

Creating an inventory for a heritage that holds meaning for its inhabitants: The case of 1950s large housing estates in Oran, Algeria

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Abstract: Assigning the heritage status to the colonial architectural legacy of the 1950s large housing estates has still not been considered, as none of them are considered sufficiently valuable or protected by law as social housing heritage. Today, a number of scientific studies carried out on the various large Algerian housing estates have been able to identify their use value, but the lack of additional information for potential stakeholders prevents them from being put to good use. This article contributes to the development of an inventory adapted to the Algerian context: a section on the built heritage of social housing from the colonial period, which has always remained on the fringes of any official intervention. The main question of this study is what are the fundamental steps to be followed for the creation of an effective inventory adapted to large Algerian housing estates, as this research work is based on the combination of two approaches, quantitative and qualitative, as well as field observation based on the methodological triangulation used to draw maximum information from each investigative tool. The objective of this article is to propose a new version of a process adopted for the elaboration of a thematic inventory by examining the identification and the evaluation of the values by referring to the system of foreign inventories to create a new one in a particular context. The article designates four large housing estates in the city of Oran as cases of study. The results obtained by this study reveal that the system of inventory slips, certain of them having patrimonial values of degree, is high measured via the assessment elements (criteria, factors, characteristics) identified in the field, whose combined efforts by the various institutional and professional actors, as well as the involvement of the inhabitants, has made it possible to bring the large housing estates out of ignorance and into the open. The addition of details on the criteria and issues that should be taken into account in the Algerian context in the creation of an inventory is a further example.

Keywords: large housing estates, modern architectural heritage, inventory, values, assessment elements, institutional actors, inhabitants.

INTRODUCTION

Oran, a major Algerian city, served as a testing ground for large-scale initiatives of a new concept that Algerian society had not seen before. Built under French colonial rule in the 1950s, these large housing estates emerged for the first time in Algeria, as noted in writings by Deluz-La Bruyère. They were considered a miraculous solution to solve the housing crisis, modernise the suburbs, and control their growth (Deluz-Labruyère, 2004). These developments were created to promote modern urban life while preserving the colonial social hierarchy, often separating European settlers from the local Algerian population (Picard and Malverti, 2009). Influenced by modernist ideals like those of Le Corbusier, they emphasised functionality, clean geometric forms, and large communal spaces, catering differently to various groups (Muslims, Europeans). Notable architects such as Candilis, Pouillon, and Roland Simonet left their mark on these projects (Lacheheb et al., 2021). Significant international companies also shaped the image of this coastal city, including the Algerian construction firms Chauffour-Dumezet and the Société

Algérienne des Entreprises Léon Ballot. Their collaboration during that period is often referred to as "The Algerian Saga" (Xavier, 2001).

Today, there are many large housing estates in Oran, making up about 20% of the built heritage for social housing (Filali et al., 2023). However, the term "heritage of large housing estates" is still new in Algeria. To address this, "recording, studying, and sharing" information about this built heritage through an inventory, can be an important first step for helping to create lists for classifying and protecting these structures. This process requires a long-term commitment from institutions (Myers, 2016) to create a complete list, description, and evaluation of the assets that make up a community's heritage in a specific location. This process involves filtering through values (Marlaux, 1964) to improve existing conservation guidelines (Ali and Ahmad, 2021). However, it is important to critically assess the existence of a single Algerian inventory for categories like excavations, historical sites, and natural monuments. This inventory effort began in 1964 and is based on laws that govern heritage in

independent Algeria (and has been updated with Law 98-04 of 15 June 1998, about protecting cultural heritage). Unfortunately, the recent revision of the old law by the Ministry of Culture's conservation service did not add other categories of built heritage, especially housing. The processes for recording, identifying values, and evaluating buildings are quite similar. Moreover, the criteria for measuring these values, which are seen as an objective foundation (Brunel, 2015), are not considered in the inventory process, whether at the regional or national level. This standard approach, which applies to all properties inherited from previous periods—Ottoman, Spanish, and French, can be explained by a lack of proper methods and scientific resources, or a lack of information about the buildings, leading to gaps and failures during the census stage. Although the inventory includes both the recording and studying of buildings with recognised values, its goal is to give them a status as classified or potentially classified objects (Barbier, 2015).

Various guidelines and other documents for creating an inventory in developed countries are based on a set of elements called "criteria," which differ from one country to another and depend on the type of object being inventoried. This helps highlight the unique features of both ordinary and exceptional artistic works (Heinich, 2009). In France, the 20th Century Heritage label shows that criteria are not fixed in a systematic way but are based on recommendations from the Council of Europe regarding the protection of 20th-century architectural heritage (Guilmeau et al., 2022). Similarly, the Venice Charter, adopted by ICOMOS a year later in 1965, is based on a series of articles (ICOMOS, 2017) that define guidelines for managing architectural heritage (Smith, 2020). These guidelines cover five criteria related to the age of the building, local or national recognition as a heritage site, environmental considerations, preservation of original features, and the most important criterion: intrinsic value, which illustrates the architectural context and styles of the time. The World Heritage Convention and the Burra Charter, adopted by Australian ICOMOS in 1979, Article 5, defines values that must be considered for classification, including usage value, contextual value, environmental value, and historical importance (ICOMOS, 1999). Notably, the Department of National Sites and Monuments of the Grand Duchy (SSMN) in Luxembourg works on several specific inventories by categories of heritage, not to protect everything, but to differentiate what deserves protection from what does not.

