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# Design Through Play: The *Archispiel* Experience

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## **Abstract:**

This paper focuses on the implications and potentialities of playful practices and game formats as innovative teaching methods in architecture, urban planning and, more generally, design. It provides a very brief account of serious games pioneers and the current state of the art of what the authors call 'design through play'. It then presents one game-based format, *Archispiel*, designed by the authors in 2015, along with a case study of its use in a classroom context, *Magaluf Reset*. The exercise, drawing on traditional war games and diplomacy games designed from the 1950s onwards, combines strategic negotiation with the use of chance to produce unexpected effects. Consequently, rather than solutions answering to a predefined brief, the results are quite literally the outcome of an exploratory and open-ended design logic. The experience shows how design through play offers a rich array of explorative possibilities not afforded by conventional design practices.

**Keywords:** urban design, active methodologies, experimental pedagogy, game-based formats, design through play.

## Design through play

Far from being a mere amusement, play is construed as a necessary condition for the generation of culture and a crucial process in human cognitive development. Many authors have recently written along the same lines, definitively disconnecting play and games from their traditional association with frivolous and inconsequential activity.<sup>1</sup> The relationship between design and play is a very fertile one. We propose the term ‘design through play’ to refer to the operative integration of playful practices and design. Indeed, playful practices and game formats facilitate novel design practices and formats that are especially relevant in contemporary debates framed by the over-arching question of the crisis of authorship in the design disciplines.

Traditional authorship in design is rooted in a humanistic ideal, and it implies an autarkic subject able to single-handedly tackle a multiplicity of inputs and address them through the proposal of a synthetic solution. Design, according to this authorship paradigm, implies solving problems in the most adequate way possible.<sup>2</sup> Currently, there is a fundamental mistrust of design as a ‘solution provider’, often due to the methodologically simplistic and ethically dubious implications of the designer-as-creator role, exemplified by the apparently different—though closely related—figures of the lofty ivory tower artist and the top-down technical apparatchick. In the face of these new times, design authorship is being reinvented. Coupling efficacy with criticality, design is not only posited as a solution provider but also as a problematizing practice, actively contributing to posing questions that help address relevant societal, technical and cultural issues. One of the most relevant avenues in exploring novel design authorships involves using play and game-based formats.

While debates on design authorship also have ramifications for the professional and research spheres, this paper focuses on the implications and potentialities of playful practices and game formats as innovative teaching methods in architecture, urban planning and, more generally, design. The project presented here, *Archispiel*, focuses on new approaches to urban design with the explicit aim of expanding the current methods and techniques, which are still fundamentally cemented in an updated version of Athens Charter functionalism.

Traditionally, urban planning enforces master-plans that work in a top-down logic. Design is implemented as a finalistic solution that goes through phases in order to be completed. We claim that cities are complex entities and they should be designed as such. We need to understand time as an active design element related to changing spatial frameworks, human experiences and more-than-human ecologies—and not simply as a linear managerial scheduling roster. And we need to embrace chance.

Although there are many initiatives currently exploring the intersection between games and design, the origin of so-called ‘serious games’ goes back to the beginning of the 19th century. What follows is a very brief account of serious games pioneers and the current state of the art of what we term ‘design through play’.

*Kriegsspiel*, invented in 1812 by Georg Leopold von Reisswitz and perfected in 1824 by his son

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<sup>1</sup> The work of Johan Huizinga, Jean Piaget, Roger Caillois and Lev Vygotsky, to mention just a few of the most relevant authors, has clearly argued the importance of play and games. See, respectively, Huizinga, 1949; Piaget, 1962; Caillois, 2001 and Vygotsky, 2016. Also, a popular version of an engaged understanding of play is the work of Ian Bogost, see Bogost, 2016.

<sup>2</sup> Although this is a very complex debate, suffice it to say here that recent societal challenges (e.g., complexity), technological developments (e.g., digitalization) and cultural shifts (e.g., collaboration) have pushed traditional authorship in design out of the center stage. See Allen 2000: 41; Elvira 2005; Ortega 2017: 47; and Paez 2019: 312.

Georg Heinrich Rudolf Johann von Reisswitz, was a board game developed by the Prussian army to teach battlefield tactics to officers (Reisswitz, 1824). Its success was formidable, to the point that after the Prussian victory in the Franco-Prussian War of 1870-71, various forms of the wargame were adopted by the world's leading nations.<sup>3</sup> This was probably the first time a game-format was used to inform decision-making and the first modern 'serious game'—i.e., a game designed for a primary purpose other than pure entertainment.

