SALMON AS SYMBOL, SALMON AS GUIDE

What Anadromous Fish can do for thinking about Islands, Ecosystems and the Globe

[Received August 26th 2017; accepted November 1st 2017 – DOI: 10.21463/shima.12.1.03]

Mike Evans
University of British Columbia Okanagan, Canada <mike.evans@ubc.ca>

Lindsay Harris
University of British Columbia Okanagan, Canada <lindsayellenharris@gmail.com>

ABSTRACT: Studies of islands have emerged as a unique and vital focus of research over the last couple decades. Works like Hau'ofa's 1994 'Our Sea of Islands' have moved us quite systematically towards the study of islands, underlining the dynamic connectedness between terrestrial and marine environments, and between individual islands and elsewhere. By tracing the many and varied ways that salmon (and other actants) connect oceans, islands, and other land forms in an ongoing inter-species dialogue, we can move the discourse one step further, and dissolve islands into a multispecies dialogue made in movement. Such a strategy opens up some insights on the inter-connectedness of islands and others.

KEYWORDS: assemblage theory; Island Studies; multispecies ethnography; salmon

Introduction

Assemblage theory has come to Island Studies. Strafford et al (2011) suggest that an archipelagic view of islands has emerged to sit alongside the more traditional images of island isolates or island dependencies. While Stratford et al partially locate this emerging paradigm for Island Studies in the Indigenous ontologies of island peoples themselves (eg Epeli Hau'ofa's 1994 image of a "sea of islands"), Hayward (2012a) notes that their notion of the archipelago remains a land based one that misses, if you like, the boat. For both Hayward and Hau'ofa the integration of marine and terrestrial activities is essential; Hayward, like Hau'ofa, insists that relations between islands occur at sea, and thus of necessity these emerging island assemblages should incorporate an "aquapelagic" vision.

The impetus to take assemblages seriously can be traced through Science and Technology Studies scholar Bruno Latour. Known for his actor-network theory (ANT), Latour draws attention to the "countless imbroglios" (2004: 20) that mark the complex associations of human and non-human beings with one another. Identifying the complexity inherent in producing scientific knowledge about the non-human world will lead us to eliminate altogether the concept of a single unified nature and instead direct our "attention to mark the complicated, uncertain and risky things we assemble around (Latour, 1993; 2004). For Latour, things do not have to be human to be active; all are "actants" with the ability to do

things or change the course of events (2005). The assemblages of actor-network theory hold to Latour's principle of irreducibility:

> *We don't know yet how all those actors are connected, but we can state as the new default position before the study starts that all the actors we are going to deploy might be associated in such a way that they* ***make others do things****. This is done not by transporting a force that would remain the same throughout as some sort of faithful intermediary, but by generating* ***transformations*** *manifested by the many unexpected* ***events*** *triggered in the other mediators that* ***follow*** *them along the line.* (2005: 107 - emphasis in original)

Assemblage thinking is also associated with the translation of Deleuze and Guattari's concept of *agencement* (1987). These assemblages share many commonalities with Latour's imbroglios: multiplicities of semiotic, material and social flows with no assumptions about which human-non-human entities might be included (ibid: 22-23). Assemblages are always mutating, either holding together or breaking apart (like Latour's networks, they are "collecting" rather than "collected"; 2004: 238), claiming territory and de-territorialising, producing the world rather than representing it (Muller, 2015: 29; Deleuze and Guattari, 1987: 504, 508). Nowhere is the usefulness of this kind of assemblage thinking more evident than Tsing's recent ethnography of the Matsutake mushroom and its global commodity chain. Tsing draws on the imagery of polyphonic music, or intertwined autonomous melodies, to illustrate how to notice assemblages as they gather ways of being. This kind of polyphonic noticing enables an appreciation for "the multiple temporal rhythms and trajectories of the assemblage" (2015: 24). The power of noticing assemblages allows a humble commodity like the mushroom to illuminate how the world economy emerges "within historical conjunctures: the indeterminacies of encounter" (ibid: 119).[1]

Stratford et al follow this Deleuzian notion of assemblage, observing how the "bits and pieces" that assemble become significant in relation to each other. They note:

> *The significance of the assemblage is ontogenic: it is not simply a gathering, a collection, a composition of things that are believed to fit together. Assemblages act in concert: they actively map out, select, piece together, and allow for the conception and conduct of individual units as members of a group.* (ibid: 122)

Assemblages are performed, rather than transcendent, and perhaps most easily ascertained (though not formed) from a species-centric, that is human vantage point, in the first instance. For example, Hayward suggests that the aquapelago be viewed as:

> *an entity constituted by human presence in and utilisation of the environment (rather than as an 'objective' geographical entity). In this regard, aquapelagos are assemblages that come into being and wax and wane as climate patterns alter and as human socio-economic organisations, technologies, and/or the resources and trade systems they rely on, change and develop in these contexts. In this sense, aquapelagos are performed entities.* (2012a: 6)

[1] Harkening back to another set of earlier Island based scholarship (ie Sahlins, 1981, 1985), we might say that the structures of conjuncture that animate histories, are not simply cultural or bi-cultural, but complexly multiple and contingent on each other; such an elaboration does no damage to the earlier notion of structures of conjuncture.

