

# SHARING AUTHORSHIP AND MEASURING INFLUENCE IN ARCHITECTURAL TRAININGS IN NEIGHBOURHOOD COMMUNITIES.

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Keywords: co-design, assessment devices, architectural education

## Abstract

In this paper, we address three contemporary issues currently being discussed in architectural education. The first issue is the hypothesis of domesticity as a suitable framework to acquire architectural abilities when students choose to focus their designs on ordinary issues from their childhood neighbourhoods. The second issue is that of shared authorship, whether it can make design more democratic and question the architect's hegemony over other agents involved in the design process. The third issue is the use of new kinds of tools to understand the results and impact of architectural actions: a new user-friendly technological device, made as effective as possible, can replace sociologic satisfaction questionnaires, interviews or discussion groups. Sociological research applied to architecture offers us references, charts, rules of analysis and diagnosis.

We describe two exercises performed in Alicante University. The first one was meant for a neighbourhood community that offered spaces, such as lobbies next to main doors and lifts, to install a shared wardrobe and other architectonic services including ironing, drying, and the folding of clothes. In the second one, housewives led a co-design process to redefine their homes and make them compatible with workshop activities.

## 1. Concepts from literature

### 1.1 Domesticity

The term domesticity can be understood as an ensemble of daily affairs and shared duties influenced by the economy, seasonality or socio-cultural values. Some thought-provoking examples to illustrate the concept of domesticity are: illustrated journals at the end of XIXth century (e.g. Ladies Home Journal); the machinic way of living after WWII (e.g. Le Corbusier's machine-home, Case Study Houses in USA's West Coast); sublimated common life in Japanese detached homes (e.g. *Tokyo Story*, Yasujiro Ozu); an ironic inter-dependency between technology and users (e.g. *Mon Oncle* by Jacques Tati) or ostensibly democratic furniture advertising campaigns (e.g. "Welcome to the Independent Republic of Your Home", IKEA).

A particular condition of domesticity we wish to emphasise in this paper is the ambiguity of space usage inside traditional houses: studio, repair shop, craftsmanship workshop, and minor jobs could be complementary with other dwelling functions in transitional or specific spaces.

Activities like sewing, patching, repairing clothes, canning, preparing food, repairing furniture, etc. are some activities that used to take place inside the dwellings. These are

precise living and working functions that could be used as examples to counterbalance modern principles of urbanism denounced by Jacob (1961) and Gehl (1971). Many Eastern and Western examples illustrate the traditional way to occupy and share these in-between spaces: genre-related scenes such as sewing or reading inside the bourgeois Dutch and Flemish houses (Pieter de Hooch, and Jan Vermeer); or craftsmanship spaces in Tokyo houses called “machiya” restored recently by Atelier Bow-Wow. Domesticity also includes the way objects or furniture interact with people inside the house, creating a kind of ecosystem interdependence that has been observed in Social Science Studies. An example highlighted by Atelier Bow-Wow, is that of Mingei, folk Japanese objects which condense the time dedicated to eating, serving, attending to guests, washing, cleaning and storing (Stalder, 2013, 104-117). Many researchers understand Modernity principles as part of the reasons to lose the hybridization of shop-living activities in domestic spaces. In this sense, some research groups (e.g. “Rehabitar” in Cataluña, Monteys, 2012) are re-studying Spanish Modernity housing projects in order to analyze the ground level uses such as offices, shops and small business activities connected to houses.

## 1.2 Shared-design

Democratic design, cooperative design, co-generation, decision-making levels, etc. all express a desire for shared participation in the creative process. It was after the 70s that the Educational Facilities Laboratories Report concluded on the necessity to open up house design processes to citizens: “...not designing the device or building, but being included in the discussions about function, use, etc...” (Weinstock, 1972). Social facilitator roles were created and degrees of participation were identified such as approach, pre-design, design, construction and customisation (Yonesu 1988 and Li, 2013).

