

## #FOGWASTE: Participatory urbanism towards place-understanding

### #FOGWASTE: urbanismo participativo para uma melhor compreensão do contexto

**Nina Claire Napawan**

ncnapawan@ucdavis.edu

Department of Human Ecology, University of California, Davis, Hunt Hall, One Shields Ave., Davis, California, 95616, United States.

**Brett Snyder**

blsnyder@ucdavis.edu

Department of Design, University of California, Cruess Hall, One Shields Ave., Davis, California, 95616, United States.

---

#### Abstract

Participatory urbanism is on the rise in communities struggling to develop quality public spaces in constrained environments. In light of the growing practice of community-based strategies to shape urban place-making, this paper argues for an increased role of community engagement in urban place-understanding. It presents the work of feminist environmental artists of the 1970s as a precedent for participatory approaches towards infrastructure awareness and environmental stewardship, and discusses opportunities for expanding the impact of their approach through digital media integration. Lastly, the paper concludes with a contemporary case-study as an engaged model for improving urban systems function. The case study presented represents a collaboration between the authors and the City of San Jose to engage pilot communities with a greater understanding of the connections between household practices of waste water management and urban sustainability.

**Keywords:** participatory urbanism, community engagement, environmental art, urban infrastructure, social media, urban sustainability.

#### Resumo

O urbanismo participativo é considerado cada vez mais importante para aplicação em comunidades que lutam para melhorar a qualidade do espaço público em contextos com restrições. À luz de uma crescente prática de estratégias baseadas em comunidades para a construção do lugar no âmbito urbano, este artigo afirma a relevância do engajamento de uma comunidade na compreensão de um contexto urbano. Ele apresenta o trabalho de artistas ambientais feministas da década de 1970 como um precedente de abordagens participativas para a consciencialização a respeito da infraestrutura e a gestão ambiental, e discute oportunidades para expandir o impacto da sua abordagem através da integração de mídia digital. Finalmente, o artigo termina com o estudo de um caso contemporâneo, modelo de engajamento para melhorar o funcionamento dos sistemas urbanos. O estudo de caso apresentado é relativo à colaboração entre os autores e a cidade de San Jose para engajar comunidades-piloto por meio de uma maior compreensão das conexões entre as práticas domésticas de gestão de resíduos de água e a sustentabilidade urbana.

**Palavras-chave:** urbanismo participativo, engajamento comunitário, arte ambiental, infraestrutura urbana, mídias sociais, sustentabilidade urbana.

---

#### Introduction: participatory urbanism and spontaneous interventions

*Spontaneous Interventions: Design Actions for the Common Good*, the U.S. presentation at the 2012 International Architecture Exhibition at the Venice Biennale, sparked a conversation among environmental designers that continues to linger for years following, regarding community-based practices and participatory design methodologies. The exhibition highlighted over 100 examples of “designers

acting on their own initiative to solve problematic urban situations, creating new opportunities and amenities for the public” (*Spontaneous Interventions*, 2015). This interest in participatory and community-based design to achieve temporary and often unsanctioned interventions in the built environment is coupled with the rise of digital social media as a means of organizing collaboration and action – another nascent conversation amongst designers. *Chair Bombing* by DoTank, *Legal Waiting Zone* by Ghana Think-Tank, *Parkmobiles* by CMG Landscape Architecture, and *Pop*

*Up Lunch* by Alexandra Pulver represent just a few of the many urban interventions that establish places for people in cities struggling to meet the socio-spatial needs of urban communities (Spontaneous Interventions, 2015). *Museum of the Phantom City* by Cheng+Snyder, *Openplans* by Openplans, *Occupy Wallstreet* by OWS Architecture Working Group *et al.*, *Neighborland* by Neighborland, and *Trees, Cabs, and Crime* by Stamen represent others that utilize digital networking tools to increase access to municipal data and enable inter- and intra-community collaboration (Spontaneous Interventions, 2015). Many of the projects do both: integrate community place-making with social media tools. This coupling of social networking and design process is particularly compelling, as the design community resurrects the values of Randolph Hester's original call for community participation (Hester, 1990) and social media becomes an increasingly powerful tool in building community capacity. The recent selection of Alejandro Aravena as the 2016 Pritzker Architecture Prize Laureate in architecture underscores this contemporary focus on community-engaged design. As noted by the organization, Aravena's work "epitomizes the revival of a more socially engaged architect" (The Pritzker Architecture Prize, 2016).