The Council of Europe Convention emphasises the need for an inventory of all architectural monuments, including housing. For example, the Unité d'Habitation designed by Le Corbusier was first protected as a historical monument on 20 June 1986, then labelled as 20th Century Heritage on 1 March 2001, and finally classified as a UNESCO World Heritage site on 17 July 2016, due to its outstanding value (Ragot, 2014). Additionally, the SPR - remarkable heritage sites, a form of classification whose conservation, restoration, rehabilitation or enhancement is of architectural, archaeological, artistic or landscape interest (Boudon, 1993) - is a procedure aimed at inventorying remarkable architectural, urban, social, and landscape elements. The remarkable heritage site of the Firminy-Vert large housing estate includes elements that respect social cohesion and original characteristics of a large housing estate. The original site plan is still maintained. Similarly, the Lignon housing estate in Geneva has been inventoried and classified for its urban, architectural, landscape, and natural qualities. The regulations briefly define the characteristics of the site, marked by the integration of buildings into the landscape, open spaces, and the quality of interior arrangements (Courbebaisse, Issot, 2022).

An inventory is seen as a way to collect new materials (Fournier, 2017). It is a process that helps identify and understand certain

values related to social aspects and usage (Pierron, 2019). In other words, it is an operation that contributes to detailing lifestyles, experiences, types of appropriation, and social life, which can lead to identifying intangible values. These ranges from small items to cathedrals (Heinich, 2009), in the same way, the inventory should consider both material and intangible heritage. It should reveal unique contextual values in terms of their impact on human civilisation (Iqbal et al., 2022), such as memory value, activism, and usage, which can enhance public appreciation and the sense of place for individuals and communities (Rahil et al., 2020). These values should be clearly defined in inventories to make it easier to implement preservation measures (UNESCO, 2003). Without a heritage inventory, a society only partially understands what it possesses and sometimes decides to preserve or highlight certain elements: this can lead to forgetting its history and roots, making the inventory a tool for understanding the identity structures of a society (Jaunin and Debize, 2018). According to Law 98-04, the classification framework for an architectural heritage inventory consists of a set of values without assessment elements. Therefore, at the start of this study, many questions arose about which criteria to use for creating an inventory of large housing estates. It was especially important to determine which contextual criteria are suitable for the modern architectural heritage of this thematic.

METHODOLOGY

This research is based on combining two approaches: quantitative and qualitative methods. It uses methodological triangulation to gather as much information as possible from each investigation tool to achieve concrete and reliable results (Yeasmin and Rahman, 2012). This is known as the mixed method, which has become common in social sciences and offers higher quality results (Shwani, 2021). This approach allows for direct field investigations to verify previously defined hypotheses. In addition, field observation was performed at different times of the day and year, enabling us to understand the social facts and behaviour of the inhabitants, and shedding light on the practices used to reappropriate these inherited spaces (Smair and Kacemi, 2019).

1. Surveying and document analysis: After identifying large housing estates needing protection, documentation was collected from the archives of the wilaya of Oran and the capital, Algiers. Archives from heritage organisations were consulted to find maps, photos, and historical documents related to the studied sites. These archival data sources were very helpful in the initial stage of developing the inventory of the heritage of large housing estates.

2. Literature review: To identify and recognise the values that can coexist within large housing estates in general, a literature review was necessary. This helped understand the process of proposing inventories for the heritage of these housing estates. The reviewed French documents clarified the concept of proposing inventories for heritage buildings and assigning protection status based on historical, architectural, aesthetic, urban, and reputational value. The inventory systems in place in France and Algeria were also examined, as many texts and laws are shared by both countries. Law 98-04 focuses on the protection and promotion of cultural properties under the Ministry of Culture in Algeria, which was inspired by the decree of 4 March 1964, initiated by André Malraux and André Chastel. This national inventory system for cultural assets provided a well-established theoretical foundation for the framework proposed in this research.

3. Evaluation grid: This process was structured in two steps:

Identification and classification of assessment elements:

(investigation 1): Based on interviews, which served as an excellent investigative tool, this approach allowed us to answer indirect questions (Taylor et al., 2015). We chose semi-structured qualitative interviews as the main data collection tool, designed to explore answers to indirect questions (O'Donoghue, 2006). Professionals in housing and heritage, history, and sociology participated in this process. The questions asked were open-ended and based on a literature review conducted as part of the first author's ongoing doctoral research and a broader study of heritage inventory systems. The questions included: What do you think about introducing large housing estates into the heritage? Are there any large housing complexes in Oran with remarkable architecture? What evaluative elements can we deduce for these large housing? What do you think about protecting these large housing estates and turning them into something like Le Corbusier's Cité Radieuse? Would a separate heritage inventory for large housing estates be useful

in Algeria? Since the topic of social housing heritage has not been considered in Algeria, despite the presence of certain masterpieces by Pouillon and Candilis, the semi-structured interviews were designed to allow respondents to answer the questions as broadly as they wished.