Among the pioneers were Yona Friedman, who designed a human-scaled mechanical device with which future users could choose the layout of dwellings placed in skyscrapers at Expo’70 in Osaka: with 53 keys, anyone could typewrite a personalized dwelling among multiple combinations (Yona Friedman, 1970). Another pioneer was Lucien Kroll, who designed the methodology by which the community could co-design the Medical Faculty Housing at the University of Louvain (Belgium). Following this methodology, technical drawings were initiated only if agreements were reached first (De Molina, 2011; Penhnt, 1987; Kroll, 2010). A third pioneer was Rodolfo Livingston, who established techniques based on conversation applied to the particular case of family houses. He organised a set of games: first, the “more-less” game, in which the architect took notes of the likes and dislikes of each family member; second, the “prosecutor” game, in which the client pretended to be the architect; and lastly, the “desired home” game in which context, resources, and location were not submitted to any budget constraints.

## 2. Learning framework

In 2014, a group of students at the University of Alicante developed creative devices based on participatory processes to test an experimental pedagogy called “Common Extra House Lab”. This pedagogy focuses on how to co-design dwelling refurbishments and neighbourhood communities and help reach collective agreements on common issues. We present two examples of this pedagogy in this paper. In our first example, students implemented a “folding screen”: a game for residents of a housing block

designed to visualize the personal ability of clothes care. Based on results, a technical wardrobe was designed to be embedded in common areas in the community. In our second example, students demonstrated how part of a dwelling could be modified, including custom spaces for folk crafts, by way of portable models of games and evaluation of levels of concentration of domestic routines. Our final aim was to offer a typology of solutions grounded in specific situations to help future clients improve their living conditions in low density developments.

## **2.1 Common Extra House Lab**

Every year, Common Extra House Lab is a workshop that produces a set of domestic refurbishment proposals, especially dedicated to hybrid functions. The design process starts with the discussion of common issues and people's ability to understand overlapped routines (i.e. duties performed in everyday life, taking place in the same place, as in the literature referred to above).

These spaces of relationship used to be inhabited by people able to generate social and domestic interactions thanks to a particular way to relate to others such as chatting, listening, caring, cooking, etc. Researchers such as Andrés Jaque name these abilities "superpowers", as illustrated in the case of Candela Logrosan in Madrid, and the visible controversy of the "Ikea Disobedience" installation. According to Jaque (2012), these people possess the practical knowledge and intuition to manage daily affairs smoothly, with empathy, and to connect with different generations, making people participate in community decisions. They are at the heart of a human network and represent a suitable context for putting academic proposals into practice. In this sense, working contexts can be urban, suburban or almost rural in non-domestic or transitional spaces. In the cases included in this paper, proposals are set in neighbourhood communities or isolated dwellings in suburban towns near Alicante in which the urban fabric is built on overlapping familiar inheritances, common spaces and retail stores.

The workshop can also be understood as a laboratory in which models, discussions and depictions of living settlements are interrelated. Furthermore, sociological devices were created: instead of scaled models, these devices acted as interfaces that connected people in their common discussions on neighbourhood issues. The devices worked as laboratories or "local surveillance units", that is, as a sort of workbench installed in the town or inside the houses, designed to obtain data at the very heart of the controversies (Latour 1991, Romero 2010).

## **2.2 Methodologies**

Within the framework referred to above, we undertook experimental methodologies and tools. We used disciplinary formats (graphic drawings, scaled models, video simulations, etc.), but some of the dynamics involved adding design to other proposals, suggesting new orientations, co-designing with the hypothetical client at any of the stages, showing agreement or rejection of other proposals, studying the relevance of proposals and reporting on the evolution of the design process. We divided these methodologies into four categories described below.

