Jaap Bakema's Open Society in the Twenty-first Century
A Critical Appraisal of 't Hool, the Netherlands and Montbau, Spain

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Jaap Bakema's Open Society in the Twenty-first Century
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Abstract
The concept of the Open Society appeared in the CIAM discourse of the 1950s as an attempt to create condition in the city for society to prosper. These good intentions at the theoretical level did not always translate into success stories in practice, and some of the consequences of such a gap can be still felt today, amplified by multiple crises (social, economic, environmental, etc.). Often, the consequence is decay and demolition. The availability of vast knowledge and the emergence of different urban theories and tools since the 1950s allows for new possibilities to reinterpret the values underpinning the concept of the Open Society, and to bridge the gap between theory and practice. Our hypothesis is that an historically situated appraisal of the Open Society is necessary to bring it up to date and renew and enrich its legacy towards social, economic, and environmental resilience. Thus, we formulate the question: to what extent is the concept of the Open Society still relevant in contemporary urbanism? This study proposes a two-pronged investigation into the Open Society (both empirical and theoretical). It aims to investigate the discursive and projective validity of the concept as follows: First, critically review the theoretical concept and its implementation from the perspective of global and contemporary frameworks of discourse and policy. Second, empirically review two case studies ('t Hool, the Netherlands and Montbau, Spain) that illustrate the phenomena and patterns that have arisen in the friction between place, Open Society ideals, and resistance generated by users. This research uses a mixed-methods approach (i.e. quantitative and qualitative) and includes critical cartographies to critically and sensitively examine the two case studies and draw conclusions to highlight power relations and the existing materials available for building a more resilient future. In this way, we attempt to bridge the theory-practice gap by providing a methodology that provides a broad and deep understanding of the places, their histories, and their potentials and urgencies.

Keywords
Open Society, Jaap Bakema, architecture/urbanism, 't Hool (the Netherlands), Montbau (Spain).

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1.-INTRODUCTION

The Open Society concept entered Congrès internationaux d'architecture moderne (CIAM) discourse in the late 1950s as an attempt to create conditions for both city and society to prosper[1]. These good intentions did not always translate into success in practice, however, and some of their shortcomings can still be felt today, amplified by multiple crises (social, economic, environmental, etc.) which are leading to decay and demolition of architectural heritage from that time. Yet, the availability of knowledge and the emergence of different urban theories and tools since then have allowed new possibilities to reinterpret the values underpinning the Open Society and potentially bridge the gap between theory and practice.

Understanding the Open Society is necessary if we are to have a deeper understanding of the history of urban renovation. By updating its legacy and exploring both the transformation and stability of urban space we can encourage resilience, social, economic, and environmental. But first we need to understand inhabitants' needs, and their engagement with self-organising entities and different types of housing and public space, as well as the gradient that exists between public and private that is facilitated by the composition of spatial form.

Urban environments undergo continuous change. These include transformations of plans and objects, as well as changing identities for certain spaces (indeed, sometimes whole cities). Historic planning approaches have been side-lined in some of the debates around modernisation and renovation and this led us to our research question: to what extent is the Open Society still relevant in contemporary urban projects and discourse?

2.-METHODOLOGY

To answer this question, we propose a two-pronged investigation into the concept (first theoretical, then empirical) with the aim of researching the discursive and projective validity of the Open Society for the twenty-first century through our explorative and speculative investigations.

We begin by critically reviewing the concept of the Open Society and its implementation from the perspective of global and contemporary discourse and policy frameworks. We then empirically review two case studies: 't Hool in the Netherlands and Montbau in Spain, to see how they illustrate the phenomena and patterns that have arisen in the friction between place, Open Society's ideals, and the resistance generated by users.

This research uses a mixed-methods approach (both quantitative and qualitative) and critical cartographies to examine the case studies and highlight the power relations that obtain in each, as well as problems (which we identify as 'urgencies') and also to seek out the materials available for building a resilient future for these places (by identifying what we call 'potentials'). Both of these can be found in Figure 3. In this way, we attempt to bridge the theory-practice gap by providing a methodology that provides a broad and deep understanding of these places and their histories.