Stratford et al are quite transparent in their own performance of the archipelago. They write:

> *Perhaps there is need to pursue in studies of the archipelago what Fletcher (2011: 18) has proposed for the island: "the idea of 'performative geographies' as an approach to studying the island as a space of cultural production which privileges neither geography or literature (in their narrow senses) but insists on their interconnection"...In our work, the basis for this 'performative geography' (after Fletcher, 2011)—or producing the reality we purport to describe—resides partly in our understanding that the archipelago has been at the core of the constitution of civilisations, collective identities and sovereign states, and central to much scientific discourse.* (2011: 118)

Neither paper takes geography as given, but rather as performative; both papers attempt to perform new island-based geographies; both articles seek evidence of the efficacy of their newly constructed (ie assembled) geographies in the overlapping assemblages of others (Stratford et al look at the ancient Aegean; Hayward at Japan, Indonesia, and Oceania). Both papers invite other scholars, policy makers, and stakeholders to make of the archipelago/aquapelago what they will, but also propose the concepts as comparative ones. That is, they invite us to think across archipelagos/aquapelagos to "potentially novel, powerful, and revealing commonalities and relations of islands *qua* islands" (Stratford et al, 2011: 114).

Subsequent analyses have solidified the concept of the aquapelagic assemblage and its relevance to Island Studies, while also thinking more inclusively about what beings can participate in its performative constitution.[2] Responding to critiques of his initial exposition of the aquapelago, Hayward clarifies: "While the human aspect is essential to the aquapelago, humans are only one of a series of actants without which the aquapelago cannot be performatively constituted" (2012b: 3). In doing so, he follows Bennett's (2010) theorisation of "vibrant matter," a concept she uses to identify the agentic capabilities, or "thing-power" of nonhumans. Hayward then offers a paradigmatic analysis of the complexities of conservation efforts in Haida Gwaii that demonstrates the explanatory purchase of the aquapelago as a concept but also leaves unanswered the question of what, if any, nonhuman agency is at work in the assemblage. Similarly, Fleury takes up Hayward's vision of the aquapalegic assemblage, arguing for a "broader and more three-dimensional view" of the aquapelago by highlighting the fishing and energy resources of the vertical sea space (2013: 1). Though Fleury productively expands the aquapalegic assemblage, his framing still takes fishing from the perspective of the humans catching the fish without taking up the question of the agentic capacities of the fish themselves.

These papers are not the first to call for an approach to islands based on either the interconnection between islands, or on the role of the sea in interconnecting islands. Epeli Hau'ofa's (1994) revolutionary approach to Oceanic Studies was first broached in 1993 at his lecture to the Association to Social Anthropology meetings in Hawai'i. Later published as a dialogue in *The Contemporary Pacific* (1994), the paper proposed the re-assertion of an

[2] As Hayward notes, "the richness of the concept comments back on the broader project of Island Studies (as it has loosely been constituted), stressing engaged, holistic, multiple-actant environments rather than spatial cameos or summary overviews where pale generalisms stand for the vibrant materiality of enacted spaces" (2012b).

Indigenous ontology—an assemblage if you like—which replaced what Hau'ofa saw as a colonial image that presented the Pacific Islands as small, impoverished and isolated isles (even when viewed as archipelagos). Hau'ofa's discussion is deeply embedded in the politics of knowledge but, at its core, he rejects the historical, political, and indeed even geographical image of Pacific Islands as isolated, tiny places in a vast and empty Ocean. His insistence that the islands of the Pacific be conceptualised as "Oceania" —one great aquapelago perhaps—grew from an overt rejection of the ideological consequences of constructing islands and thus islanders as separate, static, and alone. Hau'ofa wrote,

> *Oceania is vast, Oceania is expanding, Oceania is hospitable and generous, Oceania is humanity rising from the depths of brine and regions of fire deeper still, Oceania is us. We are the sea, we are the ocean, we must wake up to this ancient truth and together use it to overturn all hegemonic views that aim ultimately to confine us again, physically and psychologically, in the tiny spaces which we have resisted accepting as our sole appointed place, and from which we have recently liberated ourselves.* (1994: 160)

Embedded in post-colonial rather than assemblage theory, Hau'ofa's critical observations nonetheless resonate with the emerging aquapelagic emphasis in Island Studies. As importantly, the assemblage he thus imagines is the root of a contemporary assemblage that includes islands, oceans, islanders, and Pacific Island migrants who have effectively (re)colonised much of the Pacific, Australasia, and the Pacific Rim (including the United States of America). Indeed, Hau'ofa's reimagining of an Oceanic assemblage coincided with evidence of that assemblage. Other work (Evans, 1999; 2001) shows quite conclusively how Tongan migration has emerged as a powerful tool shaped by Tongan agency in the context of the emerging world system; other scholars (eg Richards, 2008; Irwin, 1984) likewise support characterisations of the Oceanic past consistent with the approach. Hau'ofa not only reflected an emerging assemblage, he lauded and encouraged it—that is he was very much both reflecting and performing the sea of islands assemblage. Then as now, the "sea of islands" thesis is both compelling and a guide for an empirically rich assemblage approach; for all the currency the assemblage has garnered in the Western academy, it is also an Indigenous assemblage at that.