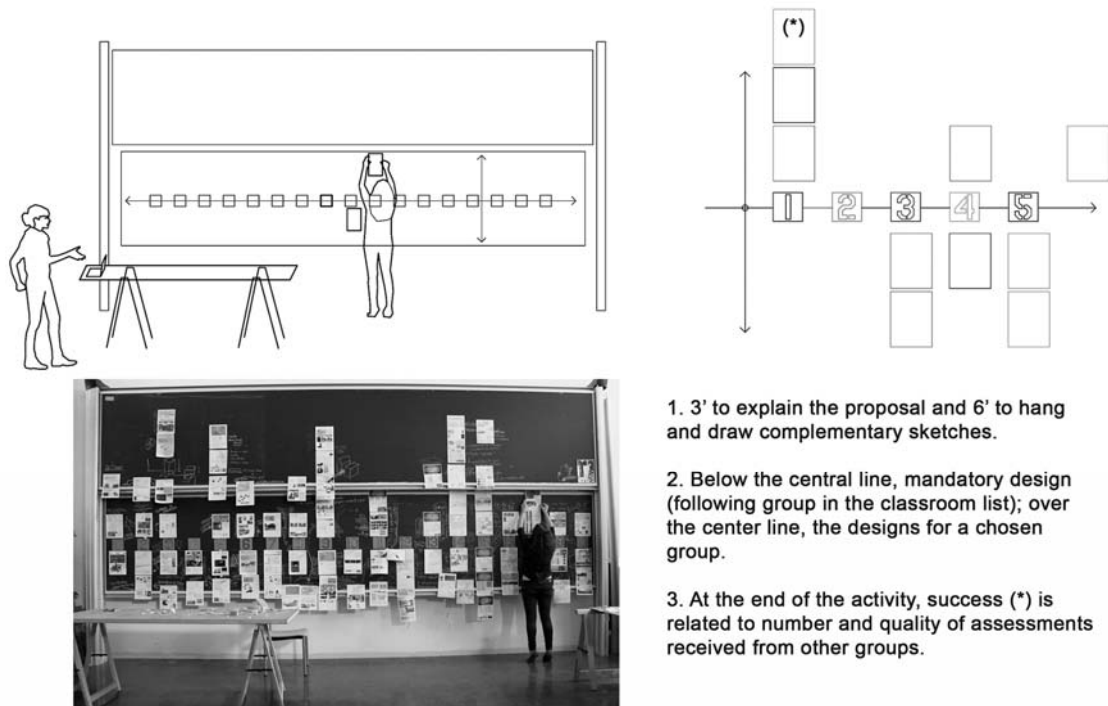
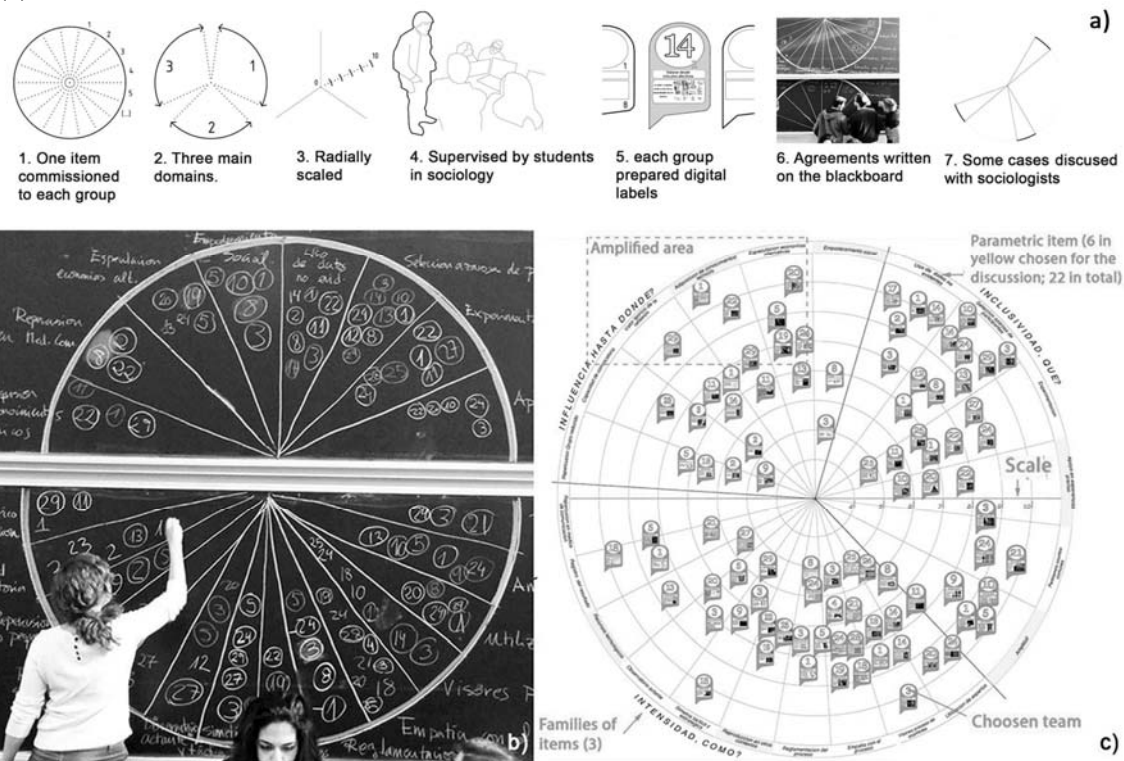


