Pinning down Urban Acupuncture: From a Planning Practice to a Sustainable Urban Transformation Model?

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Urban Acupuncture in Planning Practice

Urban acupuncture can be used as metaphor or heuristic. The phrase derives from traditional Chinese medicine, and refers to planning actions stimulating “the city’s nervous system with tiny interventions that can have a catalytic effect on the organism as a whole” (McGuirk, 2014, 26). The popularization of urban acupuncture is largely due to discussions in international news media, online blogs, and grey research literature concerning cost-effective bottom-up initiatives associated with physical and social urban revitalization interventions (Beardsley, 2008; Kaye, 2011; Pérez López, 2017). While acknowledging certain benefits associated with urban acupuncture, more research is needed to identify the institutional conditions and allied frameworks which are useful to supporting urban acupuncture usage. Also, research is needed as to the roles played by various actors, such as government, business, and civil society in implementing urban acupuncture approaches. To do this, the application of urban acupuncture should be improved specifically through: intentional application, documentation in peer-reviewed journals, precise usage and characterisation, and finally implementation of research studies which can effect long-term change.

The most common names associated with urban acupuncture are architect and urbanist Manuel de Solá-Morales (1939–2012), Mayor of Curitiba, Brasil from 1971 to 1992, Jamie Lerner (1937–2021) and Finnish architect, Marco Casagrande. De Solá-Morales is said to have been the first to use urban acupuncture as a form of urban planning (Casagrande, 2013). According to De Solá-Morales urban acupuncture consists of, “small interventions, which create a ripple, not comprehensive development [and include] embellishments like the sinuous canal side bench …”. De Solá-Morales has emphasized the importance of always intervening with “concrete” matters while effecting change that goes beyond the physical interventions being implemented (de Solá-Morales, 2008). He is well known for his association with interventions made in Europe and specifically Barcelona, Spain.

Similarly to De Sola Morales, Lerner emphasized change beyond interventions. According to Lerner “[urban acupuncture] revitalizes a ‘sick’ or ‘worn out’ area and its surroundings through a simple touch of a key point. Just as in the medical approach, this intervention will trigger positive chain-reactions, helping to cure and enhance the whole system” (Lerner, 2014). According to Lerner, “no matter how good [planning] may be, a plan by itself cannot bring about
immediate transformation. Almost always, it is a spark that sets off a current that begins to spread. This is what I call good acupuncture- true urban acupuncture” (Lerner, 2014, p. 3). Lerner’s initiatives are notable because of their efficiency, low cost, and social characteristics. Most famously, this included the BRT, an integrated mass transport system structured around Bus Rapid Transit. In opposition to an expensive subway system, Lerner developed surface transport that became the most cost-effective and quickest way to travel within Curitiba. The raised platforms at stops were particularly innovative due to their design, which allowed bus alignment directly with the platform, allowing passengers, including those in wheelchairs, to enter and exit. What is more, the BRT system could transport high volumes of passengers with relatively few buses and drivers. Other initiatives led by Lerner included recycling, sanitation, health, education, recreation and other land use programs (Lerner, 2012). He has gained world-wide recognition in the form of awards like The United Nations Environmental Award (1990) and press in mainstream media such as, The New York Times (Lerner, 2015). He has been referred to as one of the world’s most influential urbanists, and unfortunately passed away on 28 May 2021 at the age of 83 (Brasuell, 2021). Although the urban interventions in both Barcelona and Curitiba have undoubtedly contributed to planning practice, the interventions have only retroactively been referred to as urban acupuncture (Frampton, 2000). To improve the concept and its usage, deliberate application is needed to identify the ideal framework conditions from the onset.

Marco Casagrande, who is a Finnish architect, has taken the concept of urban acupuncture further by envisioning a post-industrialized (3rd Generation) city in which its citizens are in-tune with the impacts being wrought upon nature (Casagrande, 2020). Casagrande has worked together with architects in Taipei to examine illegal urban farms and markets. He speaks of a parallel city existing on top of cities: “an organic ruin of the industrial city, Treasure Hill is a bio-urban site of resistance and an acupuncture point of Taipei, with its own design methodology based on Local Knowledge. This ruin is the matter from which parasite urbanism composes the modern city”. Casagrande envisions these small-scale and localized projects as a potential method of renewing and recovering the city. He refers to urban acupuncture as a form of bio-urban healing in which a development process occurs connecting modern man with nature (Casagrande, 2020). Casagrande’s understanding of urban acupuncture has the potential to guide sustainability transition research, especially regarding human-environment relations. Nonetheless, his research is often documented via self-published and non-peer reviewed materials, likely hindering the recognition of his contributions to research studies. Although this is not limited to Casagrande, many of the planning projects claiming to be urban acupuncture are found in “grey literature” such as newspapers and online blogs. Within this grey literature urban acupuncture is linked to physical planning and design interventions such as playgrounds (Pérez López, 2017), housing rehabilitation (Reed, 2018), “plug-in” housing (Wainwright, 2013), or the improvement of pedestrian and bike networks (Zahniser et al., 2014). Well executed examples using trustworthy sources and sound conceptualization of urban acupuncture implementation are difficult to find in peer-reviewed literature. However, the few research examples found do point to positive developments utilizing urban acupuncture. Specifically, we see attempts at transforming the urban fabric to address a variety of urban ills which often utilize a participatory approach.