Within the conversation on Participatory Urbanism (also referred to as DIY, Tactical, or Guerilla Urbanism) that has continued since the exhibition, a common murmur of critique can be heard of the exhibition and of many of the design interventions represented within it: While claiming the use of participatory methodologies and design for the common good, the predominant players in these actions are still professional designers. And while non-professional designers may have played a role in either the process or the use of the design, rarely is it community initiated or adaptive. As such the presence of a non-professional design voice within these interventions has likely not reached its full potential. Many of these examples of 'spontaneous interventions' appear to fall short of the possibilities that social media provides in giving a voice to the

community. Tangential to this critique is a growing need to conceptualize cities as more than a collection of places, but as a functioning system of parts (Gandy, 2005). Given the predominant focus of designing discreet places within the current participatory urbanism movement, there is a missed opportunity to consider the community perspective as a contributor to these interventions that might allow an expansion of the understanding of place to be evolving and systematic, not static products. In short, the exhibition focused primarily on creating discreet places, and not understanding the city as functioning systems.

### Precedents in feminist environmental art

Efforts to engage communities with their cities are not new, and, in fact, precedents for utilizing participatory processes in interrogating urban infrastructure exist. Since the 1970s, environmental artists Jo Hanson and Mierle Laderman Ukeles built their career on bringing awareness to urban waste management in the cities with which they lived. Hanson's work began from a personal effort to address the conditions of her own neighborhood in San Francisco, and evolved to an effort to link urban sustainability with the human behavior relative to it (Steinman, 1995). The very act of sweeping the city streets outside her home became a means of linking her domestic actions with her neighbors, and the majority of her waste-based work operates on the balance of daily ritual and performance art. But it was the sophisticated manner in which she integrated these acts with community members and civic events – displaying the contents of her collected sweepings at schools, churches, and even City Hall – that elevated her work from mere domestic activity. In her 1980 project, *Public Disclosure: Secrets from the Street*, Hanson exhibited at San Francisco City Hall ten years' worth of street litter, labeling the debris like treasures befitting an archeological exhibition. This display was coupled with slide shows depicting the collection and sorting process which in-



Figure 1. *Spontaneous Interventions* exhibition, Chicago, 2012.

cluded community involvement and integrated with city staff and civic events. Thus the process in which objects transformed from litter to artwork was an extension of the project itself, and that process included community participation. Following the success of this and related projects, Jo Hanson spearheaded the first artist residency at the Sanitary Fill Company in 1990 (later to become Recology), developing the program that continues to house three artists annually charged with promoting public awareness of environmental issues (Recology, 2015).

Roughly concurrent with Jo Hanson's work, but operating on the opposite coast in New York City, Mierle Laderman Ukeles was tackling similar connections between domestic ritual and the creative process. Her 1969 manifesto, *Maintenance Art*, established a new genre of practice that acknowledged a unique tension between the valuing and de-valuing of objects and actions. Ukeles challenged the evaluation of her processes and actions as either maintenance or art: "I am an artist. I am a woman. I am a wife. I am a mother. (Random order). I do a hell of a lot of washing, cleaning, cooking, renewing, supporting, preserving, etc. Also (up to now) separately I do Art. Now I will simply do these maintenance everyday things, and flush them up to consciousness, exhibit them, as Art" (Ukeles, 1969, p. 3). What evolved from this interest in elevating everyday domestic actions as performance art was a body of work that established Ukeles as a leader in connecting private and public spheres, connecting the domestic to the systematic to address waste infrastructure in urban communities (Feldman, 2009). Her 1978 performance piece, *Touch Sanitation*, resulted from a series of interviews with New York City sanitation workers in which she discovered the dissatisfaction of workers with the general public's negative perception and treatment of workers. The project included an eleven-month period of Ukeles walking the five boroughs of New York City, shaking hands and thanking sanitation workers as she encountered them (Thompson, 2015). In this project, Ukeles sought to recognize and elevate the work of individuals as contribut-

ing to an important system of infrastructure. She embraced the infrastructure of waste management like a performance artwork itself, and the maintenance crew as participants and community-members.