Figure 1. Students proposing and depicting their proposals in the “Blackboard” activity (a).



### a) Tools to induce advances in others

At the beginning of the semester, students participated in “The Great Blackboard”. Each student had to propose two design readjustments for other students, one from a successive list on the blackboard (below the central horizontal line) and another freely chosen (above the central line on the blackboard). This arrangement on a big wall

around a central line encouraged general discovery and understanding of improved designs. In a production line manner, each proposal was explained in three minutes and then hung while the following student started on the next design. The number and quality of received proposals showed how successful this tool proved to be (The Great Wall explained in Hockney, 2006) (Fig. 1a).

#### **b) Tools to map the learning process**

By the middle of the semester, students started using “eGlia”, a digital mapping resource in which scattered information could be ordered and sequenced. Starting from a central crown, each user created a radial itinerary. Intriguingly, at the end of the day it was possible to visualize which designs and external links spurred most interest. This display proved to be a useful framework to prevent dispersing of architecture learning (Hernández, 2011).

#### **c) Tools to establish the human dimension of a general statement**

Specific graphic outputs such as flow diagrams or sociological diagrams were established after analysing the results of discussion groups in which some people, the hypothetical clients, participated with the help of neutral coordinators (Villasante 2000, 40-48). These qualitative techniques, borrowed from the Social Sciences, led to the production of maps showing human categories or types of dependencies and controversies. Architecture students participated as coordinators (mediators) and general designers of the experience. Thanks to their creative abilities, they turned classic qualitative techniques into games with set rules and interfaces. The physical context and scope of the target group corresponded to the general conditions the students were going to work in, thus giving rise to the following architectural questions: what size was the territory and how many residents were involved? How could new hypothesis and a typology of solutions be created?.

#### **d) Tools to evaluate proposal impact.**

The main tool was called “Round chart to observe the participative dimension of the proposals” and was inspired by the Democracy Cube (Fung, 2004). This round chart was used to classify the sociological impact of the proposals, e.g. the capacity to call people, the capacity to incorporate rules in the participatory process, transparency in the co-design process, or the capacity to speculate on non-visible issues (Fig. 1b). All properties were sorted into three groups: inclusiveness, methodology and influence. Each one of the 22 parameters was given to a team of students, who was tasked with selecting and assessing a reduced number of projects. When the graph was completed, some projects had been chosen to be implemented applying more parameters, others had almost disappeared, while those valuable for specific goals were retained, e.g. the capacity to broaden a community’s knowledge, or the capacity to deal with common issues.