For example, in Brisbane, Australia urban acupuncture was implemented to strategically target social interventions across the city. This was achieved by using social networks to encourage real-world interactions in the activation of place such as biking, filming, theatre, installing street furniture and other activities among citizens. The findings identify key elements required to design public spaces (Houghton et al., 2015).
Research conducted in Tallinn, Estonia utilized small and inexpensive design interventions to demonstrate that physical changes to infrastructure could affect behavior change (Unt & Bell, 2014). In Mexico, a study found that small-scale interventions like urban greening, installing playground equipment, and removing debris may alleviate urban stress, social pathologies, and political disengagement within informal settlements (Lastra & Pojani, 2018). Studies such as these demonstrate the impact small changes can have within underutilized spaces that improve both formal and informal settlements, which is a key aspect in urban acupuncture. All three studies referred to the actions as temporary and therefore should be considered tactical urbanism. The construction of temporary bicycle lanes, community gardens, art installations or street furniture are typical actions conducted among tactical urbanism projects. These projects are defined by specific actions such as reallocating space usage or function, reactivating underutilized spaces, or improving access to goods or services and not by overarching goals or strategies. Tactical urbanism is useful experimentally to produce feedback or desirable outcomes that can then be integrated into existing planning, design, and implementation processes (Morley, 2015). As such, tactical urbanism may well contribute toward understanding the potentials of urban acupuncture, but the two concepts should not be used interchangeably.

More precise usage and characterization of urban acupuncture is needed to further develop the concept. Urban acupuncture is more than simply implementing many small interventions, the impacts should be long-lasting and have impacts on surrounding areas or the city “organism” as a whole. In fact, there are researchers attempting to identify permanent pathways toward sustainable urban development that apply urban acupuncture. This includes interventions to increase urban greening (Karvonen, 2015), enhance social and environmental conditions or improve the function of public spaces (Apostolou, 2015). In Melbourne, Australia so called Eco-Acupuncture offers one potential example of a sustainable transition created to, “… bring that process [transformative, change requiring the restructure of the most fundamental systems for urban living] from vision to intervention, to catalyse rapid transformation of an existing urban environment, redirect development toward a low-carbon future and the understanding of the general community toward what is permissible, desirable and possible”. Small interventions involving community engagement at the local level in the Brisbane and regional areas (Ryan, 2013), demonstrate the potential for eco-acupuncture aimed at societal transformation. These interventions have included the development and implementation of the diversion of rainwater to create wetlands, and the creation of food corridors. To increase the impact of urban acupuncture, additional research like that of Ryan is required to identify stakeholder configurations and with the intention to affect broad and permanent societal and physical transformation. Research is needed that focuses on the impacts of such interventions and to improve implementation and replicability.

The Potential of Urban Acupuncture as a Model of Sustainable Urban Transformation

Urban acupuncture has the potential as a model of sustainable urban transformation. There are several reasons for this. At the outset, urban acupuncture can and has been applied to address a diversity of urban challenges. The focus of urban acupuncture on physical interventions can address the knowledge gap relating to the spatial dimensions of sustainability transition research (Coenen & Truffer, 2012; Levin-Keitel et al., 2018; Truffer et al., 2015). What is more, architects and urban planners have been found to contribute to sustainability transitions by
altering the physical elements of the city which impact the sustainable socio-economic and socio-cultural transitions acting as normative sustainability concepts (Levin-Keitel et al., 2018). They also tend to be some of the main actors involved in urban acupuncture projects, and have been identified as important agents of civil society with the ability to further promote sustainable urban transformation (Nielsen & Farrelly, 2019). The nature of urban acupuncture implementation across sectors can contribute to knowledge concerning practical actions related to multi-sectoral sustainability transitions (Nielsen & Farrelly, 2019). Especially within the contemporary context, the highly participatory nature of urban acupuncture makes it a useful tool in the governance of sustainability transition (Fragkias & Boone, 2016). Contemporary usage of urban acupuncture has tended to be cost effective, making urban acupuncture broadly applicable in both developing and developed countries. However, a failure to address key weaknesses may result in urban acupuncture remaining a shaky term which fails to be taken seriously within peer-reviewed research. Most importantly, the risk in failing to characterize and develop urban acupuncture further is to miss the opportunity to capitalize on a potentially effective tool for sustainable urban transformation.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

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