The concept of serious games, coined in 1970 by Clark Abt,<sup>4</sup> has since expanded drastically thanks to digitalization.<sup>5</sup> Although originally intended for military purposes, one of the many fields of application of contemporary serious games is design. Currently, there is an explosion of design through play initiatives, especially in teaching and research environments, and, to a lesser extent, in professional practice. That being said, today's rich landscape is due to a few pioneers who blazed the trail of using playful practices and game formats to prompt design. They include, for example, Buckminster Fuller (*The World Game*, 1961), Cedric Price (*Fun Palace*, 1961; *Generator*, 1976) and Manuel de Solà-Morales (*La ciudad y los juegos*, 1970).<sup>6</sup> Based on these and other pioneers, and on the radical practices of 1960s-70s art/architecture/activism,<sup>7</sup> a few prominent architects from the 1980s-90s continued to explore design through play: Rem Koolhaas (*Exposition Universelle 1989*, 1983), Bernard Tschumi (*Chartres Business Park*, 1991) and Chora-Raoul Bunschoten (*Urban Gallery*, 1995), among others.<sup>8</sup> All these precedents are relevant to our take on design through play, as they all stressed radical invention, a high-risk exploratory approach and a bold critical stance—which we find lacking in some, if not most, current efforts.

Today, the panorama is dominated by university-based research groups with a clear social agenda and a certain activist attitude. Some of the more relevant projects are the following: *Urban Game: Action! On the Real City*,<sup>9</sup> *Bay Area Now*,<sup>10</sup> *Playing with Urban Complexity*,<sup>11</sup> *Play the City: serious gaming for smart and social cities*,<sup>12</sup> *Conscious City Lab*,<sup>13</sup> *Kermes Urbana: Create Your Own City*.<sup>14 15</sup>

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<sup>3</sup> For an overview of the origins of wargames and role-playing games see Peterson, 2012.

<sup>4</sup> Abt, 1970.

<sup>5</sup> See Djaouti et al., 2011 for an attempt to account for and classify contemporary serious games.

<sup>6</sup> See, respectively: Krause and Lichtenstein, 1999: 464-497; Price, 2003: 56-61, 92-97; and Solà-Morales, 1970. See also the o.s. Earth updated version of Fuller's *The World Game*, <http://www.osearth.com/>

<sup>7</sup> E.g., Ant Farm, Archigram, Archizoom, Yona Friedman, Haus-Rucker, Constant Nieuwenhuys, Superstudio, among many others.

<sup>8</sup> See, respectively: Lucan, 1991: 96-105; Migayrou, 2014: 132-133, 229; and Chora and Raoul Bunschoten, 2001.

<sup>9</sup> Alfredo Brillembourg and Hubert Klumpner; Urban-Think Tank, ETH Zürich; <https://u-tt.arch.ethz.ch/project/action-on-the-real-city-5/>

<sup>10</sup> Janette Kim, Neeraj Bhatia, Antje Steinmuller and Christopher A. Roach; Urban Works Agency, California College of the Arts; <https://www.urbanworks.cca.edu/bay-area-now>

<sup>11</sup> Cristina Ampatzidou et al.; University of Groningen; <http://play-uc.net/>

<sup>12</sup> Ekim Tan; Delft University of Technology; <https://www.playthecity.nl/>

<sup>13</sup> Chora – Raoul Bunschoten; TU Berlin; <http://chora.org/?portfolio=conscious-city-lab>; <https://vimeo.com/95349046>

<sup>14</sup> Raumlabor; <https://raumlabor.net/kermes-urbana-create-our-own-city/>

For all the relevance of the coupling between design and play, and the rich (if somewhat obscure) history they share, their operative potentialities are still surprisingly underexplored, particularly in teaching environments. This paper offers a contribution to a richer understanding of design through play, specifically focusing on experimental pedagogical practices. Both authors have a sustained interest in exploring design through play, as proven by a number of academic and research experiences they have led.<sup>16</sup> In order to delve more deeply into the methodological aspects of design through play, we propose a single project, *Archispiel*, and a single case study, *Magaluf Reset*, in order to offer a thorough description and evaluate its impact.



*Fig. 1 First game of Archispiel. Source: Elvira, J. and Paez, R.*

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<sup>15</sup> This list is in no way comprehensive and is intended simply as a token of the vitality of design through play initiatives. For a rather extensive repository of game-based urban design, see <http://gamesforcities.com/database/>

<sup>16</sup> Some of the more relevant being “BOP” (Azulay and Paez, 1999), “Calverton Racetrack” (Murado and Elvira, 2000), “Tactical Spaces” (Elvira, 2002), “Espacio Activado” (Elvira, Krahe and Murado, 2003), “Derivas urbanas: la ciudad extrañada” (Paez, 2013), *Juegos de Equilibrio* (Elvira, 2013), “Medium and Plasticity” (Elvira, 2014) “Projective Memory: Re-imagining Beirut’s Martyr’s Square” (Paez and Fuster, 2018), “El Núvol” (Paez and Mansilla, 2018), “New Habitats: Re-Thinking Zona Franca” (Paez, 2019), “Game-based Design Formats: Urban Design Through Play” (Paez and Valtchanova, 2019). For more information please contact the authors.

## Archispiel

*Archispiel* was designed by Juan Elvira and Roger Paez in 2015 in order to approach diverse complex urban situations through an exercise in collective speculation. It is based on traditional war games and diplomacy games designed from the 1950s onwards,<sup>17</sup> combining strategic negotiation with the use of chance to produce unexpected effects over the course of the exercise.

