ENABLING BOTTOM-UP PRACTICES IN URBAN AND ARCHITECTURAL DESIGN STUDIOS

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ABSTRACT. This paper discusses the emergent practices in the fields of architecture and urban design and reveals their relevance for the future of design learning. As a starting point it distills three forms of bottom-up practices where: ordinary people reclaim and make urban spaces through self-organized acts (Occupy Urbanism); short-term, affordable and scalable interventions aiming at enabling ordinary people to take part in the shaping of their environment (Tactical Urbanism); and initiatives combining the former two by establishing a hybrid coalition network (Hybrid Urbanism). Reflecting on these emergent practices, it elaborates on how design studio education can be rethought to facilitate socially engaged forms of learning which are capable of challenging the status quo of individualistic design. It suggests Participatory Action Research (PAR) as a potential systematic framework for enabling bottom-up social knowledge building through design actions and reflections between the students, potential users and the socio-spatial context. Furthermore, it makes a brief reflection on how employing PAR in the design studio can help studio teachers to reposition design learning as a social and political practice. Building on this basis it proposes alternative ways for enabling bottom-up practices in the design studio; including a series of socially engaged tactical micro-tasks, thematic design studio assignments and design learning-in-action.

Keywords: Design Studio, Architecture and Urban Design, Bottom-up, Occupy Urbanism, Tactical Urbanism, Participatory Action Research.

1. Introduction

The last four decades have witnessed a worldwide adoption of neoliberal policies which prescribe laissez-faire economics, deregulation, privatization and liberalization (Kaminer et al., 2011). Born in the crisis of the mid-1970s, neoliberalization is best understood as a set of complex processes which represent market-driven social, spatial and economic transformations
distributed unevenly across places, territories and scales (Brenner et al., 2010). Among those, the most notable ones are the prioritization of market-based responses to regulatory problems, intensification of commodification in all realms of social life and the mobilization of speculative financial instruments to create new opportunities for capitalist profitmaking (Harvey, 2005, p.163). These processes had major redistributive consequences to our lives, the cities we dwell in and the ways we make them.

First, around the world, neoliberal policies have transformed the socio-political and spatial context in which urban projects play a significant role. The disciplines of urban design and planning have come under fire because - in their traditional form- they posed significant obstacles to deregulation and privatization. In many cities around the globe -from Istanbul to Brussels, Beijing to New York- these practices have been restructured to serve to the purposes of economic growth (Gleeson and Low, 2000, p.135), competitiveness, entrepreneurship and market-sensitive creativity (Swyngedouw, 2013), and steered towards aggressive city-marketing (Vermeulen, 2009).

Second, urban spaces in our cities were mobilized as a leverage for market-oriented economic growth and opened up to the consumption of the elite (Sager, 2011, p.149). Common resources -and specifically the public spaces in our cities- started to be increasingly exploited by market forces (Helfrich, 2011). As a result, architecture and urban design practices transformed into production modes through which global capitalism and political regimes exercise and express their power (Newton and Pak, 2015, p.101). These promoted urban design and development practices which are disconnected from the needs of the people (Harvey, 2013) (Boyer, 2011, p.5).

Following these developments, the financial crisis of the 2007-2008 and the austerity measures adopted by the governments have moved alternative approaches for making urban spaces to the center stage. Since then, there has been a resurgence in the number of do-it-yourself (DIY) cooperatives initiated by citizens, activists, artists and designers. Ordinary people all around the world have started to claim a shaping power over the processes of urbanization; over the ways in which our cities are made and remade (Harvey, 2013, p.5). In literature, these have been given a variety of names such as: “DIY urbanism”, “make-shift urbanism”, “austerity urbanism” (Tonkiss, 2013).

The international Occupy movements against social and economic inequality produced several relevant examples. In most cases, the citizens went beyond protesting and attempted to establish different forms of temporary commons. For instance the occupation of the Taksim Square and the Gezi Park in Istanbul in 2013 or the Movimiento 15M in Madrid and Barcelona from 2011 to 2015 were clear bottom-up initiatives for
appropriating, reclaiming and redefining public spaces as a reaction to neoliberal planning policies.