It is not, however, enough. A re-examination of one of Hayward's examples of the aquapelagic—pre-confederation Newfoundland—is helpful by way of illustration. Hayward suggests quite convincingly that islands of Newfoundland, founded as a western extension of Western Europe, limited/enabled by an overwhelming focus on the fisheries (see also Sider, 1990), and fundamentally oriented to the fisheries and the sea, were an aquapelagic society. The small coastal villages (called out-ports) that made up much of the place have, not coincidentally, disappeared as the aquapelagic nature of the place has gradually been transformed by the emergence of Newfoundland in the post-confederation period[3] as a labour pool for the Western Canadian oil and gas fields. So, contemporary Newfoundland is no longer an aquapelagic assemblage. One could argue similarly about contemporary Oceania because it too has been transformed by the new resource flows and relationships that have come with globalisation and is also now re-assembled. Indeed, one could argue that both Newfoundland and Oceania (Tonga anyway) are, like most forms of sociality, constantly in the process of reformulation—re-assemblage if you like. Such assemblages are poorly contained by any approach that would insist that these complex social, political,

[3] Newfoundland and Labrador joined Canada as its 10th Province in 1949 after a referendum on the issue.

ecological, and geographical "bits and pieces" of people's lives and imaginations—fit into a comparative frame based in a common but restricted geography, as if there was anything common about geography. So what else then, besides physical geography, holds these assemblages—as an assemblage as it were—together?

Seriality

In a recent attempt to come to grips with the place of assemblage theory in Island Studies, Owe Ronström proposes the integration of the concept of seriality into the conceptual frame (2015). After Sartre's distinction between groups and series (in *Critique of Dialectical Reason*[4]) Ronström observes that despite the practical or political motivations for conceptualising "islands" as a group, such thinking leads to essentialisation, normalisation and homogenisation—outcomes to be avoided. Seriality, he notes, avoids this problem:

> *To describe something as part of a series it is not necessary to determine a set of common characteristics that are attributed to all members. Membership is not determined by what something is, but by a common orientation towards an object, phenomenon or structure.* (ibid).

Ronström transposes seriality directly onto Island Studies, and indeed on to the emerging concepts of aquapelagic and archipelagic proposed by Island Studies theorists previously discussed.

The conceptual boundaries of a series are purposefully blurry, precisely because the borders are not marked by any one essential characteristic or purpose. The notion of a series opens up some space from which to apprehend a collective and comparative frame, while allowing a diversity unconstrained by any particular essential characteristic (like being surrounded by water for example). The basic point here is not that islands are not islands, but rather that some entities that are not surrounded by water are reasonably located within the series of "islands". A clear additional benefit is that this logical framework rids the use of the categories of their otherwise sometimes naïve empiricism. But once we open up islands to such series-like thinking, how is such seriality to be constrained; that is, what beyond the logic of seriality itself, links islands (or aquapelagos or archipelagos)?[5]

Multispecies Ethnography—Salmon in Three Parts

Multispecies ethnography may provide a productive lens through which to re-examine how islands are related in a process that starts in seriality, and works out in practice.[6] Here the

[4] Ronström is explicitly following on from on the work of feminist scholar Young (1994) who used the notion of seriality as a means to de-essentialise gender categories, and suggests the approach be used as a mechanism to constrain essentialist thinking more broadly.

[5] Recent shifts in the terms of reference *Shima* for example, reflect the growing theoretical sophistication of the field. The systematic inclusion of the term "maritime culture" signals that islands are systematically linked to other coastal and sea forms, in part because the relevant actants are.

[6] Kirksey and Helmreich (2010) provide an overview of the establishment of multispecies ethnography in anthropology. In addition to Latour's (2004) work on human-nonhuman relations, key within this literature is Haraway's text *When Species Meet*, in which the concept of "becoming with" is introduced, invoking rambunctious, tangled webs of associations between "companion species" (2008: 16). Also key

focus is not on how islands are related to continents, the sea, or each other, but rather how multispecies relations mediate relations between all these things. In other words, islands can be thought of a series, but in any one instance the logical linkage *qua* island, is superceded—contextualised in a sense—by the relationships with other actants connecting across a variety of geographies. In the following example, the multispecies relationships in question are those between humans, Atlantic Salmon (*Salmo salar*), and Pacific Salmon (several anadromous species of the genus *Oncorhynchus*[7]). Salmon have traveled rivers from inland to sea for aeons. In and around islands, salmon—variously understood as indigenous, invasive, acclimatised and naturalised—have transformed both local ecologies, and the ways these ecologies are linked to the rest of the Globe in terms of biology, politics and economy. Indeed, salmon, like people, perform complex geographies as a matter of course.[8]

I. Pacific Salmon in Hawai'i

Pacific Salmon have long been an integral element of regional ecologies. In the North Pacific, the fish not only range over thousands of miles of sea and coastal areas during the almost four years they grow to adulthood, they also return hundreds of miles inland along the rivers and streams of their birth. As a genus, they extended across the northern Pacific Ocean and into adjacent landmasses, while particular species and even more localised runs have smaller and often overlapping distributions. These complex salmon runs map on to equally complex sociologies of the Indigenous peoples for whom the fish is a key resource.