The basic aim of *Archispiel* is to open up possibilities and imagine multiple futures for a specific site. By setting up a game board and defining the players, we are able to construct a complex model, which lets us speculate about the given milieu. We can intervene in a given urban situation by recreating it in our laboratory. We manipulate it—respecting its own set of rules—and then plug our vision back into the territory. In this way, reality can become the object of conjecture and speculation. The goal of this tool of civil poliorcetics is the exploration of unprecedented scenarios and the proposal of actions in the territory which, far from seeming imposed, blend into its underlying ecology.

*Archispiel* is intended as a mechanism for imagining futures—a device for broadening the scope of the real.

## Game Mechanics

The game is structured in the following four stages.

### 1. Set-up

#### 1.1. Game board and agents

*Archispiel's* design allows for it to be played on any kind of urban site, although its full methodological and prospective potential are reached with complex urban conflicts.

The prerequisite to start the game is the analysis of the urban enclave. The overlapping of the different analyzed strata results in a composite model of the site. The ecosystem should be simple enough to encompass a reasonable number of players and complex enough to serve as a useful tool for negotiation. Every player will engage in a critical analysis, following a twofold approach:

*Geographic traits.* A minimum of morphological and infrastructural characteristics will be needed to portray the physical reality of the place—not only the local enclave, but also the delocalized places essential to understanding the site's dynamics.<sup>18</sup> The game board is thus understood as a geopolitical atoll: a set of places that, no matter how disparate, are intimately linked.

*Agencies.* All the interest groups, lobbies or social entities (whether cultural, political or financial) necessary to properly understand the social dynamics will be selected within the site's complex human milieu. The spatial-legal structure of the terrain (the 'where') will inform the construction of the game board, while the socio-political agents (the 'who') will define the game pieces. Over a geometric pattern representing the site (an orthogonal grid), game masters and players will set up the game board according to the selected fragments of territory. The game board is

<sup>17</sup> E.g., *Diplomacy* was designed by Allan B. Calhamer in 1954.

<sup>18</sup> In the case of *Magaluf Reset*, Mallorca airport, London city, Golf club Ponent, Sa Porrassa and Ciutat de Mallorca.



composed of 15x15 cm and 1.5 cm thick slates, in different colors, representing different kinds of territory, with a 0.5 cm diameter perforation grid of 3x3 cm. To delineate areas of influence or other kinds of spatial, perceptual or legal limits, a series of pegs fitted into the grid of holes can support colored elastic bands. These limits can be modified as needed during the game. Each agent has a proportional number of pieces: a series of cylinders (5 cm high and 2 cm in diameter) identified with unique graphic symbols, to be deployed across the game board. Before the game starts, a preliminary session is dedicated to an explanation of game's overall framework.