In contrast with traditional urban production modes, a key characteristic of these practices is the employment of design tactics grounded in time. Among those are *temporality, openness, ad-hocism, looseness, biophilia and novel approaches to aesthetics* which enable the continuous representation of the user needs (Pak and Scheerlinck, 2015).

**Rethinking Architecture and Urban Design Learning Today**

While urban practices undergo significant transformations all around the globe, there is an increasing interest in architecture and urban design schools to incorporate bottom-up pedagogical frameworks into *design studios* (Salama, 2015). This proves to be a challenging task.

The design studio is the central learning medium for architecture and urban design education (Schön, 1987). However, the traditional studio in its basic form does not necessarily consider the potential users as a part of the design process (Webster, 2006). It is predominantly teacher and student-centred (Newton and Pak, 2015).

In a traditional design studio setting learning process takes place with help of the periodical critiques of an experienced designer, the studio coordinator. The students are evaluated by a small group of practicing reviewers also known as “the jury members”. In this sense, it is a place for “reflection-in-action” through which students learn experientially by designing their own projects (Schön, 1987:p.28). Yet, this reflectivity is mostly limited to the individual interactions (Newton and Pak, 2015).

In this context the design studio setup needs to be connected with the emergent practices which clearly illustrate a shift from strategic thinking to tactical thinking; establishing a different understanding of power and time. In this new paradigm, strategic design is framed as centralized, top-down, slow, expensive and complex urban governance practices disconnected from the people (Lydon and Garcia, 2015) whereas tactical design is preferred as a novel empowering mechanism: bottom-up, agile and decentralized means for ordinary people to challenge the status quo (de Certeau, 1985, p.93).

Considering this paradigm shift, the design studio should be rethought to facilitate bottom-up social knowledge building through tactical design actions and reflections between the students, potential users and the socio-spatial context. In order to reach this goal, there is a need for a novel pedagogical framework for structuring the complex interactions of the students with the society while keeping the focus on the design task(s).

As a systematic method drawing on more than half a century of social research, Participatory Action Research (PAR) stands as a source of inspiration for social practices (Kemmis, 2006). This method involves a series
of self-reflective cycles with the clearly defined steps which can help to organize the learning in-action in a structured manner. However, appropriating PAR in the studio requires reframing design as a form of socially engaged research action. In addition, the affordances of PAR to augment learning in the studio needs to scrutinized.

In this context, this paper will address the following questions on design education:

- What can we learn from the emergent bottom-up architecture and urban design practices?
- How can these be integrated into the architecture and urban design studios?
- How can Participatory Action Research facilitate the above?

In order to address the questions above, this study will start with the extraction of the basic bottom-up principles from several examples around the world. As a result, by distilling the knowledge created, and reflecting on the lessons learned, it will introduce a solid proposition for a future design studio curriculum to augment bottom-up design and learning practices. Building on this basis it will propose alternative ways for enabling bottom-up practices in the design studio; including a series of socially engaged tactical micro-tasks, thematic design studio assignments and design learning-in-action. Furthermore it will reflect on how employing PAR in the design studio can help studio teachers to reposition design learning as a social and political practice.

2. Learning from the Emergent Bottom-up Urban Practices

The global financial crisis of 2007-2008 and its consequences triggered large scale demonstrations against rising social and economic inequality. Starting with the occupation of the Zuccotti Park in New York in September 2011, the protests gained popularity around the world and widespread attention from the media. These massive collective actions went beyond the conventional limits of temporary public demonstrations. Occupation inevitably required spatial use and provided opportunities for the exploration of alternative modes of living. As a reaction to neoliberal planning policies, the protestors reclaimed and redefined urban spaces in humbling but creative ways. It is clear that all of these were made without the help of a master plan, a master designer or a centralized board of authorities.

