

A Language for Communicating Your Built Environment / Un lenguaje para comunicar el entorno construido

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Keywords: Participation, Workshops, Education.

INTRODUCTION

How can the field of Participatory Design (P.D.) expand to further bridge the gap between designers and citizens? Experience in the field in Chile and the U.K. has demonstrated on many occasions that language is a key obstacle for citizens wishing to share their views in a participatory process with designers and decision makers, even though they have intricate knowledge about their local territories. It appears that two fundamental tools addressed by development in P.D. fields over the last 50 years are normally not present in non-professional participants:

1. Spatial and design-conscious language to communicate citizens' needs and aspirations;
2. A self-recognition of communities' existing knowledge of the built environment (B.E.)

Without these, the engagement of users in useful and productive dialogue with designers will be limited. To develop the legitimacy and effectiveness of ordinary people's voices in the B.E. discourse, and to value local knowledge and citizen experience as a design tool, Aldea has sought to build upon existing P.D. practice. This paper will use their recent projects as active working examples of diversifying from the approaches taken so far towards P.D. practice, making a greater emphasis on built environment education, while taking reference from existing work in the field. Composed as a team of architects, social workers, heritage experts and art historians from the U.K. and Chile, Aldea has organised workshops, forums, meetings and collaborations for both residents and decision makers that have direct influence over specific contexts.

Context

Before the age of 18, education on the B.E. is limited if not non-existent in schools for most countries, even in the U.K. The majority of citizens are expected to develop this understanding independently, and it has become a rare extra-curricular activity that can be perceived as being very intangible, as a result of the everyday-nature of our cities. Finland is a notable exception with integration in the national curriculum with a 'basic education in architecture' aimed at all citizens', however most of the teaching is done in after school clubs. The aims for this subject which is regarded a strand of visual arts education are: 'to help pupils to analyse and understand the surrounding environment and the world, to support their general education and to promote their abilities to face the challenges of modern society, such as participating in discussion and making choices', illustrating an government-led approach to improve citizen awareness and engagement through education. For the majority, the lack of formal B.E. conversation results in reduced confidence in communicating qualities and issues that exist in people's areas. The emerging field that is beginning to occupy this non-institutionalised space of citizen B.E. education, offering more tactile interaction and 1:1 making approaches has been an inspiration in finding new techniques to benefit the participatory process. By being open to accommodate young people in community design and participation by organising dynamic, fun and diverse engagement, the fundamental principles of the design process can be

established in an interactive approach to empower ideas to be contributed by all to the conversation.

Alternative approaches – developing P.D. practice open to specialised groups

One key challenge in P.D. practice is how citizens communicate to designers and decision makers the issues they experience in their area and the community's ideas for improving the B.E.. A useful methodology to find a middle ground for different points of view about spatial qualities is the immersive workshop. Aldea, along with other organisations like Arquitectives and Maushaus Arquitectura in Spain, Red Ocará in Spain and Brazil, and LunArquicos in Colombia, has been developing this methodology. Its principal aim is to foster instinctive and tactile B.E. vocabulary via interactive engagement, i.e. activities which are hands-on: drawing, constructing models, assembling collages, describing the qualities of neighbourhoods and site visits all create rich platforms for discussion. It can act as a space to introduce ideas of participation and activism for citizens, but equally serving as a key interface between designers and citizens where both groups can be aligned to communicate in a common spatial language.

The first methodology consisted of a workshop that involved giving young people the responsibility to create a building for specific members of their community, by using recycled materials to design and construct a model. Using the qualities of a specific local context provided a starting

point, ranging from neighbourhoods in London, Santiago, and the island of Chiloé, which led to each architectural and urban conversation being unique and diverse. The characters identified in the community were seen as architectural clients, inhabiting a common urban condition, which would be as equally considered as the buildings housing the community. The children investigated the needs, desires and unique qualities of each character as an individual by questioning what a building for them could be like. From the initial discussion in small groups, the conversation transformed into a physical exploration, as a handful of simple model making techniques gave them the ability to manipulate the simple materials into experimental ideas. Through making rather than only talking, the relationship between the building, the user and the context became highly visible and the young citizens could begin to understand how these related to each other in an active way.