### **2.3 Case studies**

It is hard to imagine how issues relating to the culture and care of clothing could be shared beyond first degree family circles. However, duties shared in villages, represented by public laundries, or roof tops where clothes were laid to dry and then amassed collectively, are present in our collective memory. Today these tasks unfold inside the home and are considered part of the private sphere. It is hard to imagine that

these duties, now recovered in the economy for the Common Good, could lead architectural statements.

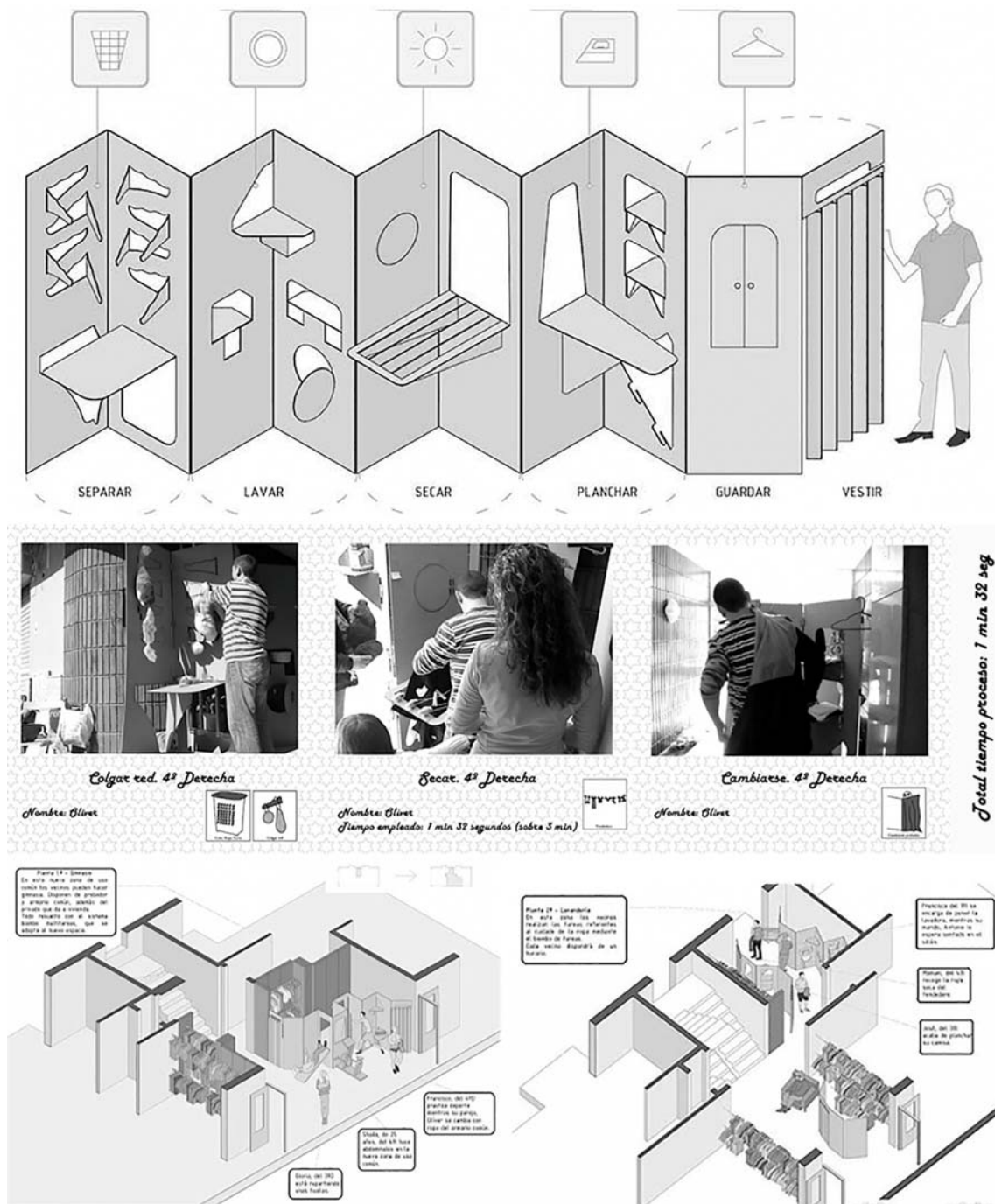


Figure 3. Folding screen (“biombo”): neighbours being tested in specific duties and isometrics of new common spaces (link: <http://grupo3-nuria-eva-santi.blogspot.com.es/>) .