In this context, the Occupy Movements around the world evoked the “forgotten” idea that political action lies at the heart of the invention of space and the making of this space is a work of imagination (Dikec, 2015). These pluralized the public sphere, created event-spaces which provided
opportunities for direct participation and in this way placed public spaces back on the agenda as a platform for social and political representation (Kioupkiolis and Katsambekis, 2014, p.13).

Since then, inspired by these movements, novel urban practices have emerged all around the world (Ferguson, 2014). Frequently initiated by grassroots collective action groups and/or urban design offices, these aim to integrate the emerging needs of the people from the ground-up, in a responsive and informal manner. In different ways, these practices bring governmental actors and local civic networks together to empower ordinary citizens through the design and implementation of catalytic urban interventions. They point out to tactics that range across different directions, from temporary to permanent; public to private; authored to anonymous; collective to individual; legal to illegal; unmediated to mediated (Iveson, 2013). In this sense, the recognition of the diversity of approaches is essential for developing a better understanding of these emergent practices.

In this paper I will discuss them by means of three distinctive themes. I will use *Occupy Urbanism* to describe DIY practices where ordinary people reclaim and make urban spaces without the lead of an urban design or planning authority through various acts of *commoning*: the collective ownership and management of resources. This process is dominantly self-organized. The socio-spatial-political interventions during the Gezi Park occupation are an example of this sort of emergent practices.

The second practice, *Tactical Urbanism* involves short-term, affordable and scalable interventions aiming at enabling ordinary people to take part in the shaping of their environment (Lydon and Garcia, 2015). This empowerment takes place in two ways: during the design process and, most importantly, through the design product itself. A clear indicator that differentiates this Tactical Urbanism from Occupy Urbanism is that it is executed according to a short-term plan and/or a project. I will use the R-urban temporary project in Colombes, France to illustrate and discuss this mode of operation.

The last mode I will discuss is *Hybrid Urbanism*. It is a blurry mixture of the two practices introduced above, combining commoning practices and planning by establishing a hybrid coalition network composed of a complex combination of actors. I will elaborate on Commons Josaphat in Brussels as an example of this sort of making spaces.

In the following parts of this paper, I will make a review of these three cases—without flattening out the differences and I will elaborate on the implicit design tactics behind them by making a critical analysis.

### 2.1 Learning from Occupy Urbanism

As discussed at the beginning of this paper, in recent decades, neoliberal policies around the world aimed (and partially succeeded) to privatize “the
common” by turning information, ideas and even plants and animals into private property (Hardt and Negri, 2011). Rooted in the protests against globalization, such as in Seattle in 1999 and Genoa in 2001, fueled by the Great Recession of the 2007-2008 and inspired by Tahrir Square protests, Occupy movements around the world developed novel ways to challenge these policies.

An evident case was the Occupy Gezi Movement in Istanbul (Turkey) in 2013 which emerged bottom-up as an event-space for protest, enabling the representation of a multitude of approaches (Figure 1). The park and the square are located at the heart of Istanbul and both were arenas for political manifestations throughout the history of the Republic.

**Figure 1.** Occupy Gezi Movement in Istanbul in June 2013. A map of the variety of political parties involved produced by “Postvirtual” (on the left) Creative Commons BY-NC-SA license and Screenshot from a drone video by Jenk K (2015) (video shot 05 June 2013) (on the right).

In a nutshell, Occupy Gezi was 1) a large-scale gathering of people from different backgrounds 2) at a strategic location with a politically loaded history 3) with activist motivations to stand against neoliberal urban policies 4) employing horizontal decision-making mechanisms and 5) creative spatial practices. These characteristics and modes of operation were significant because -arguably for the first time in the history of the republic- the diversity of the protesters did not create conflict and fragmentation. From this perspective, Gezi Park accommodated preliminary forms of a "multitude"; a concept coined by Hardt and Negri (2005, p. xiii) to describe:

“a living alternative… that provides the possibility that, while remaining different, we discover the commonality that enables us to communicate and act together… composed of innumerable internal differences that can never be reduced to a unity or a single identity-different cultures, races, ethnicities,
genders, and sexual orientations; different forms of labor; different ways of living; different views of the world; and different desires.”