Thirty years later and the collective waste-based works of Hanson and Ukeles still provide relevant precedents for contemporary designers seeking community integration with design processes. In particular, both women understood broader definitions of community than are often utilized today, including the designer as well as city agencies and maintenance crews (those who serve the community) to that list. Secondly, both Ukeles and Hanson embrace process as a critical component of their creative work. This focus on process includes a recognition of city and community function to produce metadesign (Ehn, 2008), and incorporates community perspectives as a component of the artworks. Another important facet of both artists' work includes illuminating the impact that domestic action can have upon infrastructural systems and thusly environmental health. Furthermore, these women embedded the exploration of infrastructure within common urban sites: homes, streets, and civic centers. So often the call to design solutions to complex environmental problems seeks ever new technologies to address the issue, new technologies that often come with new environmental problems (e.g. designing larger infrastructural systems to support greater waste generation), whereas these artists looked to the patterns, habits, and awareness embedded in everyday acts that might prevent the issue from occurring in the first place (e.g. tackling awareness of infrastructure and the impact of domestic habits on these systems). This approach, as exemplified by Hanson and Ukeles, was considered a feminist approach in the 1970s, although the authors would argue it's a holistic and rational approach today – one needed to continue to tackle the complex environmental problems still present in our built environments, and broaden the impact of contemporary participatory urbanism projects.



**Figure 2.** Jo Hanson, *Public Disclosure: Secrets from the Street*, San Francisco, 1980.



**Figure 3.** Mierle Laderman Ukeles, *Touch Sanitation*, New York City, 1978.

### The rise of digital media

These women's work existed prior to digital networks and social media, tools which are now deemed essential to a contemporary approach to participatory design. While the tools may be farther and faster reaching than those utilized by Hanson and Ukeles, the need for community participation, multi-scalar thinking, and metadesign in participatory urbanism remains. It will require the integration of Ukeles' and Hanson's approaches with digital networking tools to achieve a truly engaged practice of urban place-understanding.

Aside from the examples present in the *Spontaneous Interventions* exhibition, there are alternative precedents of social media's role in community engagement; these are evidenced in examining significant political and environmental events that have prompted informal community networking. #BlackLivesMatter, #ALSicebucketchallenge, #BringBackOurGirls, and #ArabSpring represent just a few of numerous movements that have employed social media as a tool to increase awareness and to advocate for action on local, national, and global scales. Most notably, the #OccupySandy movement demonstrated the unique opportunity social media provides in networking communities within a city to support recovery and resilience from catastrophic storm events. As noted by the Homeland Security Studies and Analysis Institute: "Within hours of Sandy's landfall, members from the Occupy Wall Street movement used social media to tap the wider Occupy network for volunteers and aid. Overnight, a volunteer army of young, educated, tech-savvy individuals with time and a desire to help others emerged. In the days, weeks, and months that followed, "Occupy Sandy" became one of the leading humanitarian groups providing relief to survivors across New York City and New Jersey. At its peak, it had grown to an estimated 60,000 volunteers—more than four times the number deployed by the American Red Cross" (Ambinder and Jennings, 2013). The report concluded that the following elements had supported the success of the community-based relief effort (components that the authors would argue also support efforts at place-making

and place-understanding within cities): (i) The horizontal structure of Occupy Sandy enabled the response functionality to be agile; (ii) Occupy Sandy used social media as the primary means to attract and mobilize a large volunteer corps, identify real-time community needs, and share information. Open-source software tools were used to coordinate rapid relief services; (iii) Occupy Sandy leveraged the Occupy Wall Street infrastructure to emerge within days of the storm; (iv) Occupy Sandy leveraged existing community infrastructure to address needs, establish trust relationships, and build local capacity; and (v) Transparent practices increased trust among Occupy Sandy members and the general public (Ambinder and Jennings, 2013).

Landscape architect Gary Strang states in his manifesto, *Landscape as Infrastructure*: "Utilitarian intrusions – which often result in disturbed landscapes, defaced retrofitted buildings and the erasure of nature that we have come to accept as the everyday urban and regional landscape – are actually opportunities. Designers can generate meaningful new architectural, urban and regional forms by integrating the works of the estranged disciplines of architecture, civil and structural engineering, landscape architecture and biology" (Strang, 1996). The authors would argue that digital technology and social media networking are the ideal tools for integrating environmental designers with these urban utilitarian infrastructures. Sociologist Manuel Castells has theorized about the role that knowledge of technology, information, and access to networks will play in the new 'informational economy' (Castells, 2000). Environmental designers striving for participatory processes must also engage in these technologies to remain relevant in the contemporary digital age, an age which Castells argues will be organized completely around electronic media.