### a) Neighbourhood wardrobe (Tombola’s block)

Problem: domestic understanding in relation to clothes, including cycles of wash, drying, ironing, caring, etc. has been confined in recent history to the family sphere. Humans should reconsider these duties and learn how to share them. In the case of a community of neighbours, raising awareness of this goal was difficult and had to be done in a very subtle and indirect way.

Strategy: start by giving visibility to the concept of community. First, the team analysed people's agendas, timetables, business hours, hobby times, work times, etc. as well as affinities with styles and sizes of clothes.

Participatory methodology: the first installation tested neighbours on how they could share part of their personal wardrobe. The main mechanism was called "folding screen" (biombo). This game addressed residents of a block in the Tombola neighbourhood, in which personal skills relating to the care of clothes (washing, cleaning, ironing, hanging, sorting in sizes, etc.) were timed and recorded by hidden cameras, in such a way that the conclusions would help the team decide on which floors they would distribute each part of the programme. For example, the community's wardrobe and ironing area would be placed on the floors where people with the best score in those abilities lived. The folding screen was made up of 10 pieces of 600x1900x5mm laminated wood connected by hinges. (Fig. 2a)

Project: The neighbourhood community in Tombola offers spaces, such as lobbies next to main doors and lifts, as well as part of their dwellings, to place a shared wardrobe and other architectonic services. It would be a technical wardrobe embedded between the stair and elevator. This design process led to new questions: How were resident relations affected by these devices? How were common spaces redefined? How could dwelling functions be reprogrammed? Which new forms of urban organisation were fostered by these experiments?

## **b) Shop-dwellings for urban homemakers (Alice's house)**

Problem: for middle-aged homemakers in Mediterranean countries, it is difficult to make domestic duties, attention to family issues and abilities leading to further self-realisation compatible. Additionally, most low rise houses in suburban developments near Alicante (Spain) are built based on generic designs for average families, with no adaptation possibilities before being moved in to.

Strategy: the team proposed a complete refurbishment of a typical suburb dwelling by including new domestic, productive furnishing, co-designed with a group of homemakers. The starting hypothesis was that homemakers would find ways to blend domestic and productive time with other family members. One of these women, Alice, would be the students' host and their main subject.

Layouts were agreed with the rest of her family.

Participation methodology: a complete set of recorded co-design experiments were produced (inspired in this case from Livingston techniques): modular games of conversation about shared and private spaces (Fig. 2b); sociological diagrams with controversial interactions between neighbours; demonstration of the homemaker's ability to maintain her concentration while doing more than one duty; or simulation of a little storage area (a typical cupboard) turned into a technical device, a domestic laboratory specialised in scenarios for dolls and folk craft.

Project: based on Alice's passion for making doll mock-ups and collecting folk crafts, a specific kind of refurbishment could be initiated in her living and working spaces, reflecting her abilities. Architectural models were useful to empower women like Alice.



