The Māʻohi Hinterlands:
regional variability and multi-scalar socio-economic networks in the pre-contact Society Islands

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ABSTRACT:

I draw upon current research highlighting the agentive role that hinterland zones could have on both local and regional dynamics. In my case study on the Society Islands, I consider hinterland variability at multiple scales, that of the local, community, and regional or meta-regional scale. Synthesis of historic texts and oral traditions provide an emic view into how the Māʻohi themselves conceptualized their social landscapes. I develop a multi-scalar view of hinterlands and hinterland to core relations, exploring island specific, archipelago-specific, and extra-archipelago 'far' hinterlands in the Society Island context. Finally, I use both ethnohistoric and archaeological data to imagine both push and pull factors leading to certain social actors inhabiting specific hinterland regions. My multi-scalar view of Māʻohi hinterlands illuminates their diverse socio-economic roles as well as their relational quality. As I argue, elites reached deep into the hinterlands as a form of political aggrandizement and as an expression of economic power. Such places also served as elite refugia for Māʻohi chiefs, priests, and *ʻarioi*. Yet agency was not restricted to core regions, as hinterland communities likewise reached deep into cores in order to maintain their own economic viability through precious socio-political alliances and networks.

Keywords: Society Islands, ethnohistory, hinterlands, exchange, satellite communities, specialized craft production, middle-men entrepôt.

INTRODUCTION

Historically, archaeologists have conceptualized hinterlands as remote places with little daily impact on political events centered in core regions. Early interpretive frameworks of core-periphery relationships, such as that of Wallerstein (1974), largely focused on economic relationships, viewing hinterlands as extraction zones exploited by city dwellers for raw materials, staple goods, and labor. Yet landscape studies of urban settings and their greater hinterland environments have long noted more intricate core-periphery relations. In complex state societies, Smith (2014:307) has posited that 'urban-based elites reach deep into the countryside not only as a matter of political control, but also for investment of centralized resources into infrastructure such as canals, roads, and territorial borders'. Agency and intentionality were not unidirectional, as core-hinterland interdependences translated into new socio-economic opportunities for rural hinterland dwellers and political rulers alike. Likewise, elite- driven exploitation of hinterlands was not purely restricted to economic matters.

Rulers often utilized hinterlands in targeted ways, as places for resource acquisition or as socio-political arenas for aggrandizement, warfare, and alliance building (Golden 2003).

Current hinterland research illustrates the agentive role that marginally spatial zones could have on both local and regional dynamics. Inhabitants of places on the margins were active agents in