### Maintenance and the sustainable city

While digital technology can become an important tool for networking communities and addressing urban, environmental, and/or societal problems, the authors believe that technology alone will not address the full set of

socio-spatial issues facing contemporary cities. As mentioned prior, Mierle Laderman Ukeles' and Jo Hanson's work exemplifies the opportunity to utilize community outreach and participation as a means to garner greater understanding and stewardship of their urban environments. Maintenance work (whether performed by domestic housewives or paid sanitation crews) became the critical entry to address human behavior and the awareness of its impact on city systems. This contrasts dramatically with the current environmental design efforts at addressing sustainability within the contemporary city. With regard to participatory urbanism, urban sustainability is rarely addressed as a primary goal, although projects such as *Field Guide to Phytoremediation* (youarethecity) and assorted urban greening and urban agriculture projects represented in the Spontaneous Interventions exhibit have ecosystem services potential. Predominant theories on sustainable urban development include the application of planning and design tools to limit greenhouse gas emissions through a combination of mixed-use development, transportation alternatives, and applying innovative technologies to energy production and waste management (Wheeler and Beatley, 2004). More specific examples of these efforts include renewable energy generation, closed-loop waste management systems, and improving building efficiency. These techniques represent a large-scale infrastructural design approach; they are also often very costly and applied primarily to new development. The advantages of the maintenance-based approach (and the influence of human behavior) towards improved urban sustainability (such as those pioneered by Ukeles and Hanson) include lower capital investments, and they can be deployed in any neighborhood, new or existing. In addition, the innovative technological approach to improving urban sustainability often comes with new concerns for long-term maintenance (e.g. electric vehicles creating new waste streams of un-recyclable car batteries). Or, as so aptly stated by Andrew Russell and Lee Vinsel, academics in science and technology studies at the Stevens Institute of Technology in Hoboken: "Maintenance and repair, the building of infrastructures, the mundane labour [sic] that goes into sustaining functioning and efficient infrastructures, simply has more impact on people's daily lives than the vast majority of technological innovations" (Russell and Vinsel, 2016).

Despite this critique of novel technology, the authors still argue there is a role for technology to play in support of exposing existing infrastructure and its maintenance to the communities served by it. They argue for the use of technology not as a novel fix to a systemic problem, but as an integrated system for connecting people, systems, and understanding, much like the aforementioned social movements rooted in social media. An important contemporary example of addressing sustainability through habit change and participatory measures – and utilizing digital networking to achieve it – is the introduction of the smart grid in many U.S. cities. Through a real-time understanding of energy usage, community members can actively participate in making daily decisions about their consumption of the resource. What makes innovations to the smart grid unique and relevant to contemporary participatory urbanism is the relationship between technology, infrastructure awareness, and user feedback. In other words, the recogni-

tion of consumers as a critical piece of the system means that information and perception are key factors and ripe for further design development (Office of Electricity Delivery and Energy Reliability, 2015). Linking one step further to a *community* of energy consumers and their *collective* impact on the built environment would push this technological progression into the approach embraced by Ukeles and Hanson. What if we could share our energy usage information via social media to encourage 'healthy competition'?

### **#FOGWASTE: contemporary example of engaged place-understanding**

As a final example of participatory urbanism that integrates with social media and addresses complex urban systems, the authors have served as consultants to the City of San Jose, California since the fall of 2013, collaborating on an effort to engage community members with a greater understanding of their urban infrastructure and encourage greater environmental stewardship. The project requires a similar approach to those employed by Jo Hanson and Mierle Laderman Ukeles: integration with a diverse community group that includes maintenance workers, as well as those whom the infrastructure serves; a focus on process over products; and linking domestic patterns and habits with larger infrastructural and environmental systems. It is a process that also taps into social media as an important component of community outreach and utilizes participatory urbanism tactics to increase place-understanding throughout the city.

The project was conceptualized as an effort to address the largest contributor to sanitary sewer overflows in the city: residential fats, oils, and grease or FOG waste. When FOG waste enters sewers from kitchen sink disposal, it can lead to clogs within pipes and overflows of raw sewage into homes, streets, or watersheds. Even small amounts add up, and flushing with hot water does little to impact an eventual clog. The City came to recognize that a unique opportunity lay in integrating city workers, community members, and artists in a collaborative program to increase awareness of San Jose's sewer system. This contrasts dramatically with prior efforts at FOG waste management in the city through investment in High Priority Cleanings (HPC), purchase of newer maintenance trucks, and/or laying larger mainline sewer pipes. The Environmental Services Department (ESD) and Department of Transportation (DOT) recognized that collaborating with the City's Public Art Program and Office of Cultural Affairs to engage communities in a greater awareness of their infrastructure might yield results with less capital investment.