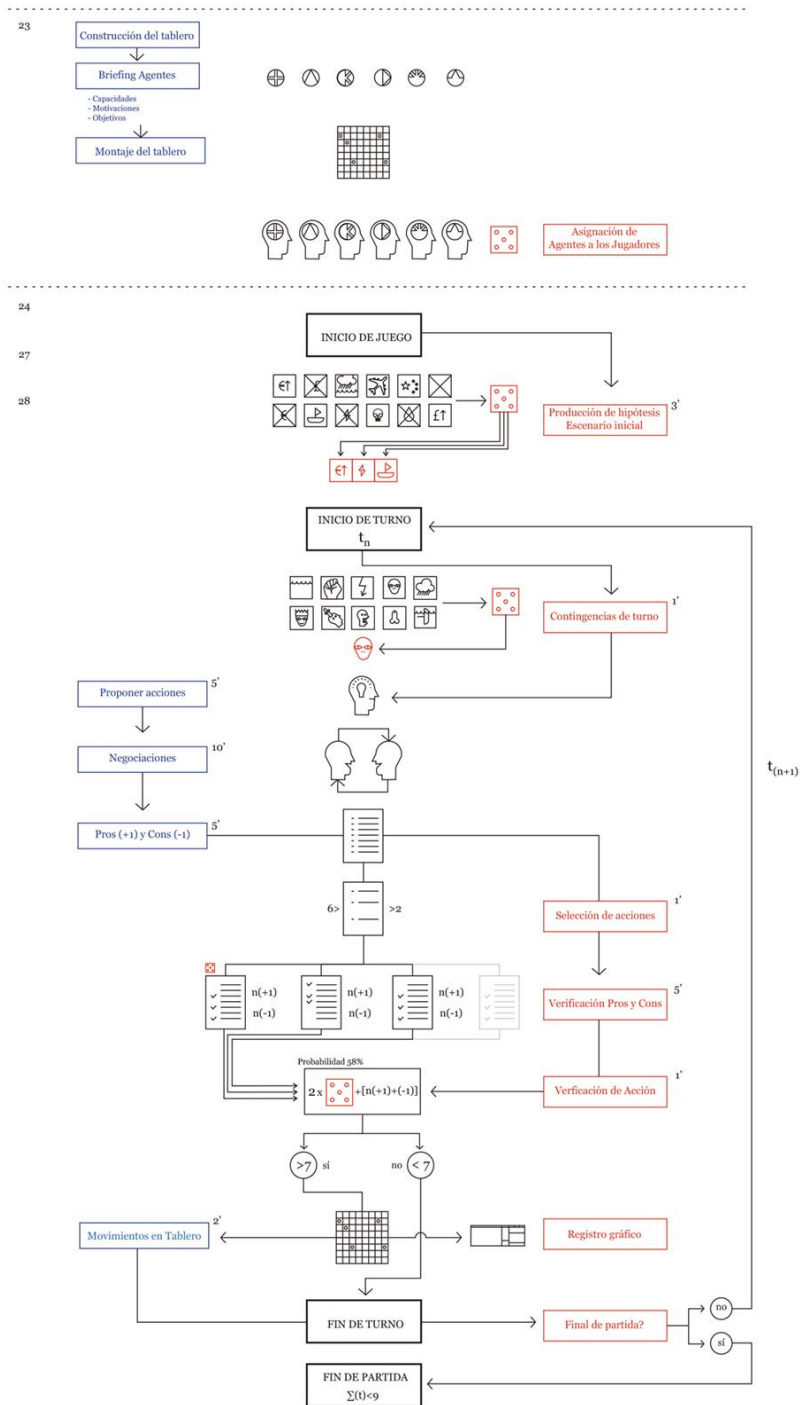


Fig. 2 Diagram of game mechanics. Source: Elvira, J. and Paez, R.

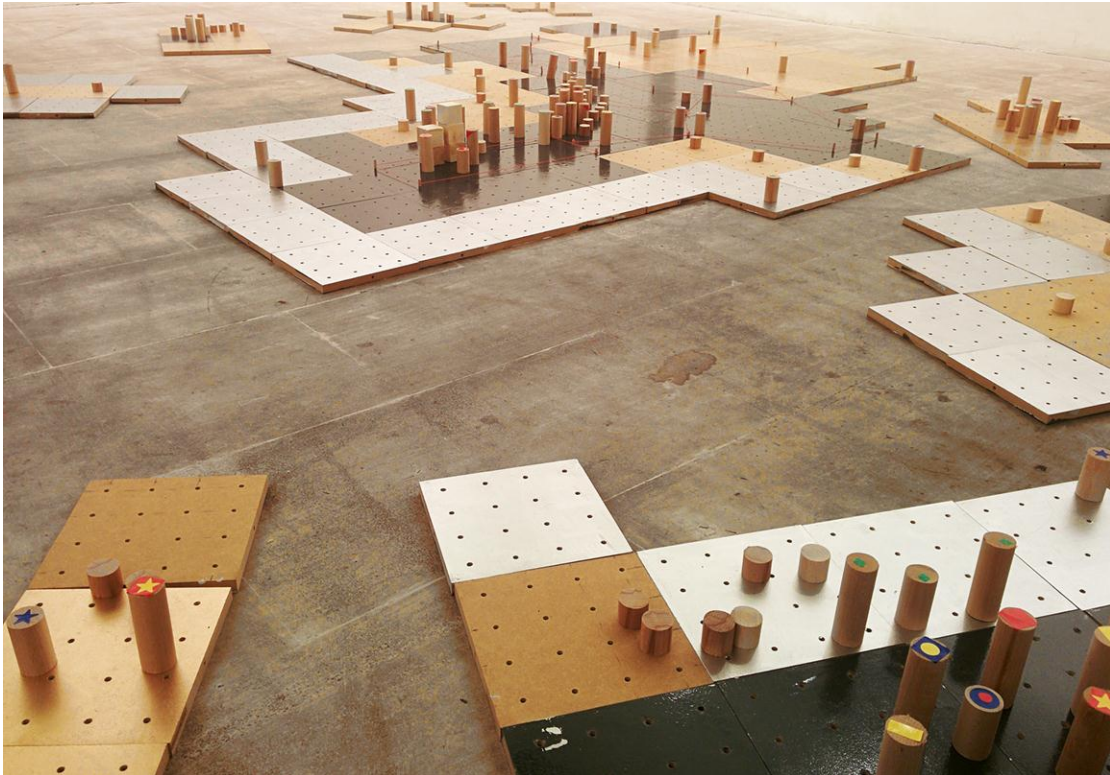


Fig. 3 Detail of game components. Source: Elvira, J. and Paez, R.

### 1.2. Initial hypothesis and scenario definition

The game mechanics are designed to transform the game board into a situation room—a space where a community of experts gather to discuss and make decisions freely, no matter how subversive or irrational they might seem.

To explore the game's limits, a set of new contingencies will be randomly picked from a game database. These constraints may be perfectly reasonable or outrageous, consistent with the urban site or simply absurd. Two kinds of contingencies are introduced in different moments of the game. First, before the game starts, three items are chosen (3D5) that will inform the initial scenario.<sup>19</sup> Second, at the beginning of each turn, an additional constraint is introduced (3D5).<sup>20</sup>

## 2. Game Development. Negotiation and Action.

*Archispiel* is centered on negotiation among the players, each representing an agent within the general scenario.

During the initial period of time, players may propose actions freely, according to their specific interests. Among all the actions proposed, the game masters will select a maximum of seven per turn.

