



Innovative urban forestry governance in Melbourne?: Investigating “green placemaking” as a nature-based solution



Natalie Marie Gulsrud^{a,*}, Kelly Hertzog^b, Ian Shears^c

^a University of Copenhagen, Department of Geosciences and Natural Resource Management, Rolighedsvej 23, 1958 Frederiksberg, Denmark

^b Urban Forester, City of Melbourne, 120 Swanston Street, Melbourne, VIC 3004, Australia

^c Manager of Urban Sustainability, City of Melbourne, 120 Swanston Street, Melbourne VIC 3004, Australia

ARTICLE INFO

Keywords:

Urban green infrastructure
Community engagement
Nature-based solutions
Urban climate resilience

ABSTRACT

A nature-based approach to climate resilience aims to challenge and re-frame conventional environmental management methods by refocusing solutions from technological strategies to socio-ecological principles such as human well-being and community-based governance models, thereby improving and legitimizing the delivery of ecosystem services (ES). There are, however, many challenges to applying a socio-ecological agenda to urban climate resilience and thereby re-framing ES delivery as community and people focused, a knowledge gap extensively outlined in the environmental governance literature. In this paper, we aim to contribute to this re-assessment of urban environmental governance by examining the City of Melbourne's approach to urban re-naturing governance from a place-based perspective. Here we focus on the city's internationally-acclaimed urban forest strategy (UFS), investigating how and to which extent the governance arrangements embedded within the UFS draw strength from diverse perspectives and allow for institutional arrangements that support “situated” reflexive decision making and co-creation. We find that Melbourne's UFS governance process fosters green placemaking by re-focusing climate adaptation solutions from technological strategies to situated socio-ecological principles such as human well-being and community-based decision making. In this sense, this case provides valuable insight for the broader UGI governance field regarding the opportunities and challenges associated with a socio-cultural approach to urban re-naturing and ES delivery.

1. Introduction

There is an increasing global focus on “re-naturing” urban areas by developing urban green spaces such as parks and forests in post-industrial cities in response to the challenges of attaining urban resilience and environmental sustainability (Lawrence et al., 2013). This is especially pertinent in light of the severe weather patterns and disasters associated with climate change (Gao et al., 2015). Cities such as New York and Singapore have adopted an urban green infrastructure (UGI) approach to climate mitigation to combat the problems associated with urban heat waves, urban floods and to achieve overall socio-economic resilience by delivering ecosystem services (ES) (City of New York, 2013; Ministry of the Environment and Water Resources and Ministry of National Development, 2015). A UGI planning approach links green spaces and built systems designed to deliver a robust and multi-functional urban fabric to support diverse ES such as climate amelioration, flood protection, and biodiversity (Chapin et al., 2008; Davies et al., 2015). Recent focus has framed a UGI planning approach as a “nature-based solution” to urban climate resilience (Eggermont et al., 2015;

Kabisch et al., 2016a). A nature-based approach to climate resilience aims to challenge and re-frame conventional environmental management methods by refocusing solutions from technological strategies to socio-ecological principles such as human well-being and community-based governance models, thereby improving and legitimizing the delivery of ES (European Commission, 2015; Kabisch et al., 2016a).

There are, however, many challenges to applying a socio-ecological agenda to urban climate resilience and thereby re-framing ES delivery as community and people focused. While resilience thinking, as represented by an urban green infrastructure approach to climate mitigation, offers a dynamic and holistic approach to human and environmental change, it problematically assumes that social and ecological dynamics can be modeled similarly, and thereby can mask the possibility to ask important questions about the role of power and culture in the adaptive capacity of green infrastructure and delivery of ES (Buizer et al., 2016; Cote and Nightingale, 2012:475). Several have pointed to the lack of “translation” of ES from scientific assessments to local governance and community contexts, whereby urban greening campaigns fail to deliver ecosystem services to a community, but instead are

* Corresponding author.

E-mail addresses: nagu@ign.ku.dk (N.M. Gulsrud), Kelly.Hertzog@melbourne.vic.gov.au (K. Hertzog), Ian.Shears@melbourne.vic.gov.au (I. Shears).

perceived as harbingers of “environmental bads” (Anguelovski, 2016:25; Buizer et al., 2016; McPhearson et al., 2016). Cases from diverse cities have shown how the economic imperative of delivering ecosystem services through urban greening campaigns has raised issues of “ecological gentrification” whereby so-called revitalization investments in urban greening in run down areas have led to raised land values and the displacement of community members (Checker, 2011; Dooling, 2009; Safransky, 2014). Along this line, there are many examples of the overly “technocratic” tendencies of an ecological focus in urban re-naturing, revealing the heavily-contested nature of large-scale tree planting campaigns and the transformation of post-industrial spaces into parks (Gulsrud and Ooi, 2014; McKendry and Janos, 2014). Further studies show that ethno-cultural preferences and a lack of “sense of belonging” impact the distribution of cultural ecosystem services in UGI planning raising the question of which services are provided through ecological networks and for whom? (Byrne, 2012; Wolch et al., 2014). This implies a lack of local socio-cultural context in urban environmental governance, management, and planning, a knowledge gap highlighted by Kabisch et al. (2016) in their assessment of a how a nature-based solutions approach to climate resilience could impact environmental governance.

