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## Mapping Biocultural and Economic Diversity ... Everywhere

*When geographers disavow their own role in crafting knowledges of culture—by claiming merely to report on ontological continuities or changes—they forget the responsibilities they have as representatives of others' lives (Castree 2004, 222).*

### Ontological Projects and Problems

The important relationship between biological and human cultural diversity appears most clearly in the world maps produced by Stepp et al. (2004) and Harmon and Loh (2004). These maps, and the ongoing research and advocacy of organizations like Teralingua, highlight the strong correlation between biological diversity (measured in terms of vertebrate and plant species density) and locations with high levels of human linguistic (as a proxy for cultural) density; this coincidence in space acts as the ontological foundation for an emergent recognition and politics of “biocultural diversity.” These persuasive maps depict, at a global scale, eco-cultural regions that, as empirical research has shown (Pretty 2011; Pretty et al. 2009), contain repositories of human experience and knowledge vital to understanding ecological diversity and, by extension, to maintaining it. Like biological diversity, such human knowledge is embedded in places threatened by social and economic processes of “globalization” (UNESCO 2007, 2010) and, like maps of biodiversity, maps of biocultural diversity function as a baseline and metric of where diversity hotspots might be found.

Critiques of biocultural diversity mapping point to the limitations and potential inaccuracies of such mapping—they “smooth over” the complex interrelations and knowledges that emerge from human/nature interactions (Brosius and Hitchner 2010). In addition, such maps appear aligned with emerging global powers and other eco-regional mapping projects that foreground conservation rather than self-determination, and preservation rather than cultural or ecological invention. Despite these critiques, the maps nevertheless convincingly and visually depict a global reality of biocultural diversity hotspots using increasing sophisticated tools (Stepp et al. 2004). In addition to hotspots in the tropics, however, such maps also convincingly produce the homogeneity of elsewhere, an absence of biocultural diversity in Northern zones, desert regions, and oceans (the latter omitted due to data limitations).

While such cartographic “silences” (Harley 2001) are inevitable, they problematically stifle projects that might seek to recover or foster or produce a politics centered on biocultural and other diversities in these seemingly bioculturally homogenous locations.

While maps of biocultural diversity clearly give value to that which has been historically devalued (e.g., diverse indigenous knowledges), they do so within a cartographic and historical frame that recapitulates a global spatialized teleology of economic modernization and homogenization. Placing diverse biocultures within a shrinking periphery does not threaten the hegemony of a particular economic, indeed capitalist, monoculture. In this sense, the map works to limit the ways in which local (i.e., Northern, temperate, etc.) biocultural milieus might be re-thought as sites of possible alternative ways of being and producing with nature; simply put, diversity (biological, cultural, and economic) is imagined and placed distant from Northern, temperate, and economically “advanced” locations (cf. Cocks 2006).

Beyond the growing recognition of what maps silence, there is also a growing understanding of maps as constitutive of the worlds they purport to reflect (Kitchen and Dodge 2007). In this case, biocultural maps are part of an ongoing *performance* of a global and globalizing space where diversity, to the degree it still exists, is on the periphery of a threatening and expanding capitalist order. While biocultural mapping, and its associated projects of visibility, conservation, and cultural survival, is certainly worthwhile, we must also take care to leave room for those diverse peoples and ecologies that are not mapped, imagined, or yet performed. What configurations of nature and society do we efface or preempt when we map diversity as always only “before and beyond” our modern economy (St. Martin 2005)?

The discussion above suggests that the performance of biocultural diversity has been relegated (via maps, narratives of crisis, etc.) to locations that are essentially beyond the frontiers of capitalism and modernity. While acknowledging biocultural diversity is vital, it is also vital that we avoid the placement of innovative and alternative forms of production, marketing, and exchange (i.e., those interventions designed to conserve biocultural diversity) only in such distant and peripheral sites. The local, participatory eco-cultural and economic projects emerging from the recognition, mapping, and enactment of biocultural diversity are desperately needed precisely within the monocultural world where their presence might work to disrupt the latter’s strength and inevitability.