<sup>19</sup> General game contingencies were: currency exchange (GBP-EUR), petrol crisis, epidemics, drought, cold front, air traffic controller strike, new hegemonic agent, ban on something to be chosen by the game masters, etc.

<sup>20</sup> Particular turn contingencies were: flood, agent demonstration, generalized blackout, invasion, storm, royal family visit, crime, cannibal drug, a wave of sexual promiscuity, shipwreck, merchant strike, a wild card to be decided by the game masters.

Once this series of actions has been approved, the negotiation period begins. Players may pact with others, either publicly or privately, with total freedom. They may employ medium- or long-term strategies or opportunistic tactics. Alliances may be formed, only to be later betrayed or reforged. Information may be shared, either true or false. Along these lines, players are asked to set aside prejudices and focus on the logic of the agents they represent. *Archispiel*, like any game, is subject only to its own rules; they determine what is permissible within its limited range of play. Thus, its scope is free of any shared moral structures.<sup>21</sup>

Players will decide whether they engage in selfless collaboration, occasional opportunism, disinformation, post-truth or chaos.

To determine whether an initiative will be carried out or not, players will propose an unlimited number of pros and cons. Game masters will then verify the consistency of each item and will compose a final list of arguments (all with a similar weight) in favor of and against the realization of each action. Here, chance will be also decisive. A roll of two five-sided dice (2D5) will finally validate each realization.<sup>22</sup>

Then it is time for players to move their pieces on the game board according to each verified action.

Once all movements have taken place, a new turn begins. For each turn, all initiatives with their pros and cons and all game board movements are registered in a log designed for that purpose.

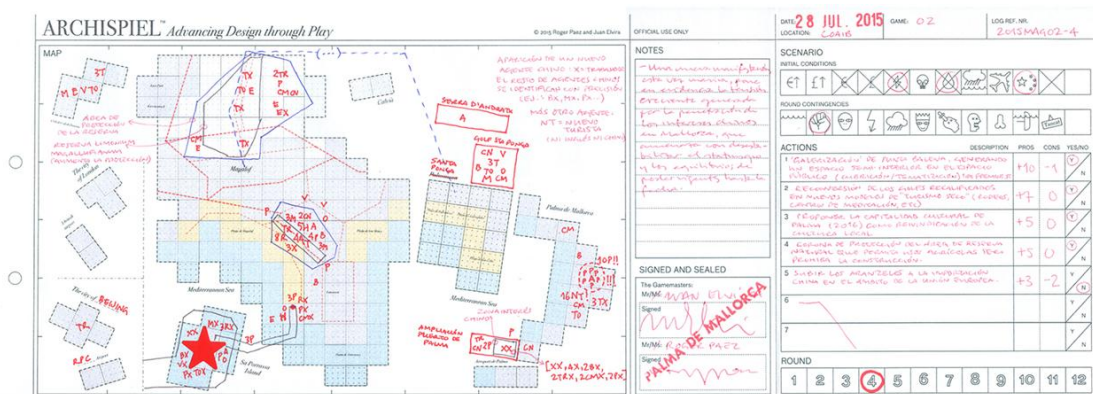


Fig.4 Game log: session 2, turn 4. Source: Elvira, J. and Paez, R.

### 3. End of Game

The duration of the game is not predetermined, and each turn has an estimated duration of 30 minutes. The game masters are responsible for deciding when the game ends. As a general guideline, a game can be considered to have arrived at its end when it reaches a scenario that is clearly far removed from the initial stages, with its own identity and lines of action.

<sup>21</sup> "Play lies outside the antithesis of wisdom and folly, and equally outside those of truth and falsehood, good and evil. Although it is a non-material activity it has no moral function." Huizinga, 1948: 6.

<sup>22</sup> If the figure resulting in adding the dice roll (2D5) plus the number of pros, minus the number of cons, is larger than 7, the initiative will be carried out. That is to say that the argumentation outcome will improve or worsen the initial probability of success by 58%.

#### 4. Record and Storytelling

Before the game is over, a final stage takes place, with a twofold purpose: first, to unify and lend consistency to the evolution of the game; and, second, to produce a formal record of the game, which is intelligible and accessible for any external interlocutor. Not only the players but the actual stakeholders they embodied during the game (e.g., residents, tourists, politicians, entrepreneurs, designers) will be able to easily access the game's conclusions and join in the conversation, which may or may not lead to an actual transformation of the urban milieu.

The record and storytelling of the game will use two formats, one written and one graphic, both contributing to the game's imaginary in a complementary way:

##### 4.1 Reports

The game masters will write a report, in which the main events of each turn are recorded. An end-of-game paragraph summarizing the game will be added. It should offer a succinct and comprehensive storytelling of the events, as well as the decisions and actions taken. This report is written from players' and game masters' memories of the game. Thus, as a history, it is not necessarily identical to those events, decisions, and actions, but rather the construction of a consistent narrative.