Evaluation of values (investigation 2): This was approached by specialists in heritage and housing, with sampling based on their availability and willingness to take the time to respond. Residents were seen as key to understanding the study object (Hadbi, 2020). Quota sampling was calculated using Cochran's formula to determine the sample size:

$$n = \frac{t^2 \times p \times (1-p)}{m^2}$$

Where: t - confidence level according to the normal distribution for a 95% confidence level, t = 1.96; p - estimated proportion of the population; m - margin of error tolerated generally, 5% (n = $(1.96)^2 \cdot 0.5 \cdot (1-0.5) / (0.10)^2 \approx 96$). **(Tab. 1).**

Tab. 1. List of interviewees. (Source: Keffif, 2023–2024)

Number	Profession	Date of interview
Investigation 1 (interview)		
3	Architects in Oran's Department of Culture.	15/05/2023
4	Architects in DL ¹ .	16/05/2023
1	Architectural historian, USTO.	02/09/2023
1	Sociologist, Professor at Oran 2 University.	16/01/2023
2	Sociologist, Professor at USTO University.	01/02/2023
5	Employees in the Oran wilaya archive.	19/01/2023
3	Architects specialising in architectural heritage.	16/09/2023
4	Architects in the OPGI ² housing department.	30/03/2023
n	The inhabitants of Lattre de Tassigny, Perret, Antinéa, Place Korte.	2022/2023
Observation in situ by the first author		3 days a week from 10 a.m. to 12 p.m., 4 p.m. to 6 p.m. and 8 p.m., during 2023 and 2024.
Investigation 2 (interview + questionnaire)		
5	Architects with a threefold experience of social housing in Algeria (project management, teaching and research).	03/02/2024
1	Architect at the Ministry of Culture Algiers	04/02/2024
80	The inhabitants of Lattre de Tassigny	2023/2024
96	The inhabitants of Perret	2023/2024
35	The inhabitants of d'Antinéa	2023/2024
20	The inhabitants of Place Korte	2023/2024
4	Civil engineers, CTC ³ management	19/02/2024

1. DL (Oran housing authority for new buildings, renovation and redevelopment of old buildings).

2. OPGI (Office for Property Promotion and Management) in Algeria is a public institution responsible for promoting and managing real estate projects, particularly public housing.

3. CTC (National authority of Technical Control of the Construction) in Algeria, its mission of the Control to the whole of the batches of construction C.E.S and C.E.T, the expertise of the existing building).

SELECTIVE PANEL OF CASE STUDIES

After conducting a census of large housing complexes built in Oran during the 1950s as a primary inventory, which is most

relevant for the inventory process, calculations and synchronisation were performed using Google Maps, Oran archives, and site visits. About fifty large complexes scattered across Oran were analysed. We defined seven criteria to structure and classi-

fy the information collected for selecting our case study sample, based on the same criteria established for the primary inventory, the first (provisional) inventory served as a database with figures for each criterion defined as an example: the first criterion, the period of construction, gave us 19/50 for the first wave and 29/50 for the second wave. This leaves two large groups without information. **(Tab. 2)**. This ensured a balance between urban and rural environments (combined locations), distinct

urban forms based on typology and size, varying ethnic destinations, and a balance between a renowned architect, a moderately recognised architect, and an unknown architect. Some were selected due to the absence of pathologies, while others had minor observed pathologies. Finally, the construction timing varied **(Fig. 1)**.

Tab. 2. The four case studies selected, extracted from the primary inventory (censuses). (Source: Authors, 2022–2023)

Large housing estates selected for case study	Period of construction	Urban typology	Localisation	Destination	Renowned architect	Number of dwellings	Minor pathologies
Lattre de Tassigny Group	The first wave (1955–1958)	Tower and bars	Suburbs	French inhabitants	M. Georges	500	/
Perret	The first wave (1956)	Towers	centre	European inhabitants	M. Barrault	730	x
Antinèa	The second wave (1959–1961)	Tower	Centre	Civil servants	G. Kalfon	126	/
Place-Korte	The second wave (1958)	Low-profile bars	Suburbs	Autochthone Muslim inhabitants	AT.BAT (G. Candilis, Sh. Woods), M. Joseph Mauri, D. R. Pons.	87	x

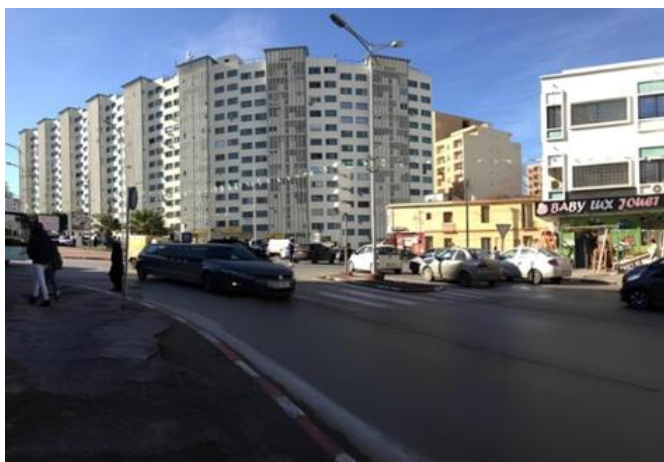




Fig. 1. Photos of four case studies from the first wave and second wave (Lattre de Tassigny Group, Perret, Antinèa, Place-Korte). (Source: Authors, 2023)

RESULTS

Step 1: Recognising heritage values

Before starting the first step to determine the heritage values of large housing estates several questions were posed: Are there large housing estates? Do they possess multiple heritage values? Have they significantly contributed to the development and historical character of the neighbourhood or city? Can these values endure over time? To answer these questions, a literature review was conducted to gain an initial understanding and identify the main values found in the large housing estate of each case study. This includes a brief explanation of the qualities that characterise the complex to ensure its protection, raising awareness in case of any interventions on the site. The identified values were categorised into two groups based on Petrulis: tangible and intangible. Recognising the intangible values can enhance the understanding of the material heritage's essence (Bousserak et al., 2018). This way, the thematic and cultural reference system becomes a flexible methodology for defining value (Petrulis et al., 2023), which will later serve as a decision-making tool for professionals, heritage management organisations, and other managers (Benberkane, 2019). The functional value identified within Pouillon's large complexes in Algiers (Smair and Kacemi, 2019), along with insights from Guy Tapie (Tapie, 2014), introduces additional "qualities" related to large housing estates, including spatial, urban, proximity, and reputational values. This indicates that the values shared by different researchers are merely personal experiences aimed at identifying and determining an object for heritage recognition (Carabelli et al., 2022) (Tab. 3).