### Cultural and Other Diversities in Northern Norway

While marine socioecological systems are not mentioned on maps of biocultural diversity, it is safe to assume that they would appear in the tropics, around coral reefs, and in linguistically complex coastal regions (Stepp et al. 2004). Furthermore, they would likely not be in Northern Europe, more a heartland of the contemporary global order (and its homogenizing trajectories) than a bioculturally rich periphery. Indeed, marine systems throughout the North Atlantic have been understood via an ontology of competing industrial sectors (e.g., fisheries or offshore energy development) and social actors that reduce to economically or amenity driven “stakeholders,” rather than as the site of diverse peoples, knowledges, and human experiences. Bioculturalism, from the perspective of those discourses that dominant marine science, policy, and governance, is a distant concept.

Yet, if we did project and map biocultural diversity into the marine environment in the North, it might suggest a social “landscape” rich with histories and inhabitations, rather than an asocial space containing resources awaiting exploitation (cf. St. Martin 2009). Were the space of resources to be re-inscribed as a biocultural (or at least socioecological) space, it might become clear that this is a site open to a variety of configurations of production and distribution, a site of economic diversity. Indeed, the diversity so evident on the periphery might begin to emerge, perhaps even through maps, in Northern Europe.

The case of the Sami of northern Norway provides a compelling example of the enactment of biocultural diversity and its relationship to economic diversity. The Sami, like other indigenous peoples subject to decades of assimilation policies, are reclaiming their languages, dress, belief systems, and history. But this reclaiming is also a production, an invention, and a performance, rather than a simple reversion to the “traditional.” Culture, and indeed bioculture, in this case is a site of not only politics and history, but also a contemporary agency that entangles ethical decisions and choices with alternative practices (e.g., language, education, tourism, museums, family traditions, and religion). The result is a Sami identity and politics of empowerment that has been extremely successful. In addition to a Sami success, however, there is a more general success insofar as culture and biocultural diversity in northern Norway seems accessible, malleable, proximate, and a vital site of ethical decision-making by individuals,

communities, and nations, despite a host of practices across scales that threaten to homogenize the human experience.

For example, the Sami, referencing the rhetoric of socioecological systems and the recent recognition of the importance of local (and indigenous) environmental knowledge to fisheries and marine management, are (re)mapping fjord ecosystems as sites of Sami culture, history, language, knowledge, and material practice (Brattland and Nilsen 2011). Where the dominant fisheries science and management regime saw only “fishermen” and single species of fish distributed throughout Norway’s national waters, there is a growing ontological presence of Sami fishers, fishing villages, inshore and offshore practices and knowledges, complex ecosystems and fjord environments, and an ongoing inhabitation by diverse peoples. Indeed, there is a growing biocultural diversity in Northern Norwegian fjords that is, at least in part, the result of Sami mapping projects. Such projects, unlike global biocultural diversity mappings, emerge from homogeneity. Just as Sami culture itself (re-)emerged in the 1970s via a variety of key struggles aligned with a global indigenous rights movement, biocultural “realities” of complex ecologies and local knowledges emerge from a host of local places.

This re-inscription of the fjords as sites of Sami inhabitation provides not only a foundation for cultural survival, but also a biocultural logic that might inform future “ecosystem-based management” initiatives. While fisheries management has long promoted the monocultures of Norwegian fishing, the Sami and other forces of diversification are creating new openings and opportunities for more localized management systems based on local environmental knowledge (Brattland 2010). Such openings suggest not only the performance and production of cultural and biological diversity but economic diversity as well. That is, re-mapping fjords as sites of Sami experience is inseparable from an acknowledgement of their artisanal inshore economy, which has been ignored (even displaced) by a management regime that, to date, caters to largely corporate offshore enterprises.

The turn towards a biocultural logic in marine resource management has the potential to maintain and foster not only the material and working culture of the Sami but an alternative economy aligned with community and ecosystem sustainability. Such a project, however, relies upon an image and ontology of diversity as performative and always potentially emergent rather than pre-existent and ultimately distant. Indeed, we

are witnessing the beginnings of a new biocultural landscape in northern Norway, one that is biologically, culturally, and economically diverse despite its location within the North Atlantic, within the very heartland of modern industrial fishing. Such a development suggests that we might want to rethink biocultural mapping strategies such that all locations, despite their challenges, are capable of and open to emergent forms of biocultural survival.

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