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Governing in a placeless environment: Sustainability and fish aggregating devices

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ABSTRACT

Sustainability governance views ‘place’ as either a central concept and phenomenon to counter homogenising globalisation, or as an irrelevant concept for understanding ostensibly ‘placeless’ global environments such as oceans. Based on a review of global tuna fisheries in placeless oceans, we illustrate the importance of place in governing the sustainable use of fish aggregating devices (FADs); floating objects under which tuna and other fish aggregate, enabling efficient purse seine fishing practices. These FADs are places that connect global tuna flows with national and global capital, information and regulatory networks. We argue that addressing sustainability challenges in purse seine tuna fisheries means governing FADs as places, by recognising and altering the networked relations that structure global flows of capital, information, regulation, and trade. We do this by bringing in ‘place’ to our analysis, thereby providing a new perspective on the governance of marine sustainability and an alternative to the homogenising regional or global governance regimes. In doing so we also challenge habitually localised, sense-making and sedentarist connotations of place-based sustainability governance, and instead call for greater theorisation of globally networked places in otherwise placeless environments.

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1. Introduction

A strange dichotomy appears to have emerged in academic research on sustainability governance. On the one hand, the role of place seems to be largely ignored. Governing sustainability is framed as an abstract and placeless process, where networks of actors develop rules, institutions and regimes that are homogenised across geographical space. Studies on global climate change governance, food sovereignty and food safety governance, and (inter)national air quality governance, for instance, all tend to either ignore or downplay the importance of place (Hulme, 2010; Lövbrand et al., 2009). On the other hand, and partly in reaction to homogenised and placeless sustainability governance conventions, the importance of

localised, place-based sustainability governance is also often overemphasised (Lane and Corbett, 2005). Here, sustainability is not only strongly attached to local places with unique, concrete and contextualised notions and definitions of sustainability; it is used to refute the abstracting and homogenising effects of globalisation.

While sustainability governance often remains at an abstract global scale, place remains fundamental because the contribution to and outcome of any governance process can only meaningfully exist when it is specified for particular places. The social relations that constitute governance cannot (and should not) be lifted out of these localised places to be generalised and abstracted across larger time–space configurations. Research on local sustainable food production-cum-consumption systems (Wiskerke, 2009), locally embedded

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sustainable companies (Shrivastava and Kennelly, 2013) and locally specified nature conservation initiatives (Pollock, 2004) all emphasise the importance of local place-based forms of sustainability governance. In doing so, this body of literature often considers non-localised influences as hampering and undermining endogenous or ‘bottom up’ decision making over sustainability within these localities.

In this paper we start from the idea that it is essential to give place a (more) central position in sustainability governance studies by moving beyond abstract, detached, homogenised and de-contextualised notions of how sustainability governance functions. Abstract and homogenised notions of governance regimes hold different consequences for sustainability in specific places, and hence it is essential to include place as a category when studying and designing sustainability governance. But, by the same token, we are not convinced that place-informed sustainability governance studies are preferably sedentary and/or static; limited to just localised places, where sustainability is primarily or only connected to local identities or experiences of place, and local networks of actors constituting and defining sustainability.

Place for us is instead constituted by networks of finances, capital, information and social relations that can be more or less localised/globalised depending on the kind of place-based system that is being governed (Mol, 2007; Mol and Spaargaren, 2006). The result is that some governance arrangements have to deal with highly localised, sedentary and readily tangible resources or environments (e.g. forest or mineral regimes), while others are focused on highly mobile, abstract and homogenised resources or environments that continually ‘flow’ across global space (e.g. fishery, carbon emission and genetically modified organism regimes) (Mol and Law, 1994; Urry, 2003). Governing the sustainability of these resources in places therefore means identifying the networks and flows that constitute and configure place-based practices; and in turn analysing how these networks and flows can be employed in the governance of these place-based practices.

Our goal in this paper is to explore the relevance of place and the need to conceptually detach place from localised, sedentary space. In operationalising such a perspective and illustrating how places are relevant categories also without being conceptualised as localised, sedentary and immobile, we will focus on the role of fish aggregating devices (FADs) in governing the sustainability of tuna fisheries. FADs are employed as fixed or floating objects placed in the ocean and they attract mainly pelagic fish species for capture (Dempster and Taquet, 2004). Because of their efficiency in attracting fish the sustainability of using FADs for tuna harvesting purposes has been widely questioned (e.g. Bromhead et al., 2003; Fonteneau et al., 2000b; Gilman, 2011): when a fishing gear or method leads to low biological growth rates or critically low biomass levels, or if non-target species are adversely affected (including vulnerable species such as sharks, billfish and turtles), it may be deemed to be ‘unsustainable’. But as variously noted (e.g. Dagorn et al., 2013b; Taquet, 2013), this does not mean that FADs are unsustainable per se; rather it means that information on the location and use of FADs, as well as (political) economic pressures for their widespread use need to be better understood and better governed.

Governing the sustainability of FAD-based tuna fisheries is not a representative case, but rather a specific or ‘extreme’ case (Yin, 2014) of governing natural resources in (mobile and sedentary) networked places. Not only is the biophysical environment mobile and fluid, the fishers that exploit the resources at these places are also (globally) mobile. Such an ‘extreme’ case can therefore clarify the position of place as an analytical category for sustainability governance (see for example Eisenhardt and Graebner, 2007; Flyvbjerg, 2006). Based on a review of the literature on FAD fisheries, the following section outlines the sustainability challenges faced by three classifications of FADs – each an ideal type based on a set of social, regulatory, material and environmental place-based ‘classifiers’. We then turn to a discussion of what FAD fisheries as an ‘extreme’ case provides us in terms of generalised insights of place-based sustainability governance.

2. Oceans, tuna fisheries and FADs

2.1. A placeless environment

The oceans are the world’s most expansive environment, covering 70% of the globe’s surface and extending to depths 25% greater than the height of Mount Everest. Marine ecosystems are also highly varied, extending from dynamic and highly biodiverse land–sea interface ecosystems, to different categories of near shore and deep-sea benthic and benthic–pelagic habitats. Marine ecosystems are also classified by depth, ranging from the near surface or ‘blue water’ photic zone, to the extreme depths of the aphotic abyssal zone (Fig. 1). The classification of these zones and habitats illustrates the heterogeneity of the marine environment, but paradoxically also illustrates the placeless nature of water-bound three dimensional space. The relative inaccessibility of these environments for the vast majority of society, and the abstract and mediated ways in which we experience parts of these environments through remote-sensing technologies, make the classification of marine places even more problematic – and may also make them appear largely irrelevant.

Societal attempts to create territories in the marine environment, to which access is regulated, are also abstract and placeless. The United Nations Convention on the Law of the Sea (UNCLOS), ratified in 1994, has divided benthic and pelagic marine resources into: the sovereign territorial waters (12 nautical miles), an extended or contiguous zone (a further 12 nautical miles), and the Exclusive Economic Zone (EEZ) extending to 200 nautical miles off-shore, beyond which are the ‘high seas’ or areas beyond national jurisdiction (ABNJ; see Fig. 1). Specific rights of countries over benthic and mineral resources in the first three zones are further specified by national jurisdictions, often referred to as different parts of the continental shelf. The high seas are then subject to broadly defined international treaties on fishing, pollution, transport and mineral extraction. While benthic seascapes are mapped and classified as trenches, reefs, shelves, banks and seamounts, pelagic habitat is defined by coordinates of longitude and latitude, and ranges of depth. The overall effect is a highly stylised, homogenising and placeless geography of the marine

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