Tab. 3. Classification of the tangible or intangible values of the large housing estates. (Source: Authors, 2024)

Tangible values	Intangible values
1 Historical	A. Memory
2 Architectural	B. Reputational
3 Urban	C. Use
4 Proximity	
5 Aesthetic	

Step 2: Data processing, identification, and classification of assessment elements

The data collected empirically from two samples of the population (heritage managers and professionals) (Fig. 2) aimed to simplify the complexity of the concept of value associated with each previously defined value. These evaluative elements, consisting of criteria, characteristics, and factors, guided the construction of our historical narrative related to its appreciation, significant events, its planning, and its architecture. Evaluating these aspects will help us better to understand the circumstances of the time and their reflection in the present (Petrulis et al., 2023), which must be preserved and transmitted.

Step 3: Evaluation of values

The evaluation of values was carried out through assessment elements identified in the field. To assess the degree of each value for each large housing estates considered as a case study, we conducted a second survey among two samples of the population (1/4 of the inhabitants from each large housing estate, and architects specialised in housing and heritage), regardless of the value in question. The characteristics of architectural and urban value were assessed by architects specialising in housing (accompanied by floor plans and plans of the dwellings drawn up by the author). The aesthetic value criteria were assessed by heritage specialists. (Choice of image questions) The criteria of historical value and use, the factors of proximity, memory and reputational values were evaluated by the inhabitants (multiple choice questions, ranking questions, open questions). We established a correspondence between five scoring groups with numerical ratings (4, 3, 2, 1, and 0), where the status of the evaluative elements is structured in the following order: exceptional, superior, strong, medium, and weak. Ultimately, all evaluations are converted into numerical values (Fig. 3).

81% to 100%: (exceptional) = 4

61% to 80%: (superior) = 3

41% to 60%: (strong) = 2

21% to 40%: (medium) = 1

1% to 20%: (weak) = 0

The overall degree of evaluative elements is high for the Lattre de Tassigny group, with scores between 3 and 4. This is due to the richness of historical events recounted by residents (score 4) (Fig. 3), where 82% of the interviewed residents maintain a connection between the place and happy moments in their lives, reinforcing their sense of attachment through shared memories. Regarding the characteristics of architectural value, 87% of housing specialists interviewed, through the analysis of housing plans, affirm that the apartments are spacious, well-lit, and well-ventilated, designed by architect M. Barrault, known for his talent and speed in construction. Sixty-five percent of the architects interviewed acknowledge his fame in Algiers.

The integrity of the large housing estate, situated in a strategic location at the heart of the city, offers inhabitants access to various transportation options (tram, bus, taxi, train station). Seventy percent of inhabitants are educated and have good cultural awareness of the large housing estate, with zero crime rates reported in the last five years and no conflicts among inhabitants. One inhabitant stated, "We have lived in the Lattre de Tassigny group since 1965, most of the residents are long-time locals, and we have known each other since childhood." Its unique urban form, featuring a screen building, marks it as a

landmark in the city of Oran. An architect employed at the OPGI noted that "its slightly curved shape, which follows the sloping

terrain, gives it an original appearance, distinct from standard large housing complexes."