In order to accomplish this, the protestors challenged the framework of existing socio-spatial relations and established new ones. A way of doing this was to reclaim the public space through the creation of novel and temporary urban commons. For almost two weeks Gezi Park and the Taksim Square was turned into a temporary autonomous zone (TAZ) (a socio-spatial and political intervention method which involves creating temporary spaces to challenge the power structures (Hakim Bey, 1991).

During the occupation timeframe, the occupiers self-organized the park and the square through horizontal mechanisms and extensively re-appropriated them as “urban commons” to serve to and sustain niches of a living alternative, the multitude. Besides pitching tents all over the park, the occupiers built (Hattam, 2015):
- a public library out of paving stones and bricks (without mortar)
- stalls for the distribution of donated food and water
- a paving-stone sharing wall with remedies
- a wishing tree out of the left over construction materials
- free cellphone charging stations; art and photo galleries
- collective vegetable gardens
- an infirmary and a veterinary clinic
- a children’s art workshop, memorials and murals,
- an open-air hotel
- a livestream TV-media center

These were managed in a collective manner, aiming at equitable access and use, which are the necessary conditions for the emergence of commons (Bollier, 2007).

Furthermore, Occupy Gezi performed a series of temporary events which are most similar to a festival -or even a carnival. Forums, concerts (rock, folk and various popular artists), improvisational piano recitals, movie shows, theater, ballet and modern dance performances accommodated a diversity of art forms, and enabled informal social encounters. Among those, forums were one of the most successful attempts of making social and political spaces which established new cultures of openness and tolerance. They quickly spread all over the city and served as event-spaces of negotiation across diverse communities. These were not only essential to the creation of temporary multitudes but also made long-term impact on the society.

2.2 Learning from Tactical Urbanism

As introduced above, after the Great Recession of 2007-2008, a new kind of participatory culture has gained popularity and triggered a paradigm shift
(Krivý and Kaminer, 2013). This “participatory turn” inspired the urbanists, architects, designers and activists who have long been experimenting with the idea of creating temporary and low-cost urban spaces; a practice known as “Tactical Urbanism” (Lydon and Garcia, 2015).

Instead of employing strategies -the formal power tool- of the governmental planning organizations, this kind of urbanism focuses on creative tactics as a counter approach. The main aim of these tactics is to develop and demonstrate alternatives to the existing centralized, top-down, slow, expensive and complex urban governance practices disconnected from the people. For this reason, Tactical Urbanism extensively relies on decentralized practices, combines top-down and bottom-up processes, uses temporary and networked modes of operation, and produces low-cost and low-tech products.

Lydon and Garcia (2015) stress that do-it-yourself and make-shift urban interventions cannot be categorically considered as “tactical” because they don’t necessarily follow these principles. At this point the difference between Occupy Urbanism and Tactical Urbanism becomes evident. The latter is rather emancipatory than bottom-up: it recognizes the power imbalance and aims to empower citizens through the use of specific tactics in urban design practices.

Urban projects such as R-urban (Figure 2) by Atelier d'Architecture Autogérée (aaa- an urban design office based in Paris) are deeply rooted in Tactical Urbanism. Initiated in 2008, the R-Urban project aimed to develop and implement an alternative and ecological approach to urbanism on the outskirts of large city.

Figure 2. Agrocite, a part of the R-urban Project at Rue Jules Michelet, Colombes, France by Atelier d'Architecture Autogérée Architectural/Urban Design Office. Photo taken April 27, 2013 (Creative Commons Non-commercial use License)
R-urban was designed specifically to be built on a piece of land temporarily loaned for three years by the Municipality of Colombes and involved three groups of interventions that were meant to work together (R-urban, 2015):

- community gardens, an ‘AgroLab’ focusing on organic agricultural production and relevant activity areas;
- a gallery of building materials, recycling workshops and various materials for local production of materials needed for operation of the project;
- a cooperative housing complex combining social housing, residences for students and researchers.