The outcomes created opportunities to synthesise many important ideas about context, scale, inhabitation, form, identity and place. Through the act of making, a selection could be consolidated into an instinctive awareness that would inform future B.E. thought.

Creating an educational space outside of a formal school curriculum follows the thinking of philosopher Ivan Illich, who wrote in his book *Deschooling Society*, 'most people acquire most of their knowledge outside of school', and that 'most learning happens casually'ⁱⁱ. This attitude is supported by the fact

that the built environment surrounds all citizens and that in time everyone becomes increasingly conscious of their neighbourhood and context, however unless they engage with it more actively, they will be unable to articulate a point of view with the necessary competence to communicate the qualities they care about. This can happen instinctively, but as we are so over-exposed to the B.E. discourse on it becomes less visible and it can require a more direct engagement – which professionals always are exposed to in their work – to present their considerations of their spaces.

Multiple Group Workshops

Philosophers and psychologists such as John Dewey, Rudolf Steiner, Anna Freud and Maria Montessori developed important theories, which sustain that experimentation and play act as fundamentals of children's development, and catalyse instinctive attitudes to interact with and investigate their environmentⁱⁱⁱ.

A second methodology builds on a series of four architecture workshops held for a group young people. These workshops allow attitudes, thought processes and actions to develop through progressive steps, resulting in B.E. dialogues and culminating in a live design exercise. Run in January 2016 in Santiago, Chile, the workshops formed personal and collaborative perspectives on design approaches as a sequence of making and questioning activities helped them to raise relevant questions informing the conversation. Progressively, they gained more

responsibility and ultimately the agency to create their own active responses to their familiar B.E.

The third workshop developed from the context of neighbourhood urbanism and architecture workshops and focused the group's thoughts on examining one distinct culture. We conducted research^{iv} into the Ruka structure of the Mapuche people, built with natural materials, in order to inform the workshop. This building typology inherently performs as pedagogical space, while multiple generations of a family co-exist – sharing the responsibility of handling construction materials and making repairs. Inspired by this precedent, we asked children to construct their own 1:1 structures (fig. 1-2), making construction accessible with the opportunity to collectively make their own inhabitable building. The aim of this workshop was for the young people to learn from the challenge of creating spaces from a not pre-conceived perspective, retaining the freedom to explore the ideas of construction, craft and contextual design as accessible activities.



Figure 1 – Constructing 1:1 structures



Figure 2 – Experimenting with defining spaces with materials

Young people were able to create without aid, as they discovered how to manipulate materials with their hands and gained confidence from the free nature of designing through making, leading to unexpected spaces and interactions. Combining tensioned cord with bound bamboo rod frameworks, recycled cardboard boxes, newspapers, leaves, and tree branches served as a three-dimensional palette to equip a temporary spatial laboratory. Fragmented ephemeral results emerged alongside a robust conical shelter, which demonstrated the spectrum of investigation, celebration of the indigenous building and empowerment of young people to experience how they could influence a community-constructed B.E. The session benefited less from explicit direction, and more from allowing the passion for reinventing and iteratively developing their buildings to take control of the activity.

Exposing all citizens to the process of design, translating many ideas in a clear brief; sourcing materials and testing techniques to solve spatial and practical problems – roof, wall, openings etc. and making on site, all

offer a new perspective for citizens to inhabit. Accepting that this interaction with the 'design world' takes place in a brief encounter and is isolated from most of the statutory frameworks that would in reality limit these actions, having citizens conscious of how spaces are made can empower them to see their existing and proposed B.E. with more value. It also can provide them with a greater sense of how they might give more beneficial and purposeful inputs to P.D. conversations. As discussed by Toker in her paper 'Recent trends in community design: the eminence of participation', '[most] identified the purpose of community design as empowering people, followed by improving environments for deprived', and, 'educating about environmental politics'^v. Taken from a study made originally by Hester in 1984^{vi}, this analysis of the ideals of P.D. illustrates that many of the ambitions have not been altered, and by finding alternative methodologies like the Mapuche 1:1 construction workshop to engage and empower citizens from fresh perspectives, this can help to inform how inter-generational groups of citizens can engage in the process of participatory design.