With the advent of the modern world system, the complex relations between the people of the Pacific Northwest coast and Pacific Salmon got even more complex, and indeed extended beyond the range of the salmon itself, south to the islands of Hawai'i. The very fish that moved through islands and fjords of the Northwest coast and up the rivers to the interior are described in Marshall Sahlins' work, 'Cosmologies of Capitalism: The trans-pacific sector of "The World System"' (1988). In that work Sahlins demonstrates the systematic connections between the trade in tea, sandalwood, English broadcloths, otter pelts, and Hudson Bay blankets across the Pacific in the 18th and 19th centuries. He shows very clearly that the trade was generated and shaped by a series of overlapping cultural logics emanating from *all* of its participants. Indeed, he shows quite convincingly that while that the British appetite for tea may have driven a demand for Hawaiian sandalwood, the reciprocating Hawaiian demand for broadcloths—of constantly varied sorts—in turn shaped British broadcloth production (rather than the reverse). The islands and inlets of what is now British Columbia were linked in turn through trade in Hudson Bay blankets for otter pelts (for the Chinese market) and salmon (for the Hawaiian market). In an intricate analysis of how these goods articulated with specific cultural desires, Sahlins demonstrates quite effectively how each element of the trade emerged from each cultural location, with

---

is Kohn's *How Forest's Think,* in which an "anthropology beyond the human" enables ethnographic attention to the way nonhuman beings represent the world and enable their own ontologies (2013: 11).

[7] The term 'Pacific Salmon' incorporates several species, including: *Oncorhynchus keta; Oncorhynchus gorbuscha; Oncorhynchus kisutch; Oncorhynchus nerka* and *Oncorhynchus tshawytscha.*

[8] Like Stratford et al (2011) and Hayward (2012a; 2012b), Lien and Law (2011) adopt performativity as central to their methodology for their study of Atlantic Salmon aquaculture in Norway: "the nature–culture dichotomy is indeed enacted in salmon practices in Norway. A performative approach sharpens our awareness of processes whereby these and other fundamental ways of knowing are being reproduced in a society which is, at the same time, so familiar to us that there is a constant risk of not noticing the many ways in which realities constantly come into being" (Lien and Law 2011: 69).

its own logic and economy, rather than a calculus derived from the overarching system. One of these commodities was *lomi*, or *lomilomi*:

> *"Lomi" salmon is made from the red flesh of the imported salmon, massaged between the fingers and mixed with tomatoes, green onions, and crushed ice; both vegetables are foreign introductions, and the use of ice is relatively recent. Lomi salmon and the luau are, however, historically related to precontact practices. Kamakau's descriptions of pre-Christian rituals reveal that one of the conventional offerings to the gods was the kumu, a red fish. Other dishes on the modern luau menu, such as ka/uapig, roasted in an underground oven, and kulolo, a taro coconut pudding, were also standard ceremonial offerings in the Hawaiian religion. In aboriginal society, red was a high color, and these were ritually high foods.* (Linnekin, 1982: 242)

Beginning from the mid-1800s on, some of this *lomi* came from the Salish Sea. From 1834 to 1859 the HBC ran a post at Honolulu, shipping in lumber and salt salmon (made into *lomilomi*), and shipping out various commodities, including labour in the form of contracted Hawaiian labourers. For example, in 1843 the Hudson's Bay Company (HBC) barque *Vancouver* from the Columbia River arrived in Honolulu with a cargo of "695 barrels of Columbia River salmon valued at $4,170, a tidy sum in those days, and 160 twelve-foot four-inch planks valued at $307.20" (St. Clair, 1941: online). According to Barman and Watson (2006), hundreds of Hawaiian Islanders journeyed to the Northwest coast of North America, and many stayed, marrying into various First Nations communities. Known as "Kanakas" locally, these men were particularly likely to be located in maritime areas, and indeed, frequently engaged in fishing—first for the HBC, and later with and for their wives and relatives.

The shipment of salmon to the Hawaiian Islands is a prime example of how one migratory species (humans) have augmented the impact of others (Pacific Salmon), as indeed, the salmon of the Pacific Northwest do not, by their own volition anyway, frequent that area of the Pacific. This interspecies symbiosis also systematically linked islands to each other, to the North American continent, and to the modern world system. There are several other examples of this sort of symbiosis of course.

II. Atlantic Salmon at the Antipodes

Among the most notable inter-species symbioses attached to settler colonialism in the Antipodes were several fostered through the activities of the various Acclimatisation Societies that sprang up in the latter half of the 19th Century. Salmonids (trouts and salmons) of various sorts were introduced through targeted programs. In New Zealand and Australia, these societies were active well into the 20th Century. The Tasmania Salmon Commission was set up to manage salmonids and other fisheries in Tasmania for example and the Inland Fisheries Agency of Tasmania is a direct successor institution of the Tasmania Salmon Commission.[9] In spite of early indications that a hybrid of early introduced Atlantic Salmon stocks had taken in the Derwent River, only varieties of trout[10] were successfully established by the then Salmon Commission. Indeed, the Brown Trout

[9] See http://www.ifs.tas.gov.au/about-us - accessed 10th February 2018.