An early component of the design process included integrating with the diverse communities that are served by and service the infrastructure; this included water treatment plant tours, ride-alongs with sewer maintenance crews, and outreach meetings with existing community groups. The authors also utilized geographic information systems to map and understand the broader physical operation of the infrastructure. This enabled the authors to better understand the system from multiple perspectives and draw connections between the different experiences of the city infrastructure.



Figure 4. Group Projects, #FOGWASTE, community outreach efforts, 2013-2014.



Figure 5. Group Projects, #FOGWASTE, 2014.

The project's success stemmed from utilizing techniques for engagement with maintenance crews and community members – much like the processes employed by Ukeles and Hanson. Maintenance crews provided insight into the procedures and protocols for managing the vital infrastructure; they also shared their experience and interactions with the communities which they served. The artists also established connections with existing community groups (mothers' groups that met regularly at elementary schools within the selected pilot neighborhoods), and integrated outreach efforts with their pre-arranged weekly meetings. The outreach workshops focused on listening to community needs and concerns, rather than trying to focus on FOG waste or city infrastructure specifically. This allowed the artists to draw linkages between the significant issues of the community (health, safety, and environmental protection) and their relationship to urban infrastructure. When broaching the subject of FOG waste and its impact on city systems, the artists used a discussion of significant meals and their preparation to draw linkages of their own homes, kitchens, and patterns to the impact of those habits on urban sustainability.

As a result of these outreach efforts and in response to community feedback, the authors developed a strategy that addressed the need for a stronger connection between domestic practice (cooking and cleaning) and environmental health. A single environmental design installation alone would not adequately address the concerns and needs of the various community members – instead a suite of design interventions at a range of scales was developed and linked with social media tools. The resultant design project, #FOGWASTE, includes informational graphics that frame the kitchen sink as part of the sewer system, and the sewer system as an extension of the ecosystem; truck wraps and manhole markings that highlight other artifacts of the overlooked sewer system; a civic installation that traces the invisible lines that connect sink to sewer; and lastly, a digital, community-based network of imagery that shares the public experience of the entire infrastructure from kitchen sink to watershed through the hashtag FOGWASTE. Each component of the multi-scalar design intervention speaks to the complexity of the system as a whole, as well as the complexity of how each group of diverse community members understands and serves it. The social media component is meant to connect each of the various scales of the design intervention and utilize the digital realm as a forum for spreading awareness and cultivating conversation.

## Conclusion

With regard to contemporary participatory urbanism practice, the lessons learned from Jo Hanson's and Mierle Laderman Ukele's work (the embrace of a broader definition of community, efforts to link the domestic to the infrastructural, and lastly a focus on process over product) are all relevant to operating in today's constrained and complex city. The authors propose that the integration with social and digital media can broaden the impact of their work, and have utilized their work in San Jose as an opportunity to test these techniques.

Within the *Spontaneous Intervention* exhibition, there are projects that begin to speak to the broader possibilities of participatory urbanism to integrate communities

with the process of place-making, or to utilize the tactic towards a more systemic city understanding. Nicholas de Monchaux and Candy Chang are two designers represented in the exhibition that utilize participatory urbanism to push the possibilities of community engagement towards improved urban function. De Monchaux's *Local Codes: Real Estates* proposes utilizing geographical information systems to identify vacant, city-owned parcels that have the greatest potential for social, economic, and environmental impact within San Francisco, and integrating with social media to solicit community perspectives and fundraising for the collection of sites (de Monchaux, 2009). This proposal represents an effort at thinking more holistically about a city as a system and integrates communities in place-making at the individual sites via digital media. Chang's *I Wish This Was...* employs community participation in developing public art installations that challenge existing blight within a city. By making simple stickers printed with "I Wish This Was..." available to community-members, Chang's intervention includes the ad hoc and unsanctioned placement of community perspectives on underperforming urban spaces; "I Wish This Was a Butcher Shop," "I Wish This Was a Place to Sit and Talk," and "I Wish This Was Repaired" represent just a few of the diverse public commentaries that were sparked by her work (Chang, 2010).