The project was designed to be sustained through autogestion (Petcou and Petrescu, 2014). This term -as used by aaa in the original French text- has specific historical connotations in French culture such as the practices during the short-lived Paris Commune government in 1871. In this specific political sense it is a type of collective self-management that allows a re-appropriation of a form of collective organization.

The critical tactics in the R-urban case to enable autogestion were to empower people by establishing commons in the form of community gardens and providing the ecological and productive infrastructure necessary for the development socio-economical capital for the initiated projects to thrive autonomously. Unfortunately at the time of writing this article, the project was planned to be replaced by a parking lot by the municipality. On the official Facebook page of R-urban, the local communities expressed their desire to keep the intervention or move it to a different location.

2.3 Learning from Hybrid Urbanism Practices: Tactical Occupation

Some of the emergent urban practices are significant in the way they employ divergent tactics that range across different vectors during their lifetime. Incorporating elements of Occupy Urbanism and Tactical Urbanism, they provide interesting cases to learn from.

A clear example is “Commons Josaphat” based in Brussels, Belgium. Brussels-Capital Region Government is the official owner of a large area of twenty four hectares in the Josaphat terrain in Schaerbeek, Brussels. Therefore the site can be considered as public property. For many years the terrain has been waiting for a new use. A master plan has been prepared for this site without the participation of the citizens. This plan foresees a complex mixed use program including public and private housing, public facilities, offices, a green space, a hotel, shops and upgrading and densification of the industrial zone.
As a reaction to this project, in 2012 a group of academics, urbanists, activists and locals came together to think about the potential of commons for this area and founded Commons Josaphat. The main aim of the group is to create an alternative for this wasteland, inspired by practices of the commons and motivated by contemporary ecological issues (Commons Josaphat, 2015). They intend to propose to the government a concrete way to build the common good, to give decision-making power to the assembly composed of all people who have a stake in the future of this neighborhood.

These include local citizens, those who will live there, those who wander on it, those who work there, who look at the construction of the balcony of their window (Commons Josaphat, 2015). It is clear that a repeating theme in the statements above is the use of commoning as an alternative practice. At the moment, Commons Josaphat is in the process of writing a collective text defining the future of the site as commons. During the writing phase, they are organizing different thematic workshops that are open to everyone. These ideas resonate with Tactical Urbanism and suggest the emergence of a rather participatory version of the R-urban Project. However, what makes Commons Josaphat interesting is that their activities are not limited to planning. As of August 2015, parts of the site have been occupied by the group to form:

- an urban collective garden;
- storage of relevant resources, water tanks, compost etc.;
- a barbecue and a dining table made out of palettes and pieces of wood;
- foundations of a future shed to be constructed using surplus pallets found on the site.

All of the interventions above are intentionally made to “float” on the ground both as a gesture to avoid permanence and to avoid possible legal conflicts (Figure 3). The recent talks with the government led to the idea of granting a temporary use license to Commons Josaphat.

Figure 3. The occupation of Josaphat Site in Brussels by Commons Josaphat. Photo taken August, 10, 2015 by Burak Pak.
The hybrid mode of operation of Commons Josaphat covers various novel tactics. Firstly, while the site is being reframed and designed as *commons*, the citizens learn from the active occupation going on in the field. This leads to an incredibly dynamic and agile process where the design is informed by incremental occupations.

Secondly, although three years have passed since its formation, the group has not produced a formal visual plan yet. This allows the process to be open. A counter-project is being prepared slowly in the form of an “open-source text” shared on the web which contains interesting suggestions and ideas—incorporating the feedback from the relevant parties.

### 3. A Novel Approach to the Urban and Architectural Design Learning in the Studio

Urban and architectural design education is well-known for its highly reflective practices which evolved significantly since the nineteenth century *ateliers* of the École des Beaux-Arts. Today design studio is perceived as central to design learning as a platform to enable the students to learn-by-designing. Since design knowledge is not easy to externalize, the studio coordinators and external jury members convey this implicit knowledge through reflective reviews by triggering “knowing-in-action” (Schön, 1987). Through the reflective processes of field observation, analysis, planning and feedback, the students develop design alternatives and interpret and explore the possible impacts of these relying on drawings, visualizations, simulations and social/self-reflections.