[10] More specifically these include Browns (*Salmo trutta)* and Rainbows (*Oncorhynchus mykiss)*, and later Brooks (*Salvelinus fontinalis)* and Tigers (*Salmo trutta* × *Salvelinus fontinalis*).

introduced to Tasmania in the late 1800s is the source of the Brown Trout stocks subsequently established at various points through the rest of Australasia (Johnson 1882). According to Lien (2015), Australian Acclimatisation societies followed the British one, and were among the most active in the Empire. The attempted acclimatisation of salmon, the successful acclimatisation of trout, and the successful acclimatisation of many terrestrial species were part and parcel of the European colonisation of the Antipodes, and Antipodean exchange (Frost 1996). Replicating 'Old World' human-fish relations in the 'New World' clearly mirrored settler colonialism more generally; European invasions were multispecies ones, and their impacts were varied and profound. Red Deer (*Cervus elaphus)* for example, have fundamentally remade the New Zealand landscape, and trout have transformed, and been transformed by the riparian ecologies they now inhabit (Franklin, 2011).

III. Atlantic Salmon on the Pacific Northwest Coast

More recently the Atlantic Salmon has again been on the move, linking islands across the globe in complex assemblages and imbroglios. Where salmon was once a powerful and generally positively marked tool of colonisation—in Tasmania for example—it is now part of an increasingly tense debate about invasive species, feral animals, and environmental degradation (see Lien, 2005; 2015). Atlantic Salmon is, of course, now farmed in Tasmania, with escapees being both a sport fishing opportunity and a serious ecological concern.

Atlantic Salmon is farmed in many places (some far inland), but island locations for salmon farms are among those most preferred (Hayward, 2011). In the North Atlantic, the Faroe Islands are among the biggest and most successful producers of farmed salmon, although here again there are concerns about the consequences of genetic mixing between farmed and contiguous wild salmon stocks (Lien and Law, 2011). On the Northwest coast of North America there are grave concerns about the ecological consequences of estuary based salmon farms impacting wild salmon runs, as well as the impacts of escaped farmed salmon generally (see for example Cohen, 2012). There are also complex impacts from the radical growth in markets for farmed salmon[11] on the price of wild salmon (and thus the viability of wild salmon fisheries) and expectations of consumers about what salmon should look and taste like. Consistency in product is manageable in a farmed salmon context in ways that it is not in the wild fishery, which has some contradictory and paradoxical results (see Hebert, 2013). Wild salmon habitat protection is also a concern, especially for Indigenous communities (both those on the sea and those inland), many of which rely on salmon for both food and cash incomes. Atlantic Salmon threaten those of the Pacific, and indeed people on the Pacific—the Indigenous peoples of the Northwest—are questioning the consequences of this re-colonisation.

By way of a de-colonising and third example of the utility of multispecies ethnography we offer a one further example of how and why salmon matter to a modern Island Studies. This example ends in the islands and fjords of the Pacific Northwest Coast, but starts high in the headwaters of the Columbia River, in the Okanagan Valley, in British Columbia.

[11] The Food and Agriculture Organization reports the growth of Atlantic Salmon production increased from just over 10,000 tonnes in 1982, to over 2,000,000 in 2013.