Our framework for assessing these case studies contrasts the concept of the Open Society with our own empirical examinations based on fieldwork. We also base our investigations on the 64 principles of the Open Society as published in *Wonen* magazine (1971), which was a speculation on Bakema's thinking, as published in Forum magazine between the years 1959 and 1967.

For analytical clarity, we cluster these principles into different topics (using those outlined by Team X in Forum), namely Identity, Association, Cluster, and Mobility. We then filter (and reduce) the number of principles by discarding those that no longer address the needs, demands, or desires of contemporary society (and also some that are overtly philosophical questions and hence difficult to spatialise). Once this first filter is complete, we then organise the topics under headings of History; Geography and Ecology; Socio-economics; Form, Scale (density), and Matter; and Technology and Networks (see Figure 2). We then relate these to a series of critical cartographies that allow us to depict the current urgencies and potentials within the two sites. We then relate these to today's global and local urban discourses and policies and to some site-specific behaviours.

We utilise this new formulation of the 64 principles as an assessment framework for conceptual and empirical revisions, as well as to allow them act as a method of monitoring and evaluating proposed designs and processes. The assessment framework is intended to be holistic, meaning that different topics of interest, and different perspectives, will enable a more multidisciplinary attitude when approaching these complex urban matters.

In order to be able to make judgements as to whether these selected case studies have been successful or not, we go back to the original 64 principles of the Open Society to assess their spatial and performative qualities. We score the results as Successful, Neutral, or Unsuccessful. Successful shows a high degree of architectonic quality and well-executed spatial solutions; Neutral could be seen as an initial shortfall that was overcome by later improvements that achieved good spatial qualities and performance (but where there is also still some room for improvement); Unsuccessful is where a project failed to achieve spatial qualities or performance in relation to the principles.

We selected two case studies: 't Hool in Eindhoven, the Netherlands designed by Van den Broek and Bakema and Montbau in Barcelona, Spain designed by LIGS (López-Íñigo, Giráldez, Subías). The two places were selected for specific reasons: they are roughly the same size (30 ha); both are located in western Europe; both were built between the 1950s and 1970s; there is the involvement of diverse actors, with a willingness to experiment and innovate to achieve high-quality urban space. Note, that while there was a certain degree of knowledge transfer between 't Hool and Montbau, there was no conscious application of the Open Society as a concept in the latter, rather a replication of spatial arrangements that make their landing indirectly. This connection and knowledge transfer was established during LIGS's trips to the Interbau in 1957 (international exhibition in Berlin)[2] and in trips to other northern European countries to study and import the 'Sidelung' model to Barcelona[3]. The Spanish architects got inspired by Bakema's proposals and other studies carried out within the Dutch groups of the CIAM, which they applied in Montbau and later projects.