##### 4.2 *Tableaux de Bataille*

Unlike the style of the report, which should be deliberately notarial and precise, the graphic record should be expressive and open-ended. How the game unfolds can be understood as a *tableaux vivant*, in which all the agents relate to one another and express their points of view in a prototypical way. This document takes as its main reference the pictorial genre of the *tableaux de bataille*. Paintings in this genre often simultaneously depict atmospheres, topographies, battle strategies and even a detailed account of each battalion uniform. This document should encompass the elements contributing to the final scenario, representing meaningful episodes of the game. Different graphic tools may be used for that purpose, from photorealistic depictions to the combination of different scales or the insertion of written or infographic information. The size should be very generous (in the case of *Magaluf Reset* it was 118.9 by 356.7 cm), which allows for a general overview of the battle events, and, upon closer examination, an immersion in the game's imaginary: persons, actions, structures in the territory.

### Case Study: Magaluf Reset

*Archispiel* was tested for the first time during "Magaluf Reset, local y visitante (II)", an intensive summer workshop attended by 13 architecture students from different schools, held at the Col·legi Oficial d'Arquitectes de les Balears,<sup>23</sup> organized by Q9 platform,<sup>24</sup> and directed by Roger Paez and Juan Elvira, who also acted as game masters.<sup>25</sup>

While the full potential of *Archispiel* is not expressed in *Magaluf Reset*, the experience allows for presenting specific results of the proposed methodology.

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<sup>23</sup> The COAIB provided essential infrastructural and communication help.

<sup>24</sup> The authors would like to explicitly recognize the invaluable work done by Xavier Oliver, Pep Quílez, Sònia Lamesa and Miguel Ángel Aguiló, Q9 representatives and workshop organizers.

<sup>25</sup> For more information on *Magaluf Reset* see: <https://workshopmallorca.tumblr.com/>; <https://www.aib.cat/en/research/14>.

The site for the workshop was the Magaluf neighborhood (Calvià), a paradigmatic case of a particularly controversial kind of mass tourism. Periodically, Magaluf is subject to waves of arrivals and retreats of hordes of British visitors. Narcissism and sexual empowerment, an exultant aesthetics of pillage, and the transgression of norms are the new (though ephemeral) rules that dictate its touristic rituals.

During the periods of this tourist invasion, a stark change in the rules of the game takes place, a shift that often destabilizes the ordinary social codes generating any number of conflicts.<sup>26</sup>

Undoubtedly, what happens in Magaluf represents a huge social problem. But it can also be read simultaneously in an altogether different way: at a time when urbanism has become a replicable and monetized technology, these conflicts also open up the possibility of implementing new and unprecedented logics across the urban game board.<sup>27</sup>

The aim of the game is to research in detail the relationships between locals and visiting agents (or the tourist crowd). Unlike analysis-based classical approaches, games provide for the simulation of possible futures thanks to the incorporation of chance, negotiation, and dialogue.

Gaming becomes a methodology for prospection and foresight. Without any merely deductive-inductive limitations, it enables imagining, developing and exploring futures for Magaluf.

The game begins. After reviewing local conflicts, the geographical enclave and its correlate on the game board, agents are selected and assigned to players.<sup>28</sup>

Instead of offering a detailed account of one of the scenarios, for our purposes we felt it would be more relevant to give a brief description of the two different scenarios we played, which demonstrate the game's capacity for producing very different outcomes.

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<sup>26</sup> The use of military terms such as "occupation", "hordes" and "invasion" is voluntary. Indeed, there are strong parallels between military practices and mass tourism, which we cannot properly address here. More generally still, landscape scholar J. B. Jackson wrote in 1984: "I still find myself wondering if there is not always some deep similarity between the way war organizes space and movement and the way the contemporary society organizes them." Jackson, 1984: 135.

<sup>27</sup> Keller Easterling has provided stupendous insights and a novel critical-practical toolbox on architecture/urbanism and conflict. See, especially, Easterling 2005, but also *Organization Space* (1999), *Subtraction* (2014) and *Extrastatecraft* (2014).

<sup>28</sup> (T) English tourist, (CN) Construction businessmen, (H) Hotel operators, (CM) Retail traders, (P) Police, (A) Administration, (O) political opposition, (V) Neighborhood associations, (TO) Tour operators, (R) Restaurants, (M) Big leisure infrastructure managers, (B) Banks, (G) Ecologist activists, (TR) Drug dealers.