The fourth workshop further continues in the direction of a pedagogy that outlines the design process, but asks directly of the participant to take ownership of developing a design response to a highly familiar context, in this case, playgrounds. Progressing their 1:1 making techniques, we questioned places for play and ran a subsequent workshop interrogating playgrounds. To explore how young people use playgrounds for play and

what improvements they would like for their school playspaces, they were challenged to construct a life-sized playground through the exploration of a new type of play, prompting a hybrid of design by constructing and playing. This 1:1 making driven by the experiential, aimed to crystallise their everyday familiar and vivid B.E. into an active consciousness, taking advantage of its tactile nature. Following the sequence of construction and playing of the playground (fig. 3-4), the ideas and physical experiences were distilled into new models of freshly informed designs of an alternative school playground. By presenting these proposals, inhabiting and climbing the 1:1 playground structure, the result appeared as both an architectural installation and a spatial sketchbook.



Figure 3 - Making new playgrounds



Figure 4 - Designing through playing

The young people with newly found skills could in a more conscious and organised way collect their ideas, thoughts and opinions of their B.E., and present their feelings and actions on how the spaces could be improved. The next generation of active citizens with the required articulation can more easily contribute to a collective conversation influencing their built environment, helping to unite citizens and designers.

Invitation to Participate

A third methodology looks at inviting citizens to participate in a locally visible and contextually sensitive project. A workshop carried out in Chile during 2015 attempted to recycle adobe rubble from buildings damaged by an 8.4 magnitude earthquake, by inviting local children to transform it into useable material. In a messy and playful process using hands, feet, hammers and shovels the children broke down the rubble in the main town square (fig. 5), ready to re-use when at the consistency of mud with new straw added. Using the reclaimed adobe, they created a new half-scaled house structure in the quincha construction technique, applying it to a timber framework (fig. 6). This process again gave an educational emphasis but in this instance directed the focus towards local citizens to develop their attitudes to their distinct B.E. and to see and interact with traditional construction techniques. The scale of community involvement invited vast quantities of people of all ages – offering children the opportunity to interact with a live building material

and giving a platform for local experts to present their craft and share expertise as a tool to promote the values of the local B.E. character. In the wider context of the adobe festival where our workshop was based, this provided an opportunity to involve the local people in the serious work of reconstructing houses in the hands-on traditional adobe material at a demonstrative scale. Locating the scaled-house in the main town square transformed the object the children created into a landmark, with identities of adobe, youth ability and a sense of involvement with supporting the community following the natural disaster, for all to appreciate.



Figure 5 – Children working with rubble from adobe buildings



Figure 6 – Creating a half-sized house using reclaimed adobe in a quincha construction technique

Youth Activism and Advocacy

This aspect of participation is a running theme within a number of projects discussed in this paper, and there are a number of project case studies made by other organisations one could examine in depth. Several organisations in Europe such as The Sorrell Foundation and Die Baupiloten architects are working to develop streams of architecture and B.E. education for children and young people. Aldea members have backgrounds from like-minded organisations, such as Open City, which ran a London youth group called My City Too in the UK, providing 12-19 year olds with opportunities monthly to visit buildings and outdoor spaces normally inaccessible. Accompanied by an architect, engineer or artist, they engaged in investigations and activities on location during the 5 years the programme ran, in addition to an exploration of youth activism for their local B.E. Campaigning for better places and spaces in mayoral elections, as youth ambassadors, they gave public talks, entered national competitions and campaigned on local highstreets to allow a diverse mix of young Londoners to learn about and participate in their city's transformation. My City Too young ambassadors were also engaged in long-term projects through the Young Planners programme with 15 local authorities in London collaborating in the design and redevelopment of public spaces.

Creating a platform for a diverse group of young people interested in B.E. issues for a city allows for a

more open-source approach to P.D. – creating opportunities to network with other citizens and having a collective of design-minded citizens could allow for more effective interaction with decision makers and designers when examining design issues. The peer workshops in schools some of the young people ran could open the conversation of how education B.E. can be improved. Ultimately fostering greater activism skills and experience will create more confidence for citizens of all ages to speak up for their spaces.