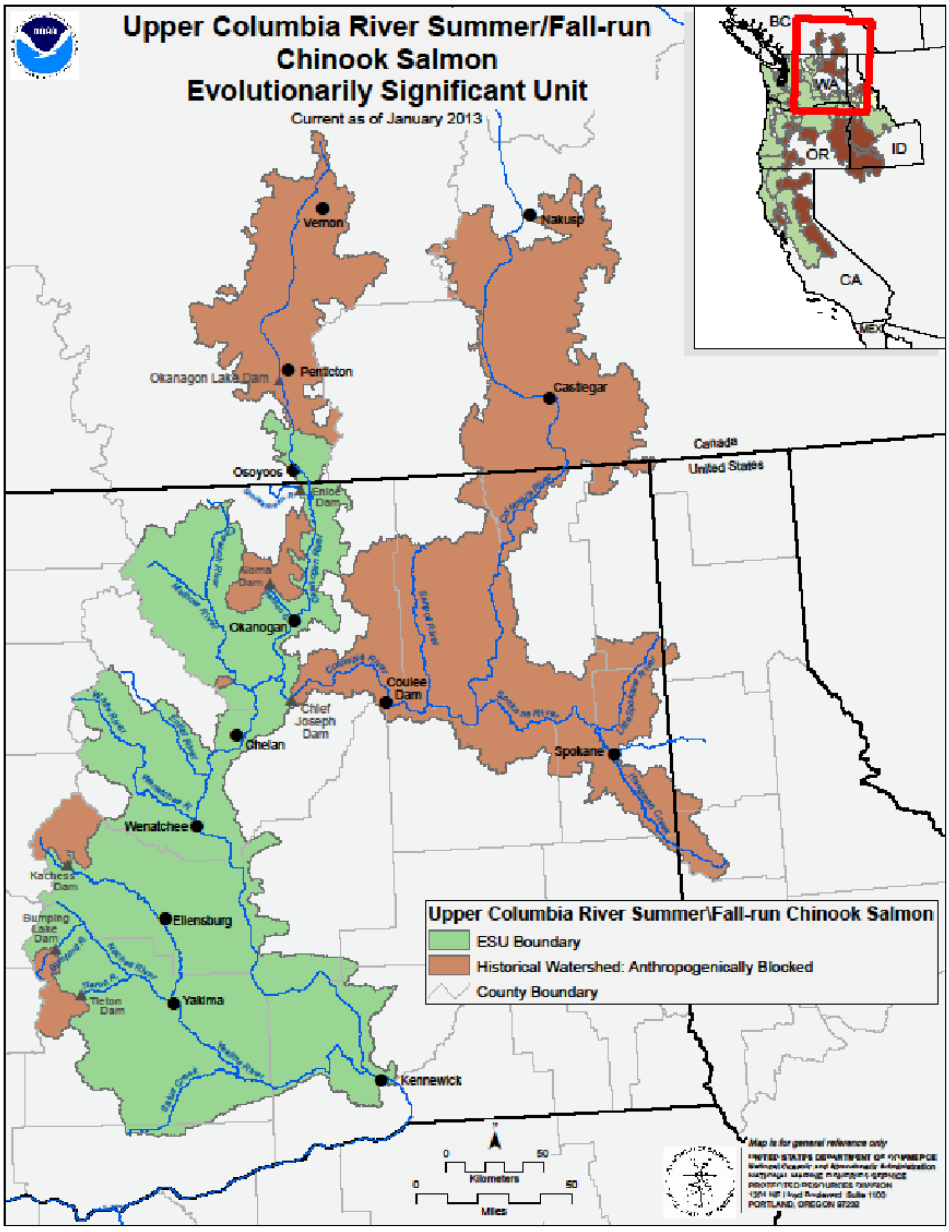

Figure 1 - Salishan fishing areas in Upper Columbia River[12]

[12] Source: http://www.westcoast.fisheries.noaa.gov/publications/gis_maps/maps/salmon_steelhead/esa/chinook/web_pdfs_ucsf_chinook.pdf - accessed November 1st 2018

As elsewhere, relationships between salmon and the Indigenous peoples of the Northwest were the subject of detailed traditional knowledge systems that shaped the relations of people to fish, and people through fish.[13] On the Columbia River drainage (an area occupied by Salishan speaking peoples from the mouth of the river hundreds of miles to the headwaters of the system in the Okanagan Valley) the fish move through the rivers in complex overlapping runs. These fish were, and are, managed by and through equally complex knowledge systems and governance structures through which people shared, protected, and even propagated the fish and their habitats (see Anastasio, 1955). The salmon runs of the Columbia effectively linked the entire ecology of the region in an ongoing performance of that ecology through the catch, escapement, and distribution of fish and people. This was true in the islands and fjords of the coast; it was a fact on the rivers and streams along the coast that connected the upland regions to the sea, and it was an almost total social fact along the great river systems that connected successive autonomous peoples to each other for hundreds of miles. Colonisation of the region disrupted these relationships in various ways, but activities disrupting salmon have been consequential. Dams and other ecological disruptions have expiated sockeye in several areas of the headwaters, and not coincidentally are part and parcel of the transformations of the polities that previously linked the islands of the coast to the headwaters of the basin. And that disruption has ongoing ecological consequences today.

Not coincidentally salmon restoration is an integral part of indigenous resistance to colonial processes. It is important to note here that that indigenous attempts to protect and restore Pacific salmon stocks is fundamentally proactive (not reactive), and seeks to re-establish disrupted inter-species relationships in contemporary context, and thereby demonstrating through these relationships Indigenous sovereignty. Okanagan Select Sockeye Salmon,[14] an enterprise of the Okanagan Nation Alliance (ONA), is part of an Sylix[15] controlled and operated fishing initiative that draws numerous Indigenous communities together to operate a sockeye salmon hatchery on the Penticton Indian Band Reserve. In effect, the map above (Figure 1) is incorrect, and the ONA has extended the range of the salmon north, when each spring Sylix biologists release of hundreds of thousands of fry in the creek flowing out of the Reserve. Since 2007, the fry have been returning higher and higher into the watershed as remediation efforts continue. The initiative is responsible for reversing the near extinction of Sockeye in the upper Columbia, and not coincidentally it is a major factor in the revitalisation of Sylix geo-political activity on both sides of the Canada-USA border. The first named author of this article has been to the ceremonial fry release in Penticton on numerous occasions, and can (and does) attest that when Sylix leaders claim the Sockeye of the upper-Columbia as their fish—their relations—it is literally true not just in terms of Aboriginal right and title, but in the fact of the relationships themselves.

Now, as in the past, the success of the human-fish relationship high in the Okanagan is very much dependent of a chain of relations that extends not only to the mouth of the Columbia, but into the islands of the Pacific. All evidence is that prior to large-scale settler

[13] This section owes a great deal to conversations with Dr. Jeannette Armstrong, and colleagues from the Okanagan Nation Alliance.