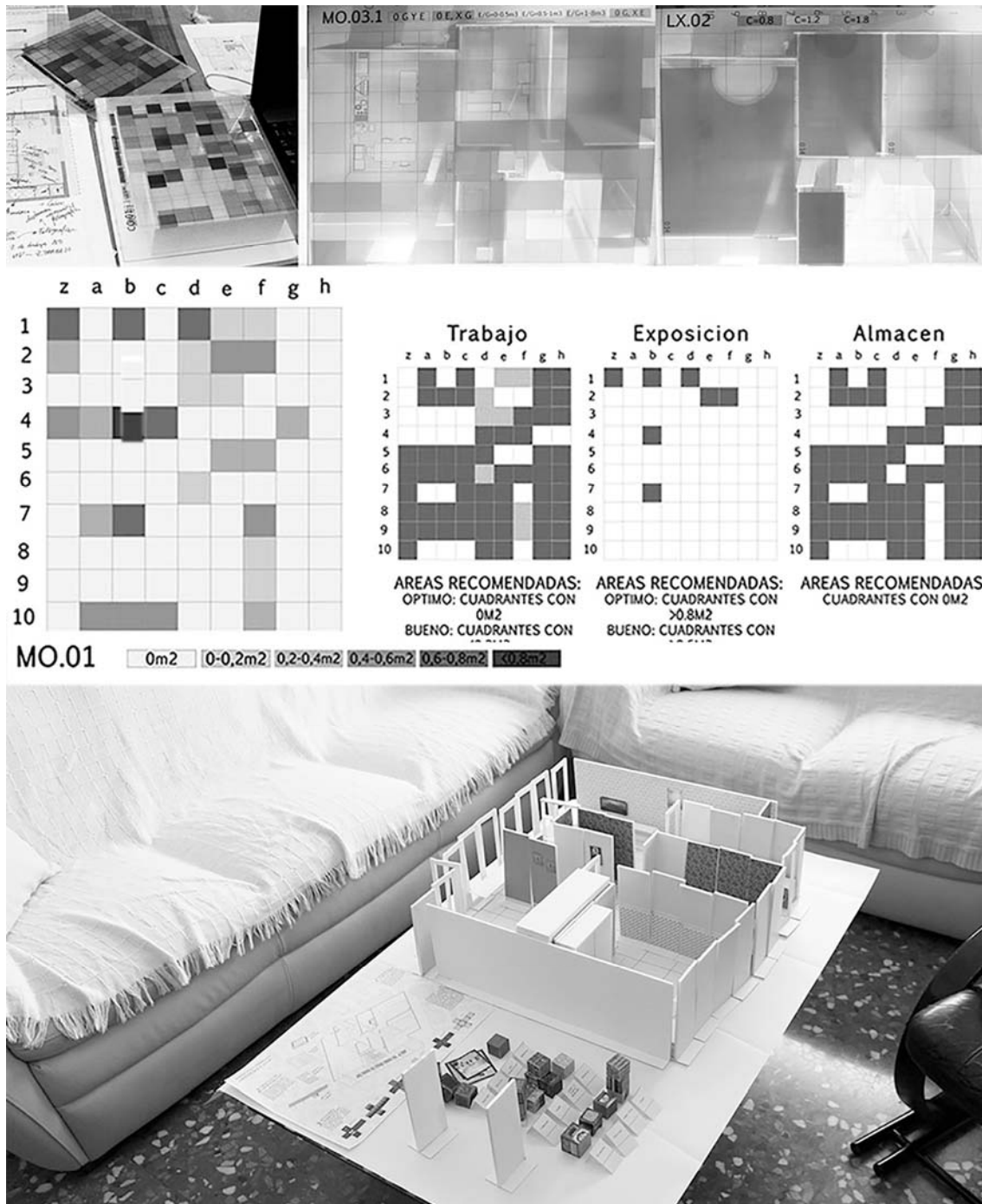


Figure 4. Participatory tools at Alice's house: living room and paper tools (Link: <https://daniyveroprojectlab.wordpress.com/>).

#### 4. Discussion

This work first presented the concepts of domesticity and co-design, which were part of our workshop's training objectives. Second, new resources created by teachers were introduced. The work concludes with the description of two of the most successful case studies produced by students. Worthy of reflection is how one of the resources, called "Round chart to observe the participative dimension of the proposals", a sort of collective self-evaluation or self-validation tool used at the end of the semester, was able to sort all 18 papers according to 22 parameters. For example, in terms of domesticity, the case of "Alice's house" was well valued (it was chosen by several



groups) because of the repercussions it could have within a home's private sphere. In turn, the "Wardrobe" project generated wider consensus regarding its ability to influence how spaces between floors in neighbouring communities can be redesigned, in the case of goods or activities that have been historically community-based, such as the care of clothes.