Community as a Stakeholder

Taking the palette of ideas so far presented, with a majority focusing specifically on working with young people, this last section of this paper will look to examine how these principles can be appropriated to assist in improving participatory design with all groups in society. Using the example of a participatory design project in progress located near Concepción in Chile, in the wetlands of San Pedro de La Paz, one can determine the challenges and opportunities of applying these tools to engage citizens in a more interactive way. The process was initiated by the Ministry of Housing and Urban Planning to ensure there was a program in place to involve local people in the process to introduce a new construction project in the area. The participants included a diverse set of professionals including architects, social and heritage workers and representatives from the municipality, in addition to local residents and designated community leaders (fig. 7). These people collectively brought

together a diverse set of skills and points of view, which were developed in a set of distinct activities that were run with the aim to progress the live design conversation, from the briefing process to issues over land management and biodiversity issues. Groups came together in different formations; one approach was to make site visits with a small number from each group, an activity which proved to be fruitful in creating the opportunity to bring up key issues directly. By having the environment that was being transformed in front of the participatory design team obviously provided a canvas to locate and distinguish spaces, flora and territories. However, having a live discussion accompanied by maps and facilitated by the social worker in the team (fig. 8) allowed an engaging process of both professionals and non-professionals informing each other and building a rapport to enable a working relationship to form. The limitation that existed between the expectations of the architect and the ambitions (or lack of ambition) of the citizens created the most tension; however, the interactive engagement with the context allowed the participants opportunities to break past this.



Figure 7 – Participatory group assembled in the Wetlands site visit.



Figure 8 – Resident relating on-site experience to draw resources and maps to architect and social worker.

The second approach was to gather the wider community in a meeting with professionals, totalling up to 200 citizens that were in regular contact with the community leaders who would assist in developing a community wide engagement with the process. This proved to be more difficult for the discussion to be managed and a vast pressure was on the social workers to mitigate tensions between the decision makers and citizens who had been able to distance themselves from entirely direct interaction. For example, the architects would not attend all the meetings that created space for internal discussion between citizens, instead of remaining more open to allow more points of view to contribute to the approach of the designers.

A third approach was based on participants completing questionnaires, to gather more qualitative data, while in parallel offering a platform to ask more open questions about how they would like to see their future wetlands. Referring back to the work focused on young people outlined earlier, the more engaging activities that attempted

to bridge the conversational gap for communicating in spatial terms, using drawings and model making as a common language, were the results of developing these skills through the architectural education endeavours. When attempting to incorporate an option to make drawings in the questionnaire, only 7 of the 200 participants attempted this, illustrating the limitations of non-existent B.E. language to improve the quality of contributions to the participatory process.

One participant stated in response to a question on methods to improve the process in this example, from a Facebook post (translated from Spanish), 'Focus on strengthening education for the entire community (schools, social organizations, etc.) regarding the responsibility for its preservation and permanent care'. By incorporating a level of B.E. education into the participatory process, citizens could develop the ability to talk about spaces from a more spatially conscious perspective, which is critical to encourage designers to listen and take note of the user's thoughts and opinions.

Conclusion

These case studies make a step forward in a process to improve the conversation between designers, decision makers and citizens in the field of Participatory Design. By opening channels for young people to access live projects that affect their own areas, their increase confidence and experience can allow them to

become involved and contribute their own fresh points of view in shaping their future neighbourhoods and cities. A fundamental element of the P.D. process as has been identified in this paper is B.E. education, seen as a great source to dramatically improve the inputs non-professionals can offer to the dialogue. Therefore, it is crucial to present the B.E. discourse as an available entity to all by offering tools to enable citizens to engage at a participatory level of discussion and action. Challenges exist with the realities of limited time and financial resources available to invest in both educating and engaging with citizens. However, there are opportunities in the short and long term to develop opportunities to talk about space, where tools can be developed to improve the built environment conversation, benefitting citizens, designers and design outcomes.

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Notes

- i Räsänen, J. Architecture Education in Finland
- ii Illich, I., 2000. Deschooling society. London: Marion Boyars Publishers.
- iii Wood, E. (2013). Play, Learning and the Early Childhood Curriculum. London: Sage.
- iv Research investigating construction techniques and living patterns of the traditional Mapuche Ruka, which included visiting a number of inhabited sites to gather local architectural and community-based knowledge.
- v Toker, Z (2007). Recent trends in community design: the eminence of participation. Design Studies 28(3): 309-323.
- vi Hester, R (1990). Community design primer. Ridge Times Press, Mendocino, CA us_56f95ef6e4b014d3fe239668