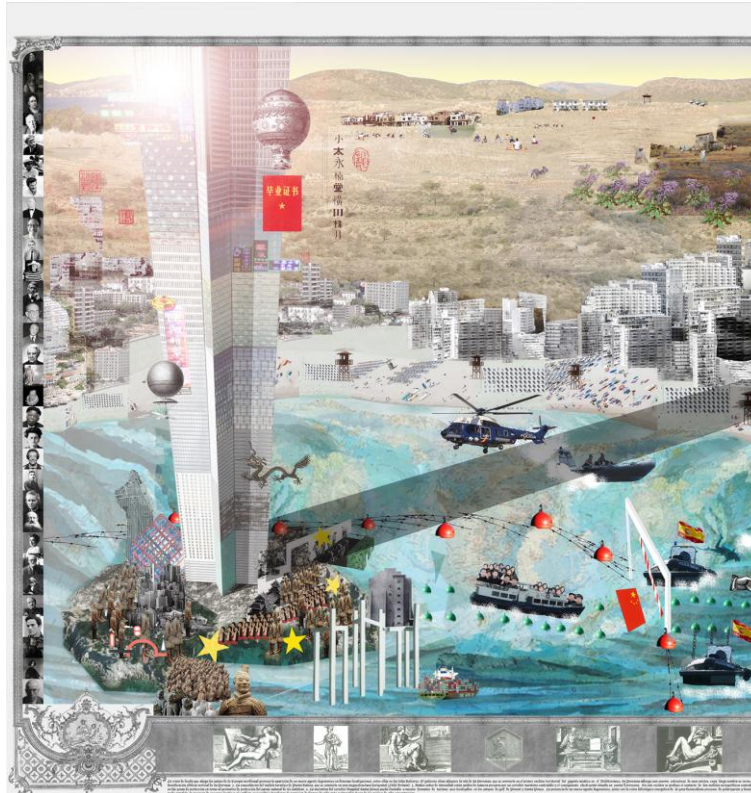


Fig. 5 Game 2. Tableaux de bataille, detail. Source: Elvira, J. and Paez, R.

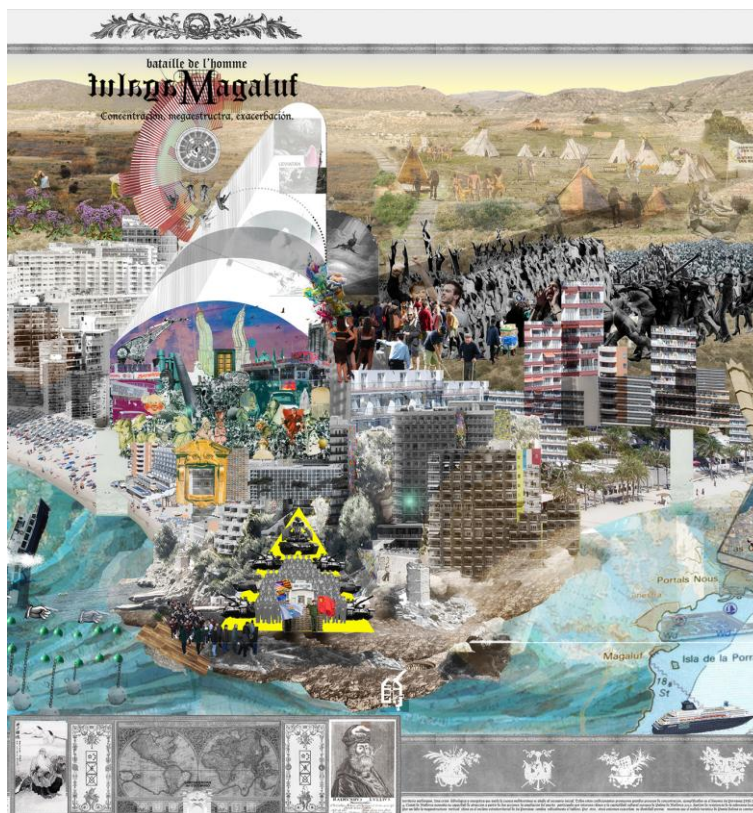


Fig. 6 Game 2. Tableaux de bataille, detail. Source: Elvira, J. and Paez, R.



Fig. 7 Game 2 : Tableaux de bataille, detail. Game 1 : Tableaux de bataille. Source: Elvira, J. and Paez, R.

### Game 1, Friday July 24, 2015

- Construction of the initial scenario:

The appreciation of the euro results in a loss of purchasing power among potential tourists from Britain. In addition, an epidemic of bird flu also reduces the appeal of this tourist area. Exceptionally, the local administration issues a ban on all prostitution in the area.

- Evolution of the game:

The first turns incorporate a new determining factor: a series of extreme climatic events and subsequent flooding make it necessary to declare Magaluf and its surroundings a disaster area. This process becomes an unintended catalyst for the redefinition of tourism in the area.

Fueled by adverse weather conditions and a failure of the existing tourist formulas due to the appreciation of the Euro, the agents decide to transition from a centralized model, focused on the area around Punta Balena, towards a polynuclear model.

Tourism becomes more specialized and expands into a network of territorial reprogramming efforts. The network is composed of the following nodes:

1. Mega-recreational area in Punta de Torrenova.
2. Development of a mixed hub at the southern end of Avinguda de Magaluf.
3. Agricultural park in the unbuilt developed areas of the western sector initially intended to support the growth of the urban core.
4. Transition areas agricultural park / urban area: PEU and emergency care area.
5. Hydrological / ecological / urban corridor resulting from flooding (southern area of Avinguda Magaluf / Carrer Galió). This enclave is the node where all the previous subsystems come into contact.