In terms of co-design, the "Alice's house" project was considered to be the most effective at including co-management in the decision-making process; it also had the least conditioning effect on the client's decision (getting nearer to what sociologists conceive as a symmetrical process). In parallel, the "Wardrobe" project was well considered for the following reasons: it adequately monitored initial stages; participants were randomly chosen in the processes of knowledge generation; it had the capacity to include challenging controversies or issues; lastly because its resources empowered neighbours in understanding the problem and subsequently making decisions.

Finally, classifications obtained from the "Round chart to observe the participative dimension of the proposals", inspired by the "Democracy Cube" (Fung 2004) were approved by sociologists (as a reminder, a few sociology students monitored the process in the architecture classroom), and were successful at illustrating achievements over the learning period (a school year) in a diagram. This process began with a single morning of class, using the blackboard, and ended in a session of digital post-processing.

An interesting question that arises when discussing architectural training processes is how relevant it is to dilute students' creative autonomy. Another issue is testing the right stage (or the right year) to introduce principles of knowledge co-management processes and, in practice, when inter-disciplinary work teams should be set up or when external agents should be included (for example, involving hypothetical clients). Thus, in the case of "Alice's House", the project seems to be guided by game rules with the client to such an extent that the designer's freedom is apparently restricted. Yet the resources used in this project to reach the final solution (sets of pixels for types of domestic programs, modular partition games, etc.) enabled fine-tuning the conversation on the living room table rather than being true design resources. They could be considered as tricks or a technique to get a real conversation flowing on needs programs, in the way students had learned from Rodolfo Livingstone.

## **5. Conclusion**

Scarcity of resources and global austerity bring about limits related to water, food, materials and energy that affect architecture and the wider built environment. In response, research units at The Bartlett in London are working on a set of models "to demonstrate innovations with real effects that improve everyday lives, in contrast with old technologically determined visions, challenging the role of expert technicians using the rationale of the affected communities..." (Chinchilla, 2014). In our view, Chinchilla supports the fact that global changes forecast between now and 2050 would imply returning to a kind of dwelling able to integrate, as in the past, working spaces, offices, supermarkets and public amenities.

Furthermore, it is also time to share methodologies with other knowledge areas, creating new interfaces and laboratories, trying to enlarge and strengthen opinions and levels of communication, for example via exchanges between students of architecture and students of geography, sociology or anthropology. Additionally, we should dedicate part of our energy to creating a new setting for urban forums in which citizens could gain access to learning design processes, even in hypothetical situations, and could formulate their own interpretations.

This framework called Common Extra House Lab helped the students involved in it gain confidence. It was in the midst of uncertainty that students wrote: "...working as facilitators, we entered in the private sphere of homemakers and we understood their schedule, their concerns, their hopes (...) we learnt that everyday life is supported by the homemaker, which disables her personal development (...) at the end we were able to evaluate how flexible a dwelling could be, in order to accommodate productive uses" (students Amorós y Doménech, 2014). Nonetheless, the architect and educator Jeremy Till emphasises that these new ranges of participatory processes involve levels of risk, uncertainty and chaos. Two main problems remain to be solved: first, the distance between expert knowledge (the architect) and tacit knowledge (the user); and second, the obstacles deriving from codes, tradition, and hierarchy. In a way, he concludes that the process should take place in the physical context and, beyond considering it a case of problem-solving theory, think about architecture as a ground for the negotiation of hopes (Till y Blundell, 2005).

### Acknowledgements

This is a sample of emergent pedagogy produced by the Group "Architectural Projects: critical pedagogies, ecological politics and material practices" and by "Viceversos Research Network" at the University of Alicante (Spain).

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