on the structural system of the urban fabric. Finally comparing and overlapping layers of analysis before the invasion and after the invasion will be elaborated, to draw up the significant transformations and impacts of the Israeli military invasion on the scale of the city and how they are altering and weakening its cultural identity.

2- Data representation

A-Graphs

The results obtained from data processing in the SPSS can be represented in different forms like charts bars and graphs. Very interesting operations and results can be obtained using the SPSS software like correlation and cross tabulation between different factors for example the link between the degree of damage and the typology of destroyed building, or the link between location of building (geographic setting) and degree or weapons used for destruction. This can indicate if specific historic building typology was the target of military operations, or if building of the ancient Roman neighbourhood were highly damaged in comparison or other neighbourhoods. Figure (4)

B-Maps Production

In order to produce graphic readable representation of the surveyed and analysed data, AutoCAD and Adobe Illustrator were the mainly graphic software used.

In AutoCAD different layers of the surveyed buildings were assigned on the old town's cadastral map. For example location of destroyed buildings, typology of destroyed buildings and so, AutoCAD is useful also for three dimensional representations. Once the AutoCAD maps are prepared they will be transformed to Illustrator format to do rendering and final touches as well as to convert the drawing to readable image format that can be used and installed in word and PowerPoint software. Figures (5, 6, 7)

CONCLUSION

Documenting and analysing Historic centres in the event of war and destruction needs to go beyond the traditional straight forward inventory forms. Using multidisciplinary approaches to understand the city and the damage that occurred in the historic fabric will have more insights and detailed analysis. The results obtained were essential in not only documenting the damage and destruction of the historic city; it further reflected the actual size and scale of the damage in readable drawings, graphs and tables, that can help in planning the needed budgets for different projects. Moreover, these results can be beneficial for any comprehensive post-war renovation projects in the area. The results of the interviews reflected the impacts of damage on user groups' collective memory about their city, it also reflect their opinion of the

ongoing renovation projects that can help in improving and developing such projects to meet with user group's needs and expectations.

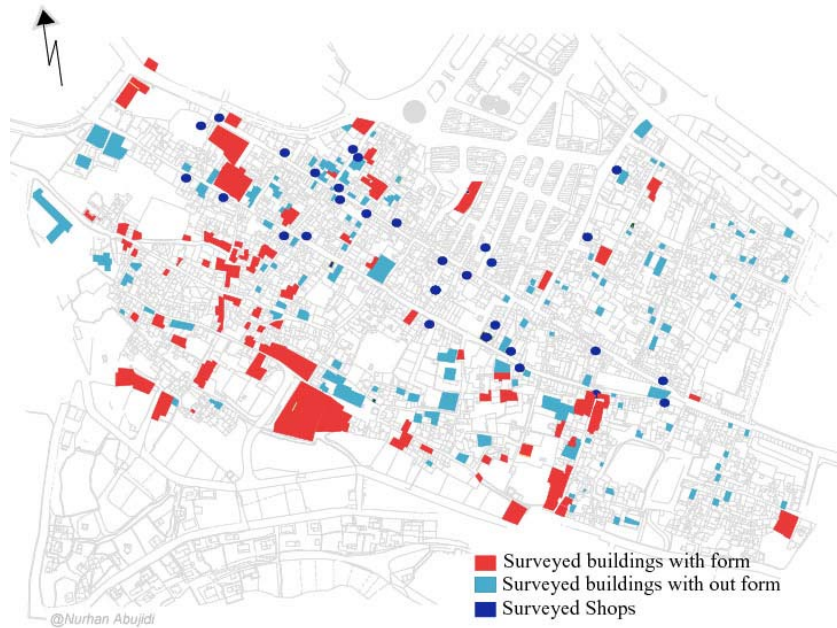


Figure 3. Location of Surveyed Buildings&Shops inside Nablus Old Town

Bar Chart

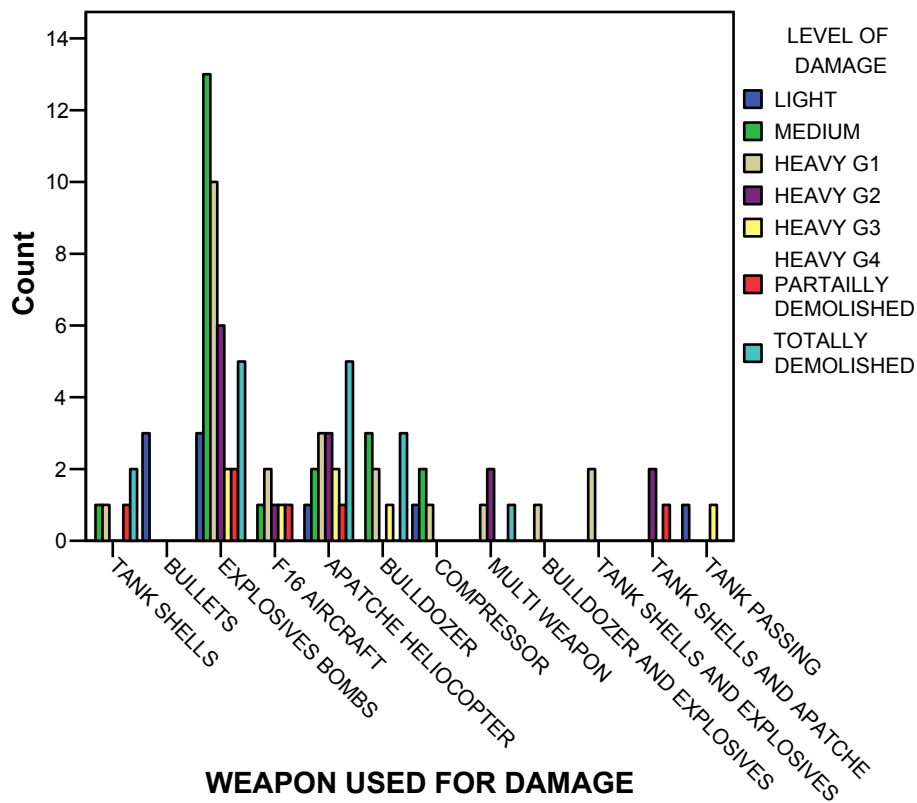


Figure 4. Sample of the results that can be obtained by using SPSS for data entry and data processing, Cross-tabulation of the link between Weapons used for destruction and level of destruction.

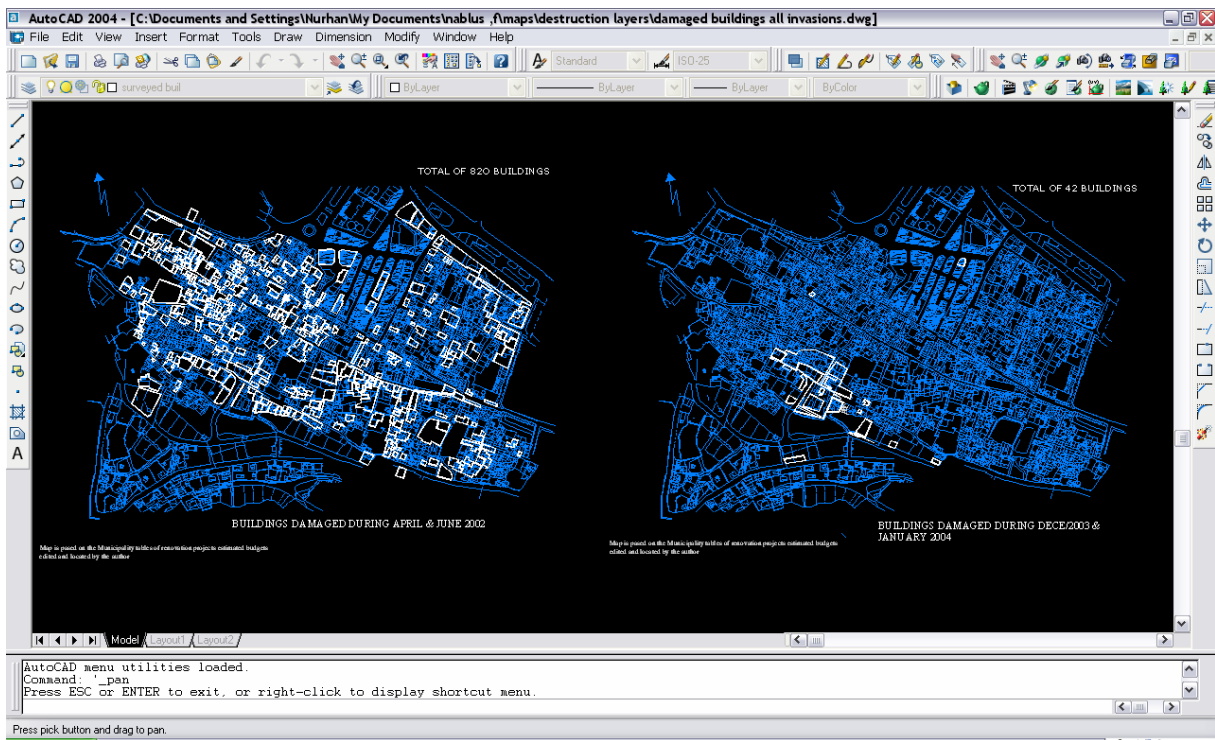


Figure 5. AutoCAD drawing of the location of destroyed buildings inside Nablus Old Town, 2002 and 2003

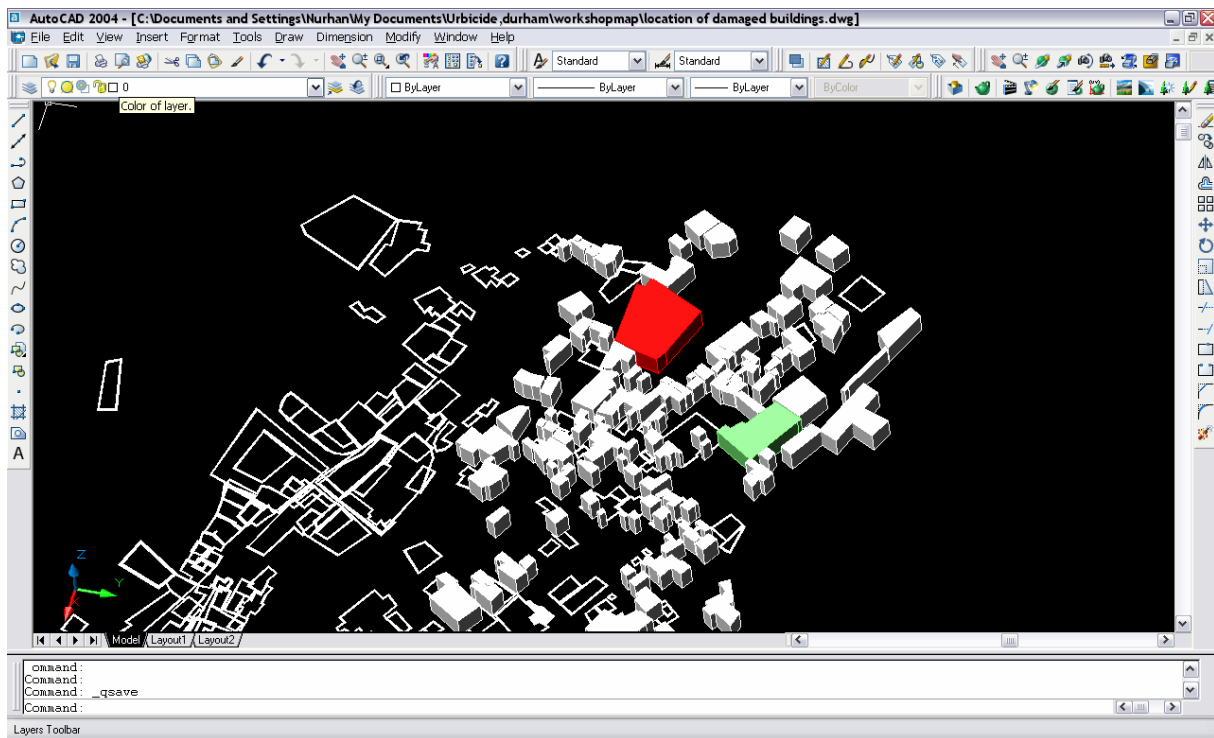


Figure 6. AutoCAD three dimensional drawing of the location of destroyed buildings inside Nablus Old Town, 2002

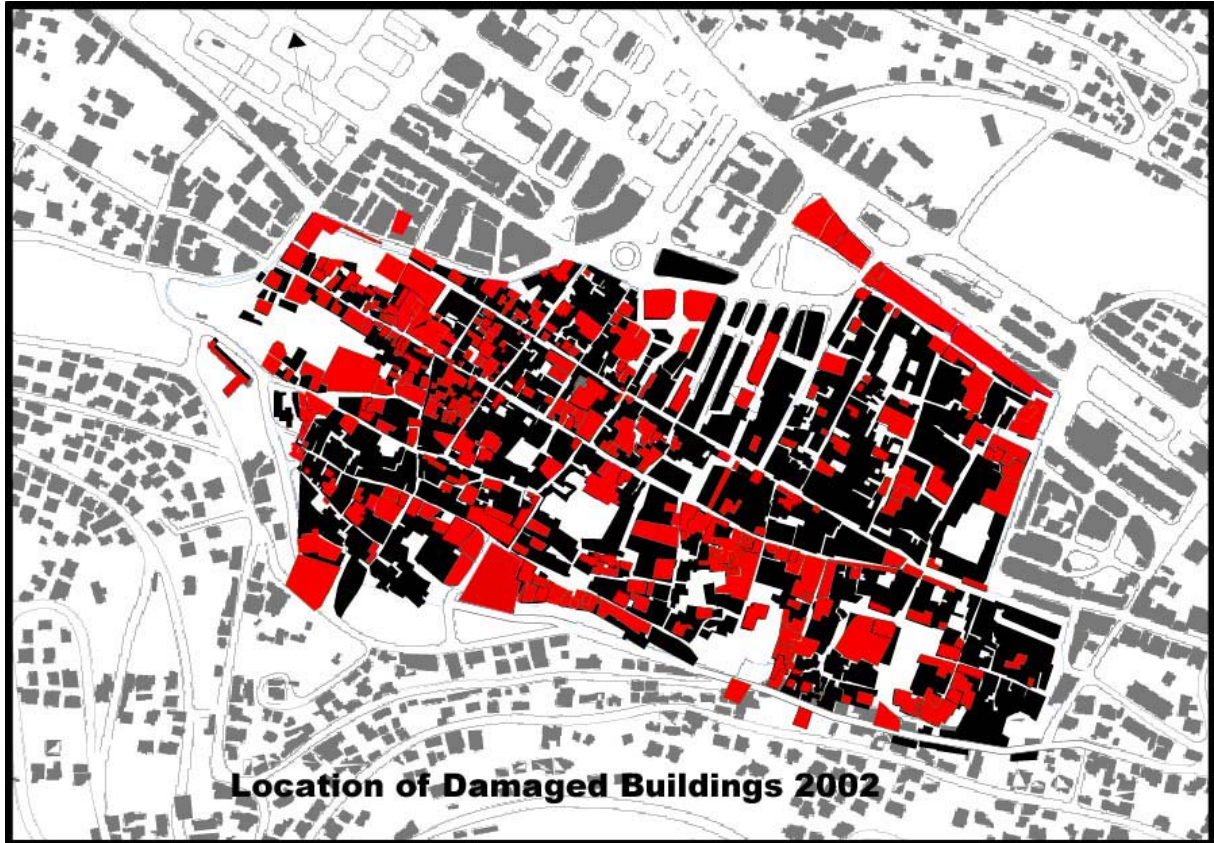


Figure 7. Adobe Illustrator image of the location of the destroyed building in Nablus Old Town 2002

ANNEX

Documentation and inventory forms, See attachment