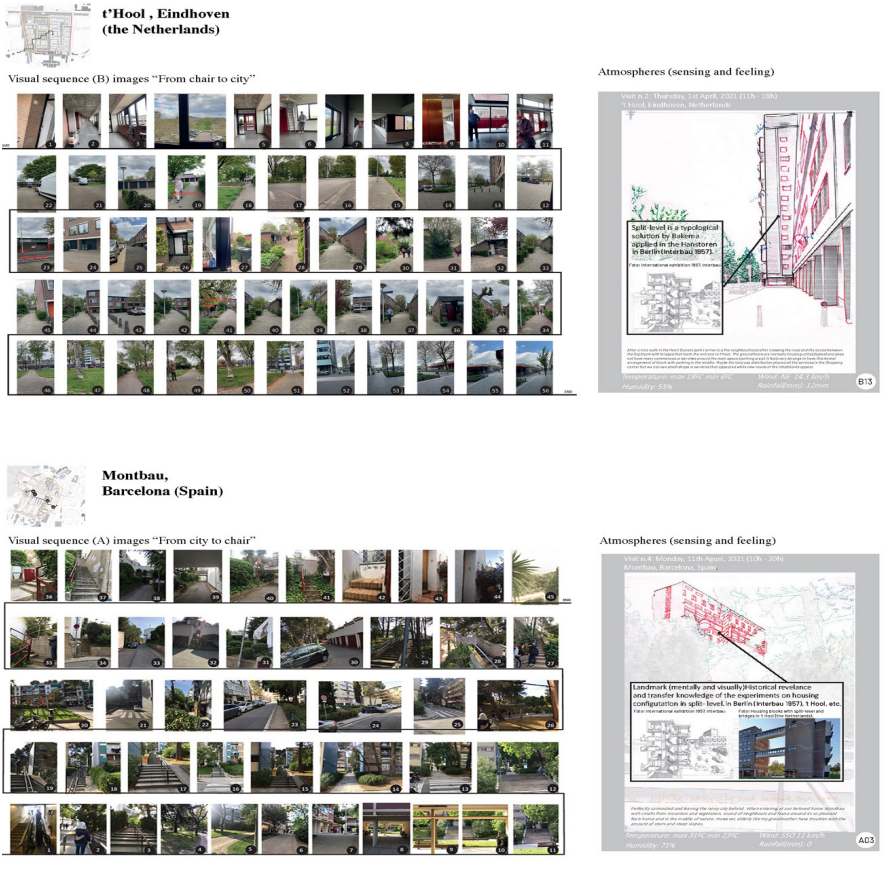


Fig. 1. Visual sequences 'from the chair to the city' in Montbau and *vice versa* in 't Hool: pictures, atmospheres (source: authors' photos from site visit; images from communities' official digital platforms and archives).

Assessment is intended to be holistic, i.e. based on topics of interest. We depict those topics in our critical cartographies. This is a practical method that seeks to address the complexity of the urban environment (and its 'wicked' problems) through a medium that enables us to reflect on the case studies using a variety of mixed methods (both qualitative and quantitative). To illustrate the different sites' power relations, and to visualise our conclusions (along with their urgencies and potentials), we use a combination of visual sequences (experiences of the sites) and data (from digital tools) to create the critical cartographies and elucidate the spatial properties of the sites (see Figures 1 and 3).

Empirical revisions of the Open Society concept, and its 64 principles, are achieved by contrasting empirical results with the principles within these critical cartographies. This method also illustrates our field work via a series of visual sequences, known as 'from the chair to the city' and *vice versa* (see Figure 1). These sequences depict the legibility of the spaces in the case

studies and also the interrelationships generated by objects and subjects. They also highlight points of what we call 'atmospheric intensity'. This provides material for studying the phenomena and patterns that have arisen in the friction between places and the imposed ideals or power structures generated by users' reaction to them (e.g. acceptance, denial, resistance, etc.), which leads us to identify the urgencies and potentials. But first, we begin with a critical survey of some literature relating to the concept of the Open Society.

3.- THE OPEN SOCIETY

The term Open Society was first coined by the Henri Bergson in 1932 using the analogy of a closed (static) mind versus an open (dynamic) one[4]. He saw this society as one where trust and transparency were guaranteed by government. This was then developed by Karl Popper who saw an historic continuum from the organic city (tribal or closed) to the Open Society (critical of traditions) leading to an abstract or depersonalised society[5]. The concept first made its appearance in the discourses of architecture and urban design when Jaap Bakema introduced it at the CIAM Otterlo meeting in 1959. Then, in 1971, a list of 64 principles for the Open Society was published in *Wonen* as a response to the needs of mass housing as highlighted by the Smithsons and Team X in *Forum*[6]. Our conceptual revision of this concept, and its principle, begins with an examination of the Smithson's Open Society's relationship with urban planning, and to the changing paradigms and frameworks in twenty-first-century society.

When this concept was first presented at Otterlo, the Team X movement was already highly critical of High Modernism and its tropes and had begun their own discussion about how the city should be designed, using fresh perspectives. Publications throughout the 1960s, such as Jane Jacobs' *The Death and Life of the Great American Cities*[7] and Christopher Alexander's *The City Is Not a Tree*[8], further informed these perspectives and contributed to this move away from High Modernism. (This was also reflected in the later Critical Regionalism, in the 1980s, although discussion of this movement falls outside the scope of this paper.) Team X's move away from High Modernism was facilitated by the delineation of the Open Society's 64 principles (which incorporated things like Jane Jacobs' bottom-up approach, or the reusing of existing structures, etc.). In attempting to understand the complexity of the urban environment we can now see the importance of cognition and behaviour (things that were largely ignored in the 1950s). Christopher Alexander's work is also of particular use in this regard, notably his pattern language and the timeless way of building.