The students are expected to consider their design alternatives together with the existing social, spatial and political urban context and build relationships between these while redefining them. Unfortunately, these processes rarely include learning from the locals and potential users; especially in the later stages of the design process. Furthermore, one-off jury reviews are organized in a limited amount of time which diverts the focus towards the design product rather than the learning process (Koch et al., 2002). Very little time is left to the students to receive feedback and they are not motivated enough to be active participants in this process (Webster, 2007).

Learning from the emergent bottom-up practices reviewed in Section 2, I would like to introduce alternative ways to challenge the issues referenced above. This process will take place in two interactive tracks:

- learning from the design approaches behind the bottom-up projects
- learning from the emergent making processes and the changing role of the architects, urban planners and designers
In the following Section I will elaborate on how they can be integrated into existing studio curriculum in a systematical manner leading to a novel approach to the urban and architectural design learning in the studio.

3.1 Enabling Bottom-up Practices in Design Learning

The analysis of the three modes of emergent bottom-up practices of urbanism revealed various tactics which can be appropriated for design as well as design learning. These can be grouped under the themes of temporality, ad-hocism, open-endedness, looseness and novel approaches to aesthetics.

To start with, the most prominent strategy was temporality, the enabling ways in which the spatial production related to time. All of the novel modes of urbanism introduced in Section 2 involved making ephemeral spaces which are implemented only for a relatively short amount of time. This quality facilitated the establishment of a less dominant power relation between the intervention and the users without weakening the impact of the reviewed practices. In fact, all of the reviewed cases were aimed at triggering long-term transformations at social, spatial and political levels and partially succeeded in their attempts.

In addition, the temporality of the novel forms of urbanism enabled making small incremental changes through ad-hoc processes. This strategy was characterized by the avoidance of pre-planning and tendency to respond only to the urgent as opposed to the important (Pak and Scheerlinck, 2015). Instead of establishing long-term and predictable planning procedures, ad-hocism brought improvisation and spontaneity into spatial production.

Moreover, compared with conventional practices, the time intervals of the cycles of planning, appropriation and re-planning were relatively short. The agility of the process enabled learning from temporary users and rapidly integration of this knowledge back to the temporary spaces creating a dynamic mode of operation.

In this context, temporary spaces performed as open-ended systems which enabled user organization, feedback and intervention in a self-regulatory, indeterminate manner and without a limited end-state until they are disturbed by the authorities. This incompleteness and refusal of a single static desired final state created new forms of openness –as described by Peters and Jandrić (2015, p.196)- shared practices which reconstitute the social through collective intelligence.

Another generative quality of the spaces created through emergent bottom-up urbanism practices was looseness. Loose spaces are characterized by the triad of diversity, possibility and disorder (Franck and Stevens, 2013). These three elements were prominent in all cases reviewed in the previous section. These were appropriated to challenge the certainty, homogeneity and order in the dominant status quo. They proved that ordinary citizens are
capable of making and appropriating spaces for their own uses, in their own
divergent, creative and chaotic ways if they were given opportunities to do so.

In addition to the novel perspectives above, bottom-up practices brought
a novel approach to spatial aesthetics. The extensive use of recycled
materials (most commonly wood and shipping pallets), re-appropriation of
ordinary found-objects and the ways in which they are combined with the
natural elements to create furniture, decks, walls and load-bearing structures
illustrate alternatives to top-down aesthetics.

In this sense, bottom-up aesthetics is no more a field of expertise at the
center controlled by elite designers; rather an improvised byproduct of an ad-
hoc process which emerge spontaneously. This mode of creativity has close
links with junk-art or trash-art: critical artistic practices which heavily reuses
abandoned materials, furniture and debris to produce art that reflects “the
consumerism and our obsession with power” (de Pajaro, 2015).