Scholars have accordingly called for a re-assessment of urban environmental governance to fill this knowledge gap, moving from a scientific and technocratic “view from nowhere” to an enriched socio-cultural view that is deeply place-based (Buizer et al., 2016; Frantzeskaki and Kabisch, 2016; Haraway, 1992; Williams, 2014:74). Tuan (1977) illustrates how a place-based approach to inquiry allows for consideration of the dynamic human emotions and relationships involved in individual's and group attachment to a specific location or place. Williams (2014) demonstrates how the act of placemaking can mediate contested social practices and institutional arrangements creating space for competing and diverse identity claims. Buizer et al. (2016) suggest that a place-based approach to UGI planning and ES delivery could contextualize and shed light on new and reflexive platforms for environmental governance, allowing for diverse and conflicting accounts of urban nature values and claims to belonging. Cote and Nightingale (2012:482) also appeal for a “situated” approach to resilience by conceptualizing local knowledge as a “process, performed in the everyday” thereby challenging the homogenization of local knowledge frequently modeled into socio-ecological systems. In this sense, a place-based approach to urban climate resilience could provide a rich socio-cultural account of UGI planning by re-framing and mediating understandings of ES delivery through processes in which local citizens iteratively create and recreate the green landscapes in which they live.

This paper aims to contribute to this re-assessment of urban environmental governance by examining the City of Melbourne's approach to urban re-naturing governance from a place-based perspective. Here we focus on the city's internationally-acclaimed urban forest strategy (UFS), investigating how and to which extent the governance arrangements embedded within the UFS draw strength from diverse perspectives and allow for institutional arrangements that support “situated” reflexive decision making and co-creation (Buizer et al., 2016; Cote and Nightingale, 2012; Edge and McAllister, 2009; Raymond et al., 2010). The City of Melbourne is an appropriate case for this analysis as it represents an opportunity to reveal and analyze new and or unique phenomenon within the context of nature-based solutions to climate resilience and ES delivery through urban re-naturing. The city of Melbourne is facing three substantial challenges: climate change, population growth and urban heating which threaten to undermine the quality of life and wellness of city residents and ravage its urban tree population (City of Melbourne, 2012a). At the same time, the City of Melbourne has been recognized by its peer-city-leaders in the C40 Cities Climate Leadership Group and academics alike as a fore-runner city with an exemplary and ambitious approach to urban re-naturing for climate resilience including extensive citizen engagement efforts

(Beatley and Newman, 2009; Ferguson et al., 2013; Siemens, 2014). The case of Melbourne can, therefore, be situated in a broader context of global cities seeking ecological solutions to climate resilience. Analyzing the governance of Melbourne's UFS allows for revelatory insight into the city's community-based approach to environmental problem solving and management (Yin, 1989). We end the paper by discussing the implications of the Melbourne case for the broader UGI governance context and conclude by assessing green placemaking seen from a nature-based approach to climate resilience.

2. Operationalizing a place-based approach to environmental governance

2.1. Theoretical frame

The soci-cultural lens we introduce in this paper is a place-based or “situated” approach to environmental governance (Cote and Nightingale, 2012:482) whereby the governing of UGI implementation and subsequent ES delivery allows for contested, diverse, and ever-changing place attachment values (Williams, 2014). The governance of UGI implementation and ES delivery can be understood as the collective steering of decision-making involved in the control and management of physically and functionally interconnected networks of green spaces, ranging from woodlands and parks to community gardens (Lovell and Taylor, 2013; Wurzel et al., 2013). Idealized arrangements of UGI governance span the range of hierarchical to reflexive environmental maneuvering, whereby “green statism” calls for a tightly state-controlled implementation of UGI and delivery of ES, “eco-managerialism” calls for restricted cooperation between the state and non-state actors such as citizens and NGOs, and “reflexive” advocates for the broad dispersion of power between expert and non-expert actors and transdisciplinary networks (Buizer et al., 2016; Luke, 2009)(Fig. 1). Local and reflexive knowledge is understood in this context as the pluralistic and varied positions of awareness and meaning associated with a place and is informed by daily interactions based on concrete activities (Buizer et al., 2016; Cote and Nightingale, 2012; Williams, 2014).

Williams (2014:75) helps us understand how varied positionings of socio-cultural “awareness, knowledge and meaning” are conceptualized in understandings of place and offers a powerful framework of how diverse readings of place meaning can be situated in a UGI governance context (Fig. 2). According to Williams, place-based discourses typically identified in UGI governance can be classified according to various ontological and epistemological assumptions moving from an inherent or objective shared understanding of place to a deeply-personal and subjective conception of place (Table 1). The first two surface meanings, “inherent” and “instrumental” are the layers of place generally legitimized in UGI governance processes while “socio-cultural” and “identity-expressive” concepts of place are frequently neglected in UGI policy due to the difficulty of modeling and managing intangible and personal knowledge (Buizer et al., 2016; Edge and McAllister, 2009; Williams, 2014).

Analyzing a UGI governance process through a place-based lens raises questions regarding how much power and agency citizens' various place-based perspectives are granted within a given policy process and thus invites an inquiry into how local knowledge is conceptualized and deliberated through nested social and political processes. This perspective also provides necessary insight into the lessons learned

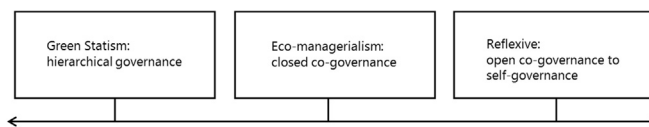


Fig. 1. Continuum of idealized UGI governance arrangements (adapted from Arnouts et al. (2012) and based on Luke (2009) and Buizer et al. (2016)).

Download English Version:

<https://daneshyari.com/en/article/8869272>

Download Persian Version:

<https://daneshyari.com/article/8869272>

[Daneshyari.com](https://daneshyari.com)