We see the 64 principles as leading to a more holistic approach for designing the urban environment. An approach which can enable us create a place that is, quite literally, more 'open' (in the sense of inclusive or diverse). James C. Scott helps us to understand the anthropological context of these principles, and the values they carry, by pointing to state-led schemes in the Modernist-era that were imposed on people as governments attempted to render societies 'legible' (through standardisation, or the measurement of populations through apparatuses like the census)[9]. Modernism's flaw, according to Scott, was thinking that society could be designed and operated via scientific laws. The Modern movement invariably ignored subaltern

perspectives, or indeed anything to do with the everyday life and needs of ordinary citizens (apart from providing mass housing in idealised, almost diagrammatic blocks). As a result, the residents of mass-housing projects found themselves expected to live up to architects' and planners' ideals. The perceived failure of High Modernism's housing projects (notably the Pruitt-Igoe complex in St. Louis, Missouri) is considered foundational for the subsequent Postmodern movement.

The paradigms and frameworks of our society have changed considerably since the mid-twentieth century. And we will show, through our examining of 't Hool and Montbau, using the lens of the Open Society' and its 64 principles, that it is possible to identify these changes, as well as compare their different articulations across these two sites. This invariably led us to a discarding of some of the principles and the reformulation of others in order to better address today's challenges, couched as they are in newer paradigms (one of which is the notable (and visible) increase of technology in the urban environment, with things like cables, sensors, security cameras, etc.).

Overall, our two case studies will show that the Open Society has performed quite well, in an holistic and interrelational manner. Some of the principles were actually visionary: topics like ecology, communication technologies, and sociology, but they did not necessarily land well in 't Hool or Montbau because when they were built there was less concern for ecological matters. Technology has also changed rapidly since then, reorganising our lives in ways unthinkable a few decades ago.

One important thing to note is that the political situation in each of these places was not sufficiently open to allow for experimentation at the time they were built. As a result, we see a distinct lack of multifunctional spaces, or even well-designed solutions, for everyday life (this new concern for everyday life was another valuable strand in later Postmodern thinking).

By carefully observing the Open Society and its 64 principles, we get a clearer picture of the 'prototypical modern citizen' of western Europe in the 1950-1970s, characterised by dreams of car ownership (i.e. freedom) and the ability to buy consumer products. We also see the strong social character of the period following World War II, when social infrastructure within urban development was important. We also see a generous number of programmes relating to social services, and a willingness to provide better-built environments for everyone. We can, thus, introduce the concept of 'liveability', even though there is a distinct difference between the Modern Man of the Modernist era and modern (gender-neutral) 'citizens' of today; people who are much more likely to be involved in local urban affairs.

Please note that there is a degree of difficulty in measuring these principles because there is no indicator nor objective target or assessment tool. We use the concept as a theoretical framework and as a sort of toolbox (or repertoire of principles/solutions). We do this to try and reconstruct the Open Society today, while trying to keep in accordance with Bakema's original vision. However, only just over 50 percent of the principles are still valid (as we show in Table 1). This means that not only it is worthwhile to consider the Open Society and its principles as a way of articulating urgencies and potentials in the built environment, but by so doing we can improve that figure.

4. CRITICAL CARTOGRAPHIES: HISTORY

This section focusses specifically on the History cartography in order to highlight the similarities and differences between 't Hool and Montbau (see Figure 2 and Table 1). This method can also be used to interrogate other cartography topics (History, Geography-Ecology, Socio-economics, Form-Scale-Matter and Technology-Mobility). 'T Hool in Eindhoven and Montbau in Barcelona were developed in 1956 and 1968 respectively, but in quite different political contexts (liberal democracy in the former, a dictatorship in the latter). However, both share the same framework, and both have an historical value to each of their cities as good examples of the Modern movement's attempts to promote innovative urban models and improve liveability for citizens as well as promote the Open Society.

Our evaluation has taken careful consideration of the two case studies, placing particular emphasis on the beginnings of the projects, but also on their evolution down to the present day. In our analysis of these urban development processes, we have noticed a desire to improve liveability, even if the approaches are somewhat different in the two cases. Both include users at some point in their development processes.