Participatory urbanism has provided new opportunities for addressing the shortcomings of many constrained urban environments. As evidenced by the *Spontaneous Interventions* exhibition, these projects enable community members to become active players in the design process through digital networking tools. However, the majority of participatory urbanism projects to date focus on individual places within communities, and rarely on the functional aspects of urban habitation. By integrating these methodologies with an approach that considers cities more holistically, understanding the city as a system, and tackling infrastructure awareness, the practice of community-engaged design might rise to better meet the complex socio-spatial demands of the contemporary city. More importantly, community members might gain capacity to not only make and use their urban places, but also to understand and serve them.

## References

- AMBINDER, E.; JENNINGS, D.M. 2013. *The Resilient Social Network: A Report from the Homeland Security Studies and Analysis Institute*: 4. Available at: <http://www.anser.org/Docs/The%20Resilient%20Social%20Network.pdf>. Accessed on 26/01/2016.
- CASTELLS, M. 2000. *The Rise of the Network Society: The Information Age: Economy, Society, and Culture*. 2<sup>nd</sup> ed., Cambridge, Oxford Press, vol. 1, 656 p.
- CHANG, C. 2010. *I Wish This Was*. Available at: <http://candychang.com/work/i-wish-this-was/>. Accessed on: 26/01/2016.
- DE MONCHAUX, N. 2009. *Local Code: San Francisco Case Study*. Available at: <http://www.demonchaux.com/Local-Code-San-Francisco>. Accessed on: 26/01/2016.
- EHN, P. 2008. Participation in Design Things. In: *Participatory Design Conference*, 8, Bloomington, 2008. *Proceedings...* Bloomington, ACM Press, p. 92-101.

- FELDMAN, M.B. 2009. Inside the Sanitation System: Mierle Ukeles, Urban Ecology, and the Social Circulation of Garbage. *Iowa Journal of Cultural Studies*, **10**(1):42-56.
- GANDY, M. 2005. Cyborg Urbanization: Complexity and Monstrosity in the Contemporary City. *International Journal of Urban and Regional Research*, **29**(1):26-49. <http://dx.doi.org/10.1111/j.1468-2427.2005.00568.x>
- HESTER, R. 1990. *Community Design Primer*. Mendocino, Ridge Time Press, 116 p.
- OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY. 2015. Smart Grid. Available at: <http://energy.gov/oe/services/technology-development/smart-grid>. Accessed on: 15/12/2015.
- RECOLOGY. 2015. Artist in Residency Program. Available at: <http://www.sfrecycling.com/index.php/about-air>. Accessed on: 15/12/2015.
- RUSSELL, A.; VINSEL, L. 2016. Hail the maintainers: Capitalism excels at innovation but is failing at maintenance, and for most lives it is maintenance that matters more. *Aeon*. Available at: <https://aeon.co/essays/innovation-is-overvalued-maintenance-often-matters-more>. Accessed on: 26/05/2016.
- SPONTANEOUS INTERVENTIONS. 2015. Spontaneous Interventions, Design Actions for the Common Good, About. Available at: <http://www.spontaneousinterventions.org/about>. Accessed on: 15/12/2015.
- STEINMAN, S.L. 1995. Directional Signs: A Compendium of Artist's Works. In: S. LACY (ed.), *Mapping the Terrain: New Genre Public Art*. Seattle, Bay Press, p. 187-285.
- STRANG, G.L. 1996. Infrastructure as Landscape [Infrastructure as Landscape, Landscape as Infrastructure]. *Places*, **10**(3):8. Available at: <http://escholarship.org/uc/item/6nc8k21m>. Accessed on: 25/05/2016.
- THE PRITZKER ARCHITECTURE PRIZE. 2016. Alejandro Aravena of Chile receives the 2016 Pritzker Architecture Prize. Available at: <http://www.pritzkerprize.com/2016/announcement>. Accessed on: 28/01/2016.
- THOMPSON, N. 2015. *Living as Form: Socially Engaged Art from 1991-2011*. Cambridge, MIT Press, 264 p.
- UKELES, M. L. 1969. *Maintenance Art. Part II of Maintenance Art: The Maintenance Art Exhibition: Care, Part One: Personal*. Available at: <http://www.feldmangallery.com/>. Accessed on: 01/06/2015.
- WHEELER, S.; BEATLEY, T. (eds.) 2004. *The Sustainable Urban Development Reader*. 2<sup>nd</sup> ed., New York, Routledge, 512 p.

Submitted on January 30, 2016

Accepted on June 16, 2016