[14] See: https:okanaganselect.ca - accessed 10th February 2018.

[15] Sylix is the term that the people of the Okanagan Nation use to refer to themselves. The Sylix people populated most of the Columbia River Basin—right up to the head of Okanagan Lake in south central present day British Columbia. Their lands in Canada are unceded to this day. The Okanagan Nation Alliance is a collaborative body representing the interests of a number of Sylix Bands in BC.

interventions, the human-fish relationship managed by Sylix people was a highly successful one in terms of sustainable and abundant stocks (Johnsen, 2009). The Sylix initiative associated with Okanagan Select reversed some of the damage done by settler colonial disruptions to relations in the watershed, but the Atlantic Salmon fish farms remain a concern. There is a related and ongoing conversation about salmon breeding habitat and its reclamation and protection as well. But regardless of how effectively the Sylix leadership manages its relations with the colonial States, or how effective their ecological restoration efforts might be in the upper reaches of the Columbia watershed, the salmon runs that link the Sylix are still under immediate threat.

In late August of 2017 an estimated 5000 Atlantic Salmon escaped for a farm at Cypress Island in coastal Washington State (Anderson, 2017), sparking renewed concerns about the impact on Pacific salmon species like the Sockeye so recently reintroduced to the lakes and streams hundreds of miles away. Salmon farms themselves are a concern, but salmon escapement is also a concern because of the unknown potential of such escapees to disrupt indigenous salmon by contamination, predation, or competition for the food supply. These matters of concern, because of the actions and interactions of Pacific and Atlantic salmon, start in the islands, but end inland.

Conclusion

By focusing on the agents and actants in island geographies of all sorts, we allow for a conceptual flow across and between those geographies. We allow if you like, for the geographies to be performed together by shifting focus to the performers rather than the stage. Islands themselves are, at some junctures at least, actants in and of themselves, and nothing suggested here precludes this or analyses based in such a perspective. We are privileging fish and humans in the first instance here, because through this lens we can place both islands and aquapelagos into relations that transcend those geographies in sensible ways. Not only do the salmon discussed in this paper themselves create and texture the geography of islands, they do so in direct and ongoing relationships—albeit shifting ones—with humans. That concern, for relationships that matter—matters of concern—lies at the centre of assemblage theory and the new Island Studies paradigms that are now emerging.

The transformations here are fundamentally ontological. Farmed Atlantic Salmon is not simply an ecological threat, it is an ontological threat as well. Even as the ONA works to rebuild the human-salmon relationship so important to Sylix presence on the land, the human-salmon relationship fostered by growing Atlantic Salmon markets undermines, and could potentially destroy, these renewed relations. The assemblage of which the Atlantic salmon is a central part fundamentally erodes Indigenous practices and locality-based reasoning both upriver and among the aquapelagos and marine environments of the coast. In conjunction with the humans with whom they intersect, these salmon relink new assemblages—islands, aquapelagos, and continental geographies—in new, provocative, and potentially disastrous ways. They are no less than actants of re-colonialising and multispecies consequence. Our interpretive and analytical lens must be sufficiently flexible to capture this—that is, we need the ontological capacity to appropriately ascertain what different makes a difference and to direct our attention to other relationships that pass through islands (and inland when appropriate). Such sensibilities lie at the heart of the development of aquapelagic and assemblage theory in Island Studies, and an insistence that we must go where such assemblages take us.

BIBLIOGRAPHY

Anastasio, A (1955) 'Intergroup Relations in the Southern Plateau', (unpublished) PhD Thesis, Department of Anthropology, University of Chicago

Anderson, R (2017) 'Farmed Atlantic Salmon escape into Washington state waters. Here's why fishermen are worried', *Los Angeles Times* 24th August*:* http://www.latimes.com/nation/la-na-salmon-escape-20170823-story.html - accessed 25th August 2017

Barman, J and McIntyre Watson, B (2006) *Leaving Paradise: Indigenous Hawaiians in the Pacific Northwest, 1787-1898,* Honolulu: University of Hawai'i Press

Bennett, J (2010) *Vibrant Matter: A Political Ecology of Things,* Durham: Duke University Press

Cohen, B (2012) *The Uncertain Future of Fraser River Sockeye: the Report of the Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River*, Ottawa: Government of Canada: http://publications.gc.ca/site/eng/432516/publication.html - accessed 19th October 2017

De Landa, M (2006) *A New Philosophy of Society: Assemblage Theory and Social Complexity,* London, Continuum

Deleuze, G and Guattari, F (1987) *A Thousand Plateaus: Capitalism and Schizophrenia*, Minneapolis: University of Minnesota Press

Evans, M (1999) 'Is Tonga's MIRAB economy sustainable? A view from the village and a view without it', *Pacific Studies* v22 n3: 137-166

----- (2001) *Persistence of the gift: Tongan tradition in transnational context*, Wilfrid Laurier University Press

Fletcher, L (2011) "…Some Distance to Go': A Critical Survey of Island Studies', *New Literatures Review* v47-48: 17-34

Fleury, C (2013) 'The Island/ Sea/ Territory Relationship: Towards a broader and three dimensional view of the Aquapelagic Assemblage', *Shima* v7 n1: 1-13