We have prepared an overview of each site. This is intended to be a guiding document that addresses, first of all, the urgencies we detected (see Figure 3). These are organised by topic and classified into three main categories: social, economic, and environmental. These urgencies also point to potentials, i.e. problems that need to be addressed when considering new solutions. Figure 3 gives a visualisation of these case studies' urgencies and potentials and thus provides some useful knowledge to inform future design decisions.

Similarities	Differences
Both were motivated by a shortage of housing (due to emigration, industrialisation, and modernisation).	The proposal processes were different: Montbau was top-down; 't Hool bottom-up.
Both increased the number of homes: in Montbau this was achieved by increasing density; in 't Hool, the number of homes was doubled by an extension which maintained similar density levels.	'T Hool began as a private initiative linked to desires and needs of certain individuals; Montbau was promoted by a public entity (Patronat d'Habitatge) within a framework of private incentives.
Both were carefully sited, with links to existing axes from new ones.	Montbau site was selected from the beginning; 't Hool it was initially designed without a context and the site only found later on – it was a symbol of experimentation in the centre of the new Woensel District.
Professionals were involved (Bakema in 't Hool and LIGS in Montbau), both showed critical thinking and a willingness to propose improvements.	In 't Hool, Bakema dealt directly with user-clients and adapted the scheme to their needs; in Montbau the Public Administration was the client and the LIGS architecture team relied on studies (interviews, etc.) to determine the type of user to whom the action is directed.
Users were part of the process: in 't Hool, participating during the entire decision-making process; in Montbau, during the construction phase.	'T Hool is in Eindhoven, which was damaged during World War II; Montbau was not similarly damaged.
There was enthusiasm and a desire for experimentation and innovation, with a commitment from professionals to society and in promoting liveability.	

Table 1. History cartography: 't Hool and Montbau (similarities and differences).