It is possible to integrate the tactics and approaches introduced above into
design learning in several different ways:

**Tactical Micro-Tasks:** This method involves designing cycles of small
weekly tactical tasks for the students to promote bottom-up learning. For
instance through making ad-hoc artistic installations or making temporary
occupations with the local users (Figure 4) it is possible to learn about the
needs and dreams of the ordinary people and gain a better understanding of
critical problems surrounding a specific urban context.

![Figure 4. A Tactical Micro-Task organized in the framework of an the Urban Design Studio in KU Leuven Faculty of Architecture. Workshop tutor: Koen de Wandelaar; Studio Coordinators: Livia de Bethune, Chotima Ag-Ukrikul, Roeland Dudal, Burak Pak.](image)

**Thematic Design Studio assignments:** The design studios are frequently
organized along themes and places. In this context, these can be carefully re-
framed to facilitate integrative bottom-up processes. For instance, a studio with the theme of “Making Collective Spaces for Super-diversity” (Pak, 2015) in a socially, spatially and politically super-diverse urban neighborhood with limited resources may help to motivate the students to explore novel bottom-up tactics and approaches.

Learning-in-action: This method suggests the founding of real-world action research laboratories for learning. In a nutshell, these are learning environments (living labs) that facilitate continuous interactions with the local communities, non-governmental and activist organizations. The main aim of this practice is to engage students in the bottom-up making and remaking of urban spaces as active agents and develop the skills for learning-in-action.

3.2 Reframing Urban-Architectural Design Learning as Participatory Action Research

As discussed at the beginning of Section 3, the existing frameworks for design learning in the design studio fail to address and facilitate bottom-up practices. Due to the complexity and divergent nature of the design practices, it is not an easy task to engage local communities into design learning, specifically in the design studio.

In the last and the conclusive section of this paper, learning from the emergent making processes and the changing role of architects, urban planners and designers I would like to suggest rethinking design learning in the studio as a Participatory Action Research practice.

With a long history in emancipatory social practices, Participatory Action Research is distinguished by three characteristics: shared ownership of research projects, community-based analysis of social problems, and community action (Kemmis, 2006). In research contexts in which the action involve community engagement it can be considered well-suited as a research method for enabling bottom-up practices.

In brief the process of Participatory Action Research involve a series of self-reflective cycles with the essential steps of: 1) planning, 2) acting and observing the process and consequences of the change, 3) reflecting on these processes and consequences, 4) re-planning and 5) acting and observing again. These steps can help to implement integrative suggestions in the former section in a structured manner using this framework.

In line with the emergent urbanism practices, participatory action research method enables breaking the learning tasks into small increments (Figure 4) with minimal planning and does not necessarily involve long-term planning. Cyclic iterations of research can be configured as short or long time frames that last from one to several weeks depending on the context (Muir, 2007).
Employing Participatory Action Research (PAR) in the design studio helps us reposition design learning as a social and political practice in various ways. First, it provides a structured framework for addressing **temporality**. Second, it helps promoting engagement with the real-world issues and users, identifying issues and diagnosing problems as a clear starting point. Third, as the following steps, it motivates self-planning and re-alignment of the research processes in parallel to the emergent practices reviewed in Section 2.

The innovation that emerge out of the reframing of PAR to design learning is that, it creates an expectation from the student to take action and intervene. In the design studio context, the nature of this action is scalable. It can change depending on the progress of the research study. For instance, in the first week the action of the student can be to make interviews with the locals and make personal observations whereas in the later stages it can involve creating experimental urban spaces with the potential users in real-world (Figure 4).

As a conclusive step, reporting findings in this framework refers to making a reflection on action and interventions together with the peers and studio coordinators. This step enables the coordinators and fellow students to give feedback on the former action as well as on the planning of the next action.

4. Conclusions and Future Directions

As a result of decades of neoliberalization, architecture and urban design became increasingly isolated from the society - and most importantly - the users. However, this problematic trend has started to change since the Great Recession of 2007-2008. The creative practices of the Occupy Movements
around the globe and scarcity caused by the austerity measure brought novel bottom-up approaches for making spaces to the center stage. Today, it is possible to claim a shift towards “social turn” which is rapidly changing architecture and urban design thinking towards more participatory and activist trajectories.

