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Multi-level governance for large marine commons: Politics and polycentricity in Palau's protected area network

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ABSTRACT

This paper brings together institutional theories of polycentricity and critical human geography theory on scalar politics to advance understanding of the form and function of nested, polycentric regimes for the governance of large-scale common pool resources. We focus on institutional changes associated with a national marine protected area network in Palau through which national government and NGOs gain influence in local decision-making processes. Influence is gained through an attempt to scale up common-pool resource governance to an ecologically-relevant spatial scale in an effort to protect coral reef resilience and biodiversity across Palau. An institutional approach informed by scalar politics brings into focus potential tradeoffs between organizing governance reform around ecologically versus institutionally relevant scales. Our analysis suggests that prioritization of ecologically-relevant scales in institutional reform resulted in more nested but less polycentric institutional arrangements governing the network. We conclude that less distributed decision-making in the overall nested governance system could threaten the sustainability and resilience of coral reefs in the long-term by constraining institutional innovation and diversity. Results demonstrate the potential for interdisciplinary dialog to advance the research frontier on multi-level governance for large common pool resources.

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1. Introduction

Common pool resource (CPR) theory as defined by the Bloomington School (Aligica and Boettke, 2011) emerged mainly from research in local, small-scale settings (Ostrom, 1990). A critical research frontier is the governance of larger CPRs, which requires analysis of interdependencies among different levels and scales of more complex systems (Heikkilä et al., 2011; Ostrom, 2009). We take Elinor Ostrom's design principle of polycentric, nested enterprises in long enduring, larger CPR systems as a starting point for interdisciplinary

research on the governance of large CPRs (Marshall, 2008). Specifically, this paper brings together institutional theories of polycentricity and critical human geography theory on scalar politics to contribute to emerging research and policy agendas on the governance of larger CPRs by advancing understanding of the form and function of nested, polycentric regimes. We highlight complementarities between these theoretical approaches in agreement with Lejano (2006) that multiple analytical lenses can reveal different aspects of a policy situation.

A well-suited policy arena in which to explore these issues is marine conservation governance, particularly marine

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protected area MPA networks. Marine ecologists have concluded, “If marine reserves and other MPAs are to provide significant conservation benefits to species, they must be scaled up” (Gaines et al., 2010, p. 18286). As an alternative to scaling up the geographic extent of individual MPAs, conservationists are increasingly promoting large scale marine governance through networks of smaller MPAs that may spread the costs of conservation across resource owners and/or users, and “can have emergent benefits that make the network more than the sum of its individual parts” (Gaines et al., 2010, p. 18286). The most prominent global policy-making fora (i.e., World Summit on Sustainable Development, the World Parks Congress, and the United Nations Convention on Biological Diversity) have all called for ecologically representative MPA networks (Gray, 2010).

In theory, an MPA network stretching across a large marine CPR is networked in both biophysical and social dimensions. As Agardy (2005, p. 244) has pointed out, an MPA network has “a dual nature” of “connecting physical sites deemed ecologically critical (ecological networks), and linking people and institutions in order to make effective conservation possible (human networks).” While there has been a proliferation of research on the biophysical dimensions of MPA networks (e.g., Aïramé et al., 2003; Botsford et al., 2003; Gaines et al., 2010; Moffitt et al., 2011; Roberts et al., 2003), there has been comparatively little research on the political and institutional dimensions thereof (but see Grilo, 2011; Lowry et al., 2009; Sievanen et al., 2013). To be clear, institutions herein refer to the formal and informal rules, norms, and strategies that structure human interactions (Ostrom, 2005).

To address this gap and explore our theoretical interests in multi-level governance for larger CPRs, we focus on institutional changes and politics associated with a national protected area network (PAN hereafter) in the western Pacific Island nation of Palau, a context in which communities of resource users both own and manage marine resources. Through the PAN, national government and NGO actors are providing financial incentives to resource users/owners to voluntarily enroll pre-existing and new protected areas¹ into a national network. Although resource users maintain ownership of PAN sites, there are significant changes to the process of governing those sites. As the PAN attempts to increase the spatial scale of marine governance to accommodate goals of biodiversity conservation, national government and conservation NGOs gain more influence in local decision-making processes. We conclude that the pursuit of large-scale marine conservation in Palau has led to a more nested but less polycentric governance system, and caution that decreased local autonomy may reduce the institutional diversity upon which the long-term sustainability of CPRs may depend. Results are broadly relevant as Palau’s PAN is being promoted as a model for other nations seeking to meet their commitments to multilateral environmental agreements.²

¹ While the PAN includes terrestrial areas, our concentration on the marine component reflects the focus of the PAN and historic local conservation on marine environments.

² Palau received the high profile 2012 Future Policy Award for having the world’s best policies to protect oceans and coasts.

2. Complementary perspectives on multi-level CPR governance

According to Giordano (2003, p. 365), “the field of geography has been relatively silent in the commons literature, especially on the theoretic front.” This is beginning to change. There is an emerging foundation of interdisciplinary theoretical dialog regarding the relationships between physical geography, resource users, and institutional arrangements for CPR governance (e.g., Araral, 2013a,b; Brewer, 2010; Giordano, 2003). However, there remains little constructive engagement between Bloomington School institutional theorists and critical human geographers interested in the scalar dimensions of CPR governance (hereafter, institutional theorists and critical human geographers) (Poteete, 2012), arguably due to divisive tensions about core questions, values, assumptions and methodologies (Johnson, 2004; Mosse, 1997).

While Johnson (2004) concludes that co-existence is more likely than convergence,³ there is emerging interest in a third option: complementarity (e.g., Armitage, 2008; Clement, 2010; Campbell, 2007; Poteete, 2012). Poteete (2012) for example, brings together concepts across multiple disciplines, including critical human geography and Bloomington institutional analysis, to argue for broader perspectives on the multi-level institutions and multiple scale linkages characterizing CPRs. Research taking a broader perspective, she argues, “is less likely to overlook important elements, relationships, or processes” (Poteete, 2012, p. 147). Armitage (2008, p. 7) similarly advocates for “critical reflection” on multi-level governance for CPRs, calling for the exchange of ideas from common property theory, resilience thinking, and political ecology.

In agreement that “continued cross-fertilization of ideas is crucial for the evolution of commons governance” (Armitage, 2008, p. 26), we explore complementarity between “Bloomington institutionalism” (Aligica and Boettke, 2011, p. 29), grounded in the seminal work of Vincent and Elinor Ostrom et al., and critical human geography theory on scalar politics. This section describes arguments and analytical foci within each literature, demonstrating that they share key concerns with power, scale, and multi-level governance. We argue that key components of the theoretical perspectives fit together to structure a more comprehensive analysis of multi-level governance regimes for larger CPRs, such as networks of marine protected areas.

2.1. Polycentricity

In 1961, influenced by the study of federalist systems, Ostrom et al. observed that some federalist systems were organized as polycentric political systems, arguing that they could constitute a potential alternative to the theoretical ideal of monocentric systems with a dominant center of decision-making power. The term polycentric “connotes many centers

³ Johnson (2004) describes tensions between “collective action” and “entitlement” schools of thought that generally correspond to what we refer to here as institutionalist and critical human geography perspectives.

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