Food and Agriculture Organization (nd) 'Species Fact Sheets: Salmo salar' http://www.fao.org/docrep/006/y4652e/y4652e09.htm - accessed 30th October 2017

Franklin, A.S (2011) 'Performing Acclimatisation: The Agency of Trout Fishing in Postcolonial Australia', *Ethnos* v76 n1: 19-40

Frost A (1996) 'The antipodean exchange: European horticulture and imperial designs', in Miller, D.P and Reill P.H (eds) *Visions of Empire: Voyages, Botany and Representations of Nature*, Cambridge: Cambridge University Press: 58-79

Haraway, D (2008) *When Species Meet*, Minneapolis: University of Minnesota Press

Hau'ofa, E (1994) 'Our Sea of Islands', *The Contemporary Pacific* v6 n1: 148-61

Hayward, P (2012a) 'Aquapelagos and aquapelagic assemblages', *Shima: The International Journal of Research into Island Cultures* v6 n1: 1-11

----- (2012b) 'The Constitution of Assemblages and the Aquapelagality of Haida Gwaii', *Shima: The International Journal of Research into Island Cultures* v6 n2: 1–14

----- (2011) 'Salmon aquaculture, cuisine and cultural disruption in Chiloe', *Locale: The Australasian-Pacific Journal of Regional Food Studies* v1 n1: 87-110

Hébert, K (2010) 'In pursuit of singular salmon: paradoxes of sustainability and the quality commodity', *Science as Culture* v19 n4: 553-581

Irwin, G (1994) *The prehistoric exploration and colonisation of the Pacific*, Cambridge University Press

Johnsen, B (2009) 'Salmon, Science, and Reciprocity on the Northwest Coast', *Ecology and Society* v14 n2: 43

Johnston, R.M (1882) 'General and critical observations on the fishes of Tasmania; with a classified catalogue of all the known species', *Papers & Proceedings of the Royal Society of Tasmania*: 51-170

Kirksey, S and Helmreich, S (2010) 'The emergence of multispecies ethnography', *Cultural Anthropology* v25 n4: 545-576

Kohn, E (2013) *How Forests Think: Toward an Anthropology Beyond the Human*, Berkeley: University of California Press

Latour, B (1993) *We have never been modern*, Cambridge: Harvard University Press

----- (2004) *Politics of nature: How to bring the sciences into democracy*, Cambridge: Harvard University Press

----- (2005) *Reassembling the social: An introduction to Actor-Network-Theory*, Oxford : Oxford University Press

Law, J and Mol, A (1995) 'Notes on Materiality and Sociality', *The Sociological Review* v43 n2: 274-294

Lien, M.E and Law, J (2011) ''Emergent Aliens': On Salmon, Nature, and Their Enactment', *Ethnos* v76 n1: 65-87

Lien, M (2015) *Becoming Salmon: Aquaculture and the Domestication of a Fish,* Berkeley: University of California Press

----- (2005) 'King of fish or 'feral peril': Tasmanian Atlantic salmon and the politics of belonging', *Environment and Planning D: Society and Space* v23 n5: 659-671

Linnekin, J S (1983) 'Defining tradition: variations on the Hawaiian identity', *American Ethnologist* v10 n2: 241-252

Miller, K.A (2003) 'North American Pacific salmon: A case of fragile cooperation', *FAO Fisheries Report* 695 Supplement 105-22: http://www.fao.org/docrep/006/y4652e/y4652e09.htm - accessed 26 October 2014

Müller, M (2015) 'Assemblages and actor-networks: Rethinking socio-material power, politics and space', *Geography Compass* v9 n1: 27-41

Richards, C (2008) 'The Substance of Polynesian Voyaging', *World Archaeology* v40 n2: 206-223

Ronström, O (2015) '*"Island"* as seriality', paper at 'The Safeguarding and Promoting of Sea and Island Culture' conference, Nha Trang, Vietnam, January 5th-6th

Sahlins, M (1985) *Islands of History*, Chicago: University of Chicago Press

----- (1981) *Historical Metaphors and Mythical Realities: Structure in the Early History of the Sandwich Islands Kingdom*, ASAO Special Publications n1, Ann Arbor: University of Michigan Press

-----(1988) 'Cosmologies of capitalism: The trans-Pacific sector of 'The World System'', *Proceedings of the British Academy* v74: 1-51

Sider, G.M (1986) *Culture and class in anthropology and history: A Newfoundland illustration*, Cambridge: Cambridge University Press

Stratford, E, Baldacchino, G, McMahon, E, Farbotko, C and Harwood, A (2011) 'Envisioning the Archipelago', *Island Studies Journal* v6 n2: 113-130

St. Clair, W Jr (1941) 'Beaver in Hawaii', *The Beaver,* Reprint: http://www.canadashistory.ca/Magazine/Online-Extension/Articles/HBC-and-the-Northwest-Rebellion#Hawaii – accessed 26th October 2014

Tsing, A (2015) *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Princeton: Princeton University Press

Young, I.M (1994) 'Gender as Seriality: Thinking about Women as a social collective', *Signs* v19 n3: 713-738