- End of game scenario:

*Taking advantage of a prolonged flooding process, the most controversial processes in the area of Punta Balena (thematization, alcohol, drug use, sexual promiscuity) are redefined and institutionally assimilated through new tourism models and new forms of territorial occupation, tending toward dispersion and functional specialization.*

Keywords: *Dispersion, specialization, institutionalization*

## **Game 2, Tuesday July 28, 2015**

- Construction of the initial scenario:

A new hegemonic agent appears: the People's Republic of China. Following in the footsteps of other indebted states in southern Europe, the Balearic authorities and state government hand over the island of Sa Porrassa as compensation for the debt purchased by the Chinese state. As a result, the island becomes a Chinese extraterritorial enclave in the Mediterranean Sea. For all intents and purposes, Sa Porrassa is part of the PRC and is subject to its laws and its government. The island is used as the foundations for a 1000-meter-high vertical citadel with a star-shaped floor plan, which highlights the new Chinese hegemony on the global stage. The extraterritoriality of the island inevitably leads to a redefinition of the map of the Mediterranean to guarantee a direct connection between the Chinese territorial waters around Sa Porrassa and international waters. In addition, an energy crisis causes a dramatic increase in the price of oil, resulting in the virtual disappearance of low-cost airlines. A persistent drought ravages Mallorca.

- Evolution of the game:

Sa Porrassa becomes home to a huge mixed-use structure, whose long shadow looms over the Mallorcan territory. A hydrological and energy crisis affecting the Mediterranean basin is added to the initial scenario.

These determining factors result in large concentration processes, exemplified by the pairing Sa Porrassa / "Little Britain", in addition to smaller-scale processes of local adaptation to this new polarized reality:

1. On the one hand, the enormous vertical densification of Sa Porrassa.



2. On the other, the exacerbation of the Punta Balena tourism model, which becomes a leisure-oriented horizontal mega-structure (“Little Britain”).

3. These two nodes of intensity are connected precariously by a controlled maritime corridor, with the consequent checkpoint located at Punta Torrenova. It becomes the site for contact between two contradictory sociopolitical models.

4. Ciutat de Mallorca increases its power of attraction capacity through two actions: an expansion of the port funded by Chinese interest; and the naming of Palma de Mallorca as European Capital of Culture for 2016, as a stronghold of local sovereignty and a bastion of Balearic culture.

5. There is a new social tendency towards autonomy and self-management with the creation of a nucleus of permaculture in the agricultural corridor formed in the protected areas around the perimeter of the natural park.

6. The initiative of the Magaluf-Santa Ponça corridor is limited to new formats of dry tourism located in the Ponent and Santa Ponça golf courses.

- End of game scenario:

*The presence of a new hegemonic agent, compounded with a hydrological-energy crisis in the area, triggers processes of polarization and densification. On the one hand, the Chinese vertical mega-structure in the extraterritorial enclave of Sa Porrassa radically changes the game board. On the other hand, the pre-existing identities of other areas are exacerbated: while the tourist model of Punta Balena is transformed into a horizontal mega-structure called “Little Britain”, Palma defends Balearic culture and consolidates itself as a representative of local traditions. In parallel, the dearth of local resources and the socio-political conflict foster the emergence of self-sustaining lifestyles on the margins of the high-density urban nuclei.*

Keywords: Concentration, mega-structure, exacerbation



Fig. 8. Tableaux de bataille and game board. Source: Elvira, J. and Paez, R.

## Conclusions

Game-based design formats offer a plethora of design methodologies that embrace *chance*, prompt *negotiation* and generate choral works based on *dialogism*. Playing allows for superseding design as representation and embracing design as simulation, and it allows design to become performative rather than descriptive.<sup>29</sup>

Indeed, chance is likely the most relevant driver affecting our urban environments. If planning plays a significant role in defining how our cities work, so does the blind force of chance—not only in informal settlements but also in the most strictly planned urban sites. Negotiation is also a crucial aspect that accounts for a significant part of what our cities are like and how they perform. And yet, conventional architectural design and urban planning disregard the openness of chance, negotiation and dialogism, enforcing top-down, hard control and finalistic design logics.

As shown by the *Archispiel* format in general and the teaching experience of *Magaluf Reset* in particular, design through play offers a rich array of explorative possibilities not afforded by conventional design practices. The students involved in *Magaluf Reset* experienced a radically different approach to design. First, they were able to construe the design problem/s from different and often opposing stances, helping them understand the importance of specific points of view and interests in the definition of a design brief. During the game, they experienced different roles and hence different views on urban problems and different opinions on potential design opportunities. Second, they practiced a critical reaction to unexpected events introduced by chance, helping them appreciate design not in terms of a systematic application of a rigid catalogue of solutions (personal or group-based) but rather as the progressive construction of meaningful design logics as the decision-making process advances. Finally, they learned to negotiate, which entails listening and understanding the other, building a compelling narrative and creatively adapting to complex group dynamics. Consequently, rather than solutions answering to a predefined brief, the results of design through play are quite literally the outcome of an exploratory and open-ended design logic. They reveal a somewhat loose order, an unfinished quality and a temporal condition resulting from methodologically embracing chance, promoting negotiation and inducing choral work. Hence, the resulting urban scenarios are not well-groomed urban utopias but exciting stochastic landscapes where design plays a cueing role rather than a regulating one. We argue that the city should not be built as a final clear-cut solution through top-down master-planning but appear progressively and over time through an interwoven set of design-enabled processes.

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<sup>29</sup> See Paez, 2019: 264, 273, 310.

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