In parallel to these approaches there is an increased interest in architecture and urban design schools to incorporate bottom-up pedagogical frameworks into design studios. The rapid evolution the emergent urban practices produce inspiring tactics for social engagement and bottom-up empowerment which the design schools can learn from and experiment with. However these are challenging tasks.

The traditional pedagogical setup of the design studio mostly focus on the individualistic learning processes. It is predominantly oriented towards top-down practices and consequently fails to motivate the student to learn from the users and make social interactions in a systematic manner. Reflecting on these challenges, it is necessary to rethink the design studio setup to learn from emergent practices and facilitate bottom-up social knowledge building through tactical design actions and reflections between the students, potential users and the socio-spatial context.

In order to accomplish this goal this study made an in-depth review of the emergent practices. Learning from the design approaches behind the bottom-up projects, the novel spatial production processes and the changing role of the designers it distilled three forms of bottom-up design: Occupy Urbanism, Tactical Urbanism and Hybrid Urbanism. The analysis of these three modes of emergent bottom-up practices of urbanism revealed various tactics which can be appropriated for design as well as design learning. These are discussed under the themes of temporality, ad-hocism, open-endedness, looseness and novel approaches to aesthetics. In a nutshell, the review concluded that:

- **Temporality** can potentially facilitate the establishment of a less dominant power relation between the intervention and the users. It is a way to enable making small *incremental* changes

- In contrast with long-term and predictable planning, ad-hocism brought *improvisation* and *spontaneity* into spatial production

- The *agility* of the process enables learning from temporary users and rapidly integrating this knowledge back to the temporary spaces creating a dynamic mode of operation

- Temporary spaces performed as *open-ended* systems which enabled user organization, feedback and intervention in a self-regulatory, indeterminate manner and without a limited end-state until they are disturbed by the authorities
- Characterized by diversity, possibility and disorder, looseness served as means to challenge the certainty, homogeneity and order in the dominant status quo.
- Bottom-up practices introduced a novel approach to spatial aesthetics; bottom-up aesthetics as an improvised byproduct of an ad-hoc process which emerge spontaneously.

These can be inspirational and interesting for future design studios in various ways. First, as tactics to facilitate bottom-up social engagement; second, as design approaches to empower the users through the product; and third as elements of thematic studios. Building on these conclusions and the discussion above this paper suggested three alternative ways to integrate these tactics and approaches:

- Tactical Micro-Tasks, designing cycles of small weekly tactical tasks for the students to promote bottom-up learning.
- Thematic Design Studio assignments, a careful combination of themes and places to facilitate integrative bottom-up processes.
- Learning-in-action, the founding of learning environments (living labs) that facilitate continuous interactions with the local communities, non-governmental and activist organizations.

It is clear that these suggestions are not sufficient on their own to answer the challenges in the traditional design studio. Engaging students in the bottom-up making and remaking of urban spaces as active agents and develop the skills for learning-in-action requires a novel reflexive setup. There is a need for a holistic framework for the systematic integration of these into design learning processes.

For this purpose, the final part this paper elaborated on potentials of rethinking design learning in the studio as a Participatory Action Research practice. The cyclic iterations PAR were reframed as short and long time frames of design actions that last from one to several weeks depending on the context. The self-reflective PAR cycles with clearly defined steps served to organize learning in-action in a structured manner. This enabled the breaking of the learning tasks into small increments of socially engaged actions and provided a structured framework for addressing temporality in a novel manner. The main contribution of reframing of PAR to design learning was to demonstrate its potentials for motivating the student to socially engage with real-world problems and reframe the relations between users and design students.

In the near future the suggestions above will be tested in a design studio setting to research their affordances to accommodate learning. The author of this paper has designed a novel theme for a design-based Master’s Dissertation in KU Leuven Faculty of Architecture to appropriate and evaluate the tactics.
and PAR method with six architect-students. This study will be valuable to deliver empirical results to test their potentials to enable bottom-up practices in urban and architectural design studios as well as their applicability in a real-world setting.

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Short bio

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