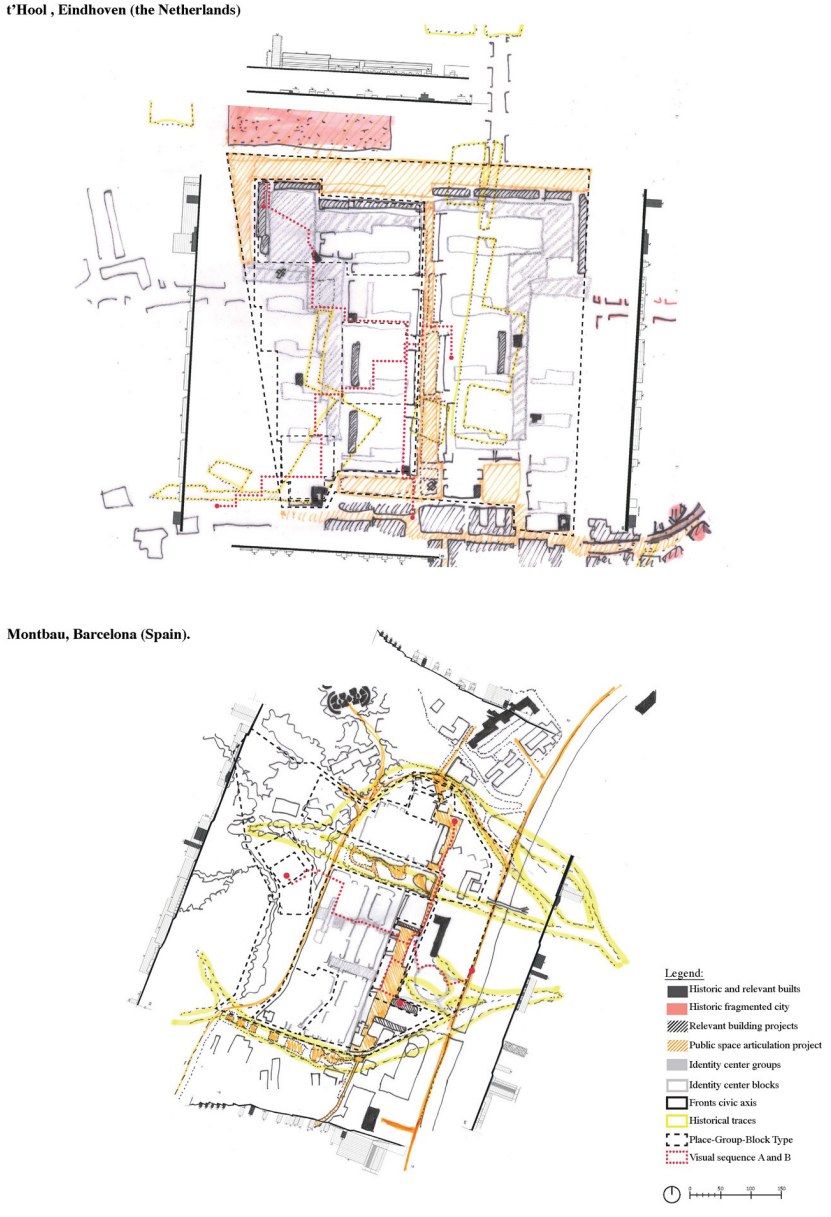


Fig. 2. Historical cartographies of Montbau and 't Hool: evaluation of the 64 principles outlined according to our framework criteria (source: authors' drawing based on Pdok and ICGC dataset (2021) and historical archived maps (COAC digital platform archive and Visie Erfgoed en Ruimte (2011) Rijksdienst voor het Cultureel Erfgoed)).