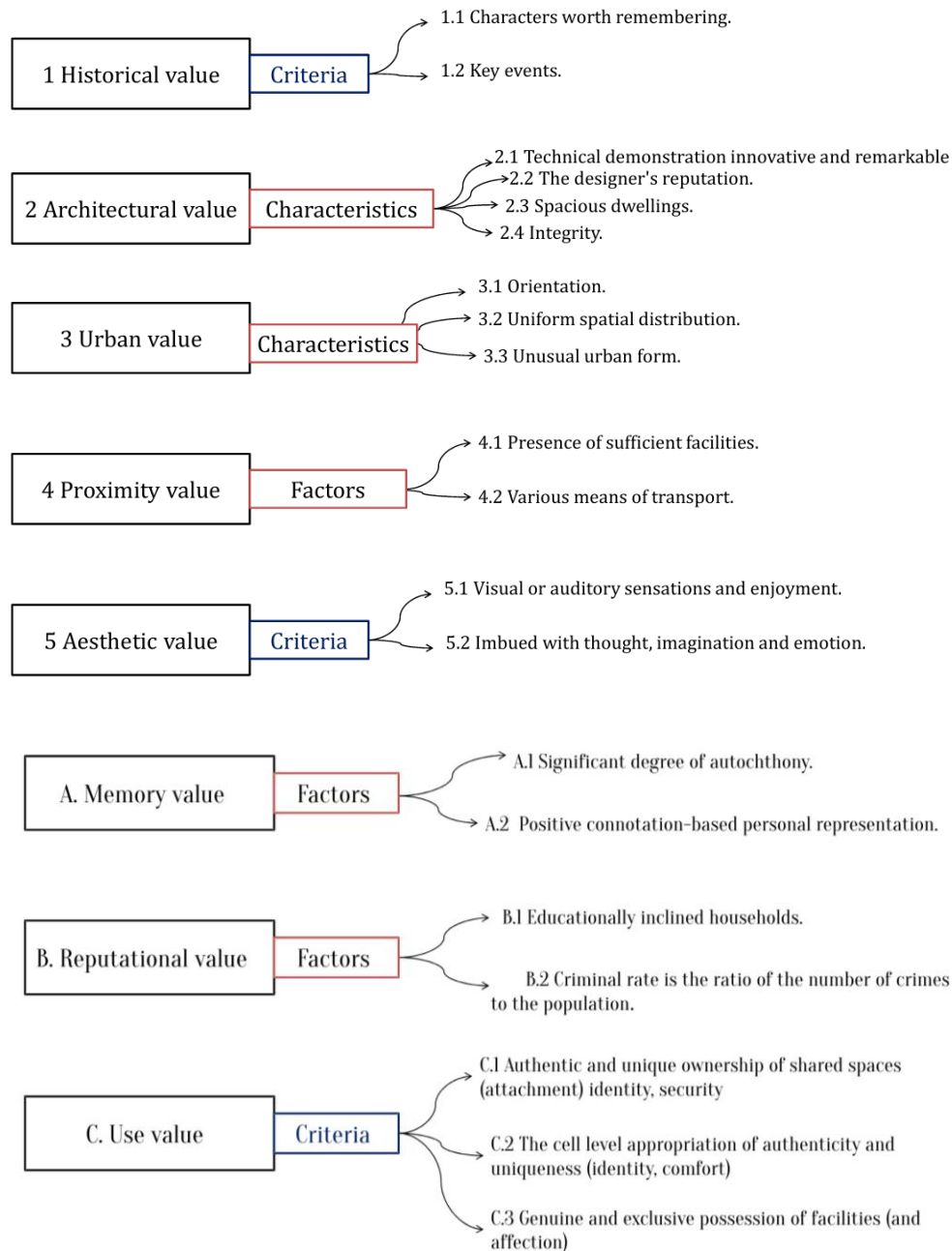


Fig. 2. Result of the survey on the identification and ranking of assessment elements. (Source: Authors, 2024)

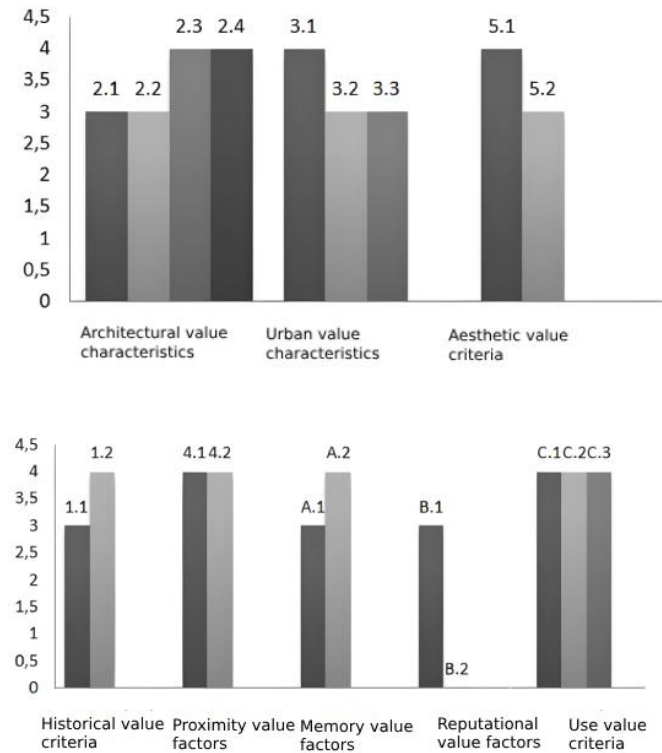
The three types of appropriations identified by sociologists in the first survey are all present and authentically practiced by the inhabitants, they develop attachment and affection for communal spaces, which are lively during the day with older residents and animated in the evenings by young people who enjoy themselves and sing. The appropriation of facilities is unique, as inhabitants continue social practices to maintain community vibrancy. The appropriation at the unit level varies from one apartment to another based on room arrangements. Seventy-five percent of interviewed inhabitants opt for modern layouts, while 25% prefer to preserve "traditions and customs" with traditional room designs. Regarding aesthetic value criteria, 60% to 100% of specialists affirmed the influence of the

large housing estate on thought and behaviour, promoting visual relaxation through integration with its immediate environment.

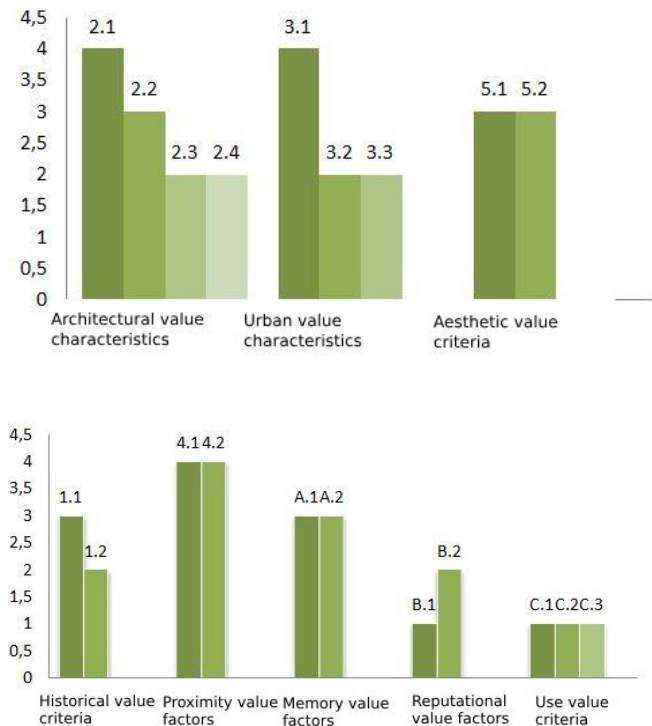
For the Perret large housing estate, which ranks second, despite its monumental scale and the original layout of nine blocks placed on a vast platform (garage) (Fig. 3), giving it a distinct urban form integrated into an old urban fabric undergoing transformation in the Saint Pierre neighbourhood, it suffers from a poor reputation due to a high rate of illegal activities, which has affected its ranking. The majority of residents have left, replaced by an immigrant population from Central Africa, leading to a significant decline in functional value due to poor

appropriation of housing, communal spaces, and facilities (score 1). A sociologist in the architecture department stated, "Love for a residential environment is formed unconsciously over time as events and memories are built."

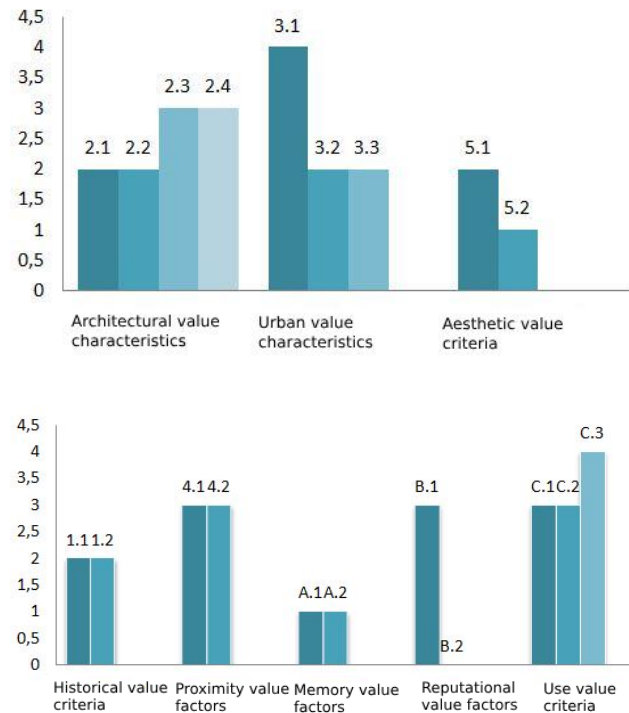
Lattre de Tassigny group



Perret



Antinéa



Korte

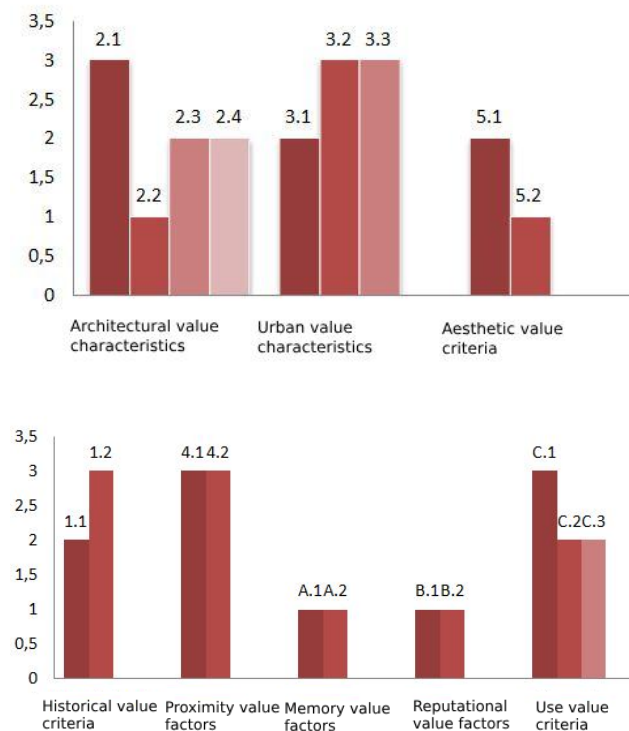


Fig. 3. Results of the evaluation of the value by the two samples of the population (inhabitants and specialists in housing and heritage). (Source: Authors, 2024)

For the Antinéa housing complex located in the heart of Oran, where facilities and transportation options are readily available for residents, the criterion C3 for functional value is high (score 4) (Fig. 3). Coupled with the good practices surrounding various cultural and religious facilities within the built heritage, 97% of residents have a high level of education, and there is zero crime

reported. "This is a housing complex with a good reputation," the report states. Its architectural aspect scores between 2 and 3, with its orientation towards the sea providing residents with panoramic views. However, the memorial value is low (score 1) (Fig. 3), because 35% of the interviewed residents moved in around 1980. For the Korte housing complex, designed by the Candilis group known for their expertise in social housing, 75% of specialist architects affirm the presence of remarkable technical demonstration through the addition of walkways as an

architectural element for spatial distribution and aesthetics. "The inhabitants we interviewed told us that 'every year, two or three foreign and even Algerian researchers come to take photos of the Place Korte (score 3) (Fig. 3). The criterion for functional value (C1) is high, as 80% of inhabitants maintain traditional layouts that align with the intended purpose of the large housing (Fig. 4).

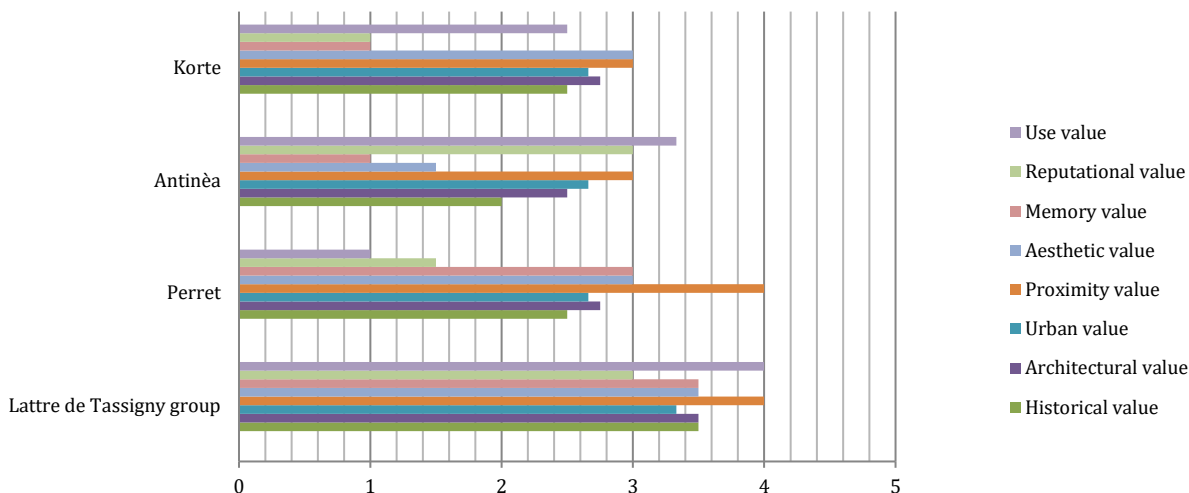


Fig. 4. Profile of heritage values attributed to the large housing estates analysed. (Source: Authors, 2024)

Step 3: Proposed inventory

In addition to the evaluated values, a study was conducted based on the "Guidelines for Heritage Inventories by the Canadian Government" (Ministry of Tourism, Parks, Culture and Sports, 2009; Parks Canada, 2010). The inventory of large housing to be protected in Switzerland, conducted between 1975 and 1980, along with the inventory of Historical Monuments inscribed on the UNESCO World Heritage list, particularly the case of the housing unit in Marseille, France, were examined to develop a meaningful inventory system for the social housing of Algerian large housing estates. Experience in several countries has shown that the inventory, especially the initial steps of identifying and pre-selecting representative heritage (Tourath, 2016), is crucial. In Canada, Switzerland, and France, the inventory system focuses on three key elements considered essential for understanding the heritage value of buildings. Inspired by these three elements, a significant approach to the architectural heritage of large complexes is proposed for the inventory of social housing in Algeria (Tab. 4).

The results of the inventory system for large complexes are described in a structured sheet comprising three elements, which are: (a) **Building context:** This section should present the building and its setting within its environment, including a description of the area, number of floors, location, construction materials, type of structure, and notable construction elements based on information gathered from archives, field observations, and current condition photos. (b) **Physical condition:** This section includes modifications, degradation, deterioration, and the structural integrity of the housing complex, with information on its condition and lifespan provided solely by the National authority of Technical Control of the Construction in Algeria - CTC organisation. (c) **Heritage value scores:** This section includes the degree of each heritage value, whether tangible or intangible, along with the criteria used to evaluate that value.

Tab. 4. Proposed inventory system for large housing estates in Algeria. (Source: Authors, 2024)

Country	Key 1	Key 2	Key 3
Canada	Description	Character-defining elements	Identification of heritage values
Switzerland	corded	Interest or alterations	References
France	Presentation of the building	Size, siting, urban position	Values and significance of the building
Proposed for Algeria	Identification sheet	Architectural expression of the building	Score for each heritage value identified through the contextual and thematic assessment elements (Tab. 5)

Tab. 5. Summary of the selection grid for the seven contextual assessment elements identified during the thematic study of the large housing estates in Oran. (Source: Authors, 2024)

Contextual assessment elements Algerian of the thematic	
1	The historical context, key events in the building's history.
2	This exceptional large housing estate combines modern architecture with local architecture (the Arab house).
3	Composition of facades, integration into the immediate context (inverted architecture, small windows, passageways, moucharabieh).
4	A singular social history that bears witness to an evolution.
5	Authentic and unique appropriation of common areas in cells.
6	Adapted links between the centre and the suburbs.
7	Successful integration into an urban or suburban context.

DISCUSSION

The proposed inventory system for the architectural heritage of large housing estates in this research needed to be solidly justified. Thus, identifying large housing with a heritage character by organising values as a primary step was considered. The use of evaluative elements (criteria, characteristics, and factors) contributes to strengthening and supporting a thematic inventory. The results obtained from this research allowed for the selection of contextually important evaluative elements derived from all the merged surveys conducted in the study areas, following three methodological axes: in situ observation, quantitative approach, and qualitative approach. The quantitative study confirmed the qualitative study (Angers, 1996). In other words, the quantitative data provided mass results regarding inhabitants' relationships with the large housing estates, while qualitative data provided details and information about the characteristics of each large housing.