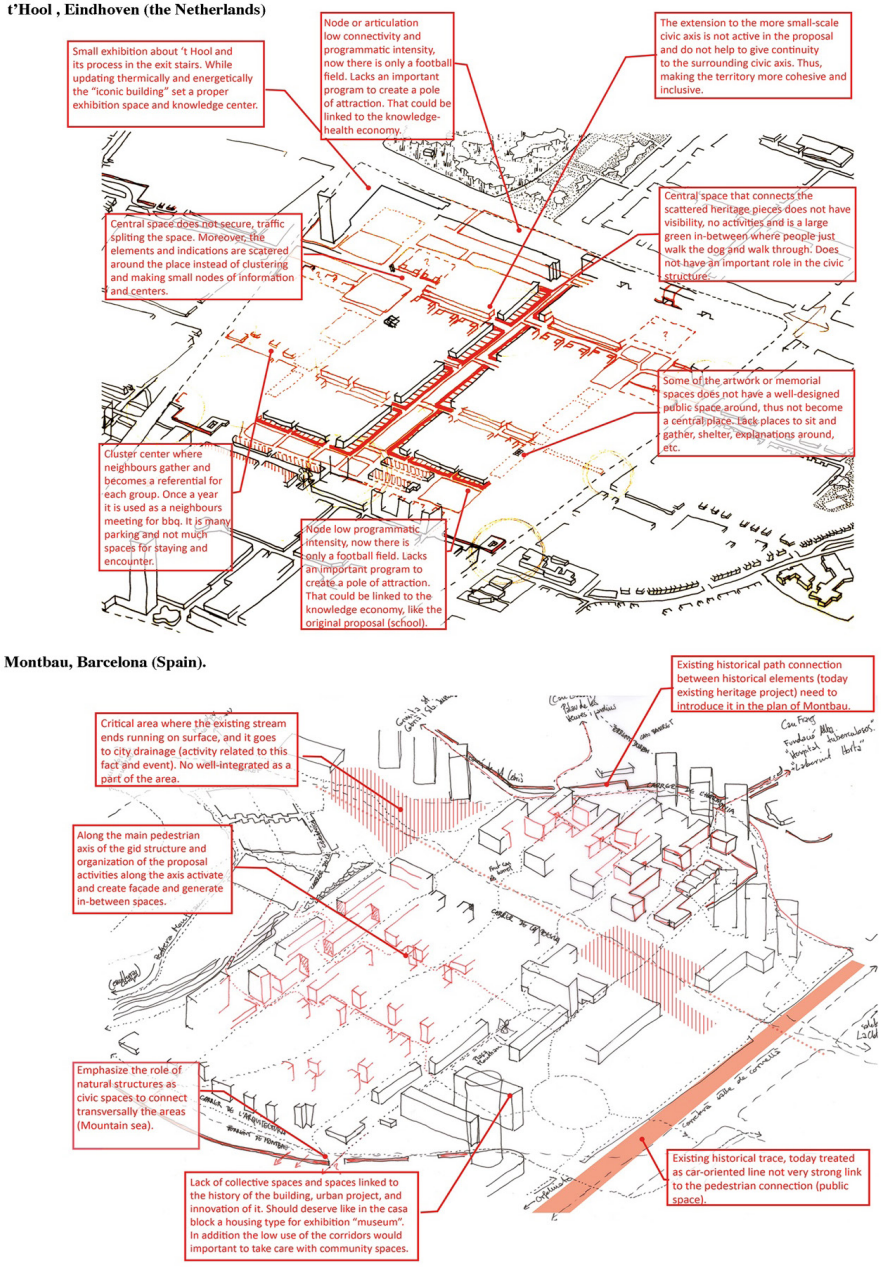


Fig. 3. Urgencies detected in the historical cartographies of Montbau and 't Hool: issues outlined in red and described in text boxes (axonometric and pedestrian view) (source: authors' drawings based on site visits, Pdok and ICGC datasets (2021), and OpenStreetMap adjusted 3d model).

5. DISCUSSION

The Open Society's 64 principles were specifically meant for Western society in the 1950s to the 1970s and reflect the way of life and values of this 'modern' era (more specifically, post-war Europe). However, as we today encounter the effects of globalisation (e.g. many different cultures living together in these areas), the needs of society for the twenty-first century are somewhat different. It seems that the majority of the 64 principles are still well aligned to today's discourses and critiques, so it would be worthwhile to revisit them, and perhaps with a more subaltern perspective this time.

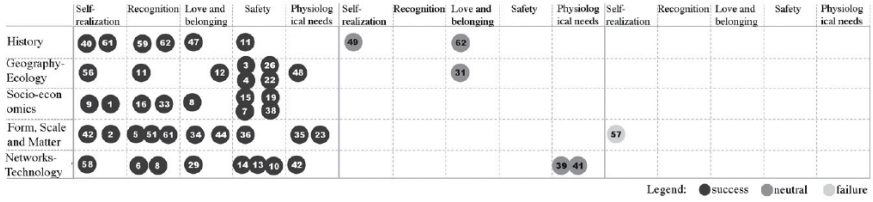
One other interesting point to note is the fact that while ecological concerns were not the emphasis of these principles, they seem to have been implicit from the very beginning and have allowed for the potential adaptation of urban life to the sustainability concerns of today, particularly in the field of climate preparedness and environmental resilience.

As has already been noted, it can be quite difficult to measure the validity of the principles as there is no assessment framework, neither is there a description or indeed any sort of instructions on how to measure them. Our evaluations have taken into account how these case studies, and the people who live in them, have addressed the urgencies we have identified. There have been some successes, which are the result of good decisions at the beginning of the projects. Yet, these successes account for only a little over 50 percent of the principles. Where they do occur, however, we can attribute them to a good match between users, professionals, and institutions.

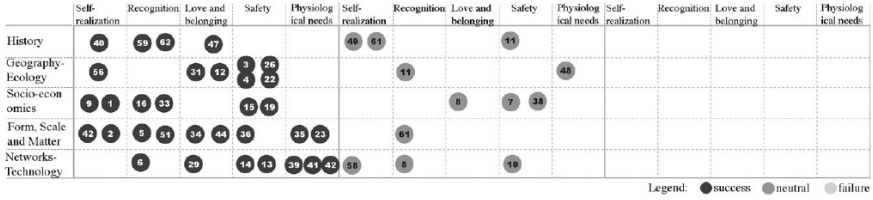
There now follows a summary of the results relating to the different categories:

1. Ecology (numbers 11, 45, and 49): in this group we can see the different sensitivity (caring) of the professionals towards history, the social concern for liveability was more important than ecological concern and we can see this reflected in the politics of the time. Now, we have more awareness, new methods, new approaches and technologies that can help address this better.
2. Civic culture (numbers 7 and 38): cultural tradition linked to many values: social, climatic, economic, have impacted the models where we can see two different ways of treating this function.
3. Cognition of the built environment (numbers 5 and 61): insufficient knowledge on behaviour and the environment means there was not enough data to address these principles here.
4. Accessibility and ownership (numbers 2 and 29): accessibility problems for certain spaces were dealt with simply through policies. Now that we have more technology and more comprehensive frameworks and regulations, we can rethink these spaces in terms of access and ownership.
5. Technology (number 58): the technology of the time was not that developed and some was not economically feasible. Nowadays, we have access to a lot of data and technologies to tackle social, environmental, and economic issues and create healthy approaches.

Conceptual revision results:



Empirical revision results (t'Hool, Eindhoven):



Empirical revision results (Montbau, Barcelona):

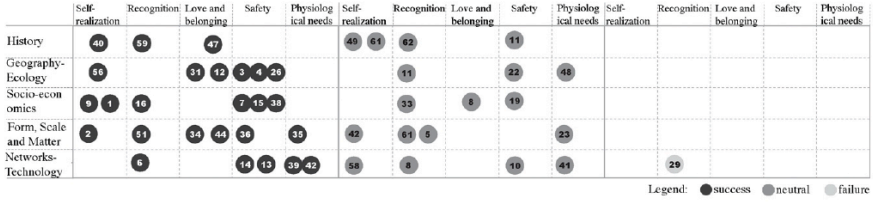


Table 2. Conceptual and empirical results according to authors' evaluation criteria.

6. CONCLUSION

Some of the key findings in these two case studies are the fact that there is a strong sense of community and ownership. This is the result of the possibility of appropriating and changing use of space over time, something that is very important for the maintenance of these spaces and for the care of the community more generally. There are also strong alliances and partnerships in both places, and a promotion of good quality space and the best practices for maintaining it. The spaces and layouts are modular and non-programmed and there is also a willingness to experiment and improve them. Finally, there is context sensitivity (i.e. these were not tabula rasa approaches). There was the understanding that these places were built somewhere specific (even if 't Hool began as an abstract exercise, it addressed local needs as soon as the site was chosen). Good design never occurs in a vacuum. The public spaces in these two case studies show clearly how good quality design is related to the intensity and use of space. If this were to be aligned with climate conditions and local culture today, then we would be able to identify the DNA of the place.

One final reflection on resilience: we can see in both projects a strong sense of community

(both diverse and inclusive) and an engagement with public institutions, as well as socially oriented projects, and environmental awareness. Yet, economic resilience is not something that can be achieved by inertia, it must be driven from the top, from institutions, from changing land uses and regulations, developments and incentives. Moreover, the emergence of more sustainable and ecological projects in recent years, and the awareness of their importance to the planet, has allowed for experimentation. These two places are socially and environmentally orientated as they engage with projects for updating their urban environments while also contributing to the common good.

Our analysis uncovered certain patterns that can be used to address spatial urgencies by seeing the potential for solutions, some of which will be more closely related to regulatory frameworks (land use, building regulations, etc.) and others that can be improved during the processes of urban renewal.

It is important to consider that users must be involved in decision-making processes and in the processes of construction in order to allow their eventual appropriation of these places (not simply from an anthropological view but also from a political one). This enables the residents to exercise their right to use the city, and to transform it through their actions. In other words, this allows them exercise their 'right to the city'[10].

This study shows the continuing importance of the Open Society, and its principles, for helping to create social, economic, and environmental resilience. These ideas also help us make the transition to new socio-technological and ecological paradigms. By providing room for diversity and self-realisation in the urban environment we will be able to allow human life to flourish, which is after all one of the most important ideas behind the concept of the Open Society.

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DISCLOSURE STATEMENT

No potential conflict of interest was reported by the authors.

NOTES ON CONTRIBUTOR(S)

Juan Sanz Oliver is an independent scholar. He holds an Architecture Degree from Universitat Internacional de Catalunya in Barcelona and a Master's Degree in Urbanism (EMU post-masters) from TU Delft. During his professional career in practice in Europe and Africa he has researched diverse urban topics between the scales of urban design and architecture. His academic and professional work has been recognised in the Graduate Awards of the Bienal Española de Arquitectura y Urbanismo BEAU XI and with Second Prize at the EUROPAN 12 international competition.

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