Seven assessment elements were selected based on the previously identified to confirm that the inventory process consists of testing a unified methodology and refining it while testing it in the field (Fournier, 2017). However, certain factors were rated significantly higher than others, such as the crime rate in the Perret large housing complex, where the level of illegal activities is high, which can lead to its stigmatisation in the heritage approach, when the perpetual persistence of multiple types of crime (theft, drug trafficking, assault, illicit trafficking, verbal or sexual aggression, destruction, etc.), which the inhabitants can cite, prevents any recognition of heritage and constitutes a delay or outright absence in the heritage approach. This leads to sensitive, unstable marginalised areas, where human intervention in the event of investigation or identification of values cannot be performed under the right conditions. In particular, destruction can lead to a lack of knowledge of certain architectural elements, which does not give them the heritage status. Nonetheless, its strategic location and monumental quality, which gives it a unique architectural character, can balance the assessment elements, meaning $2 > 1$. Comparing to other countries like France, the national ranking vision presided over by the SPR is a procedure aimed at inventorying remarkable architectural, urban, social, and landscape elements.

Beyond a standard and monotonous approach, the aim of this research is to create a comprehensive and consistent inventory that opens the door to further inquiries regarding a novel action to inventory identified intangible values. The objective is to transform the scientific work of description and observation into administrative prescriptions for public action (Heinich,

2009). To this end, this work proposes a dedicated inventory model for large housing estates, focusing on a system of both tangible and intangible heritage values that reflect the material and immaterial richness within these complexes. These values include architectural, urban, historical, aesthetic, functional, memorial, and reputational aspects, which will then be evaluated to position each large housing estate according to the degree of their value. Moreover, the analysis of the structural and physical condition, aided by expertise conducted by the CTC organisation, will provide insight into its durability and rigidity. The complementary information gathered from various sources (archives, residents, ministries) will help develop an inventory system as a solid documentary source for large housing complexes with the heritage potential. This approach contributes to their sustainability, serving as a testament that some of them exemplify the modern movement (Bertier et al., 2014) while preserving the identity and spirit of the site (Iqbal et al., 2022).

The term "social heritage" encompasses not only material values but also intangible values that can be identified and preserved, reflecting "the extraordinary in the ordinary" (Lefebvre and Levich, 1987). Countries like France, Switzerland, and Canada provide concrete examples of the conservation of post-war large housing estates through appropriate inventory systems. Although the term "social heritage of large housing" has been considered in the Western world, certain studies by Vincent Veschambre (2012) and Bruno Vayssière (2002) demonstrate how large housing estates can achieve this new heritage legitimacy, possessing characteristics that make them particularly representative examples (Gourbin, 2011). Furthermore, this concept remains relatively new in developing countries like Algeria, and it could create a range of possibilities in terms of restoration, sustainable development, and the restructuring of large housing estates in major cities, especially as the notion of heritage has become flexible enough to encompass ordinary mass housing, not just religious and cultural heritage.

CONCLUSION

The inventory system serves as a support for an operational methodological tool in decision-making by various stakeholders involved in management, heritage preservation, or the classification of architectural products. Thus, the inventory of large housing estates, with their identified values, can provide a new image and interpretation of a marginalised architectural heritage. Some of them, like the Lattre de Tassigny group, can serve as exemplary cases for heritage classification. This approach aims to preserve their heritage values while also benefiting the environment. It is important to emphasise that the surveys conducted among inhabitants through questionnaires, along with the evaluation of characteristics by heritage specialists, have allowed for the conclusion of causal relationships linking inhabitants, professionals, and institutions in the development of a consistent thematic inventory.

Considering certain assessment elements relevant to the Algerian context appears to be essential in the inventory process, as this has facilitated the development of a thematic ranking grid that is not standardised as outlined in Algerian law 98-04. Thus, the inventory proposed for this study can serve as a prototype for other countries. However, excluding inhabitants during the development of an inventory leads to gaps, like missing pieces of a puzzle, resulting in a lack of understanding on the part of decision-makers and, consequently, a rejection of the establishment of an inventory. This work proposes a model of inventory based on a registration form, the opinion of the CTC, and the identification and evaluation of values through assessment elements, allowing for the exploration of the possibility of classification. It produces knowledge about heritage and consequent-

ly generates multiple data types: images, descriptions, comments, scholarly research, etc. (Cornu, 2014), as they come from experts in various fields of knowledge.

Therefore, access to different databases appears to be essential through the introduction of multiple IT devices. The shared tool (GERTRUDE), which allows for the collaborative establishment of a dematerialised inventory file system, represents a significant opportunity and convenience for heritage services in France. Thus, the inventory proposed for this study, as a result of the investigation, can contribute to the formulation of BIM or HBIM, which are models capable of incorporating information on a stratified medium, with visualisation, documentation, and management capabilities that provide a comprehensive view of the building to be catalogued (Agustín and Quintilla, 2019). Consequently, for the Algerian context, the collection of information from various organisations, national and international archives, and field surveys is currently underway. The authors are aware that there is a difference between heritage and legacy, the former being specific to civilisation in a well-defined context, the second being imported into another region according to certain conditions, but since the public authorities classify and designate remarkable buildings from the French period as classified heritage, we wanted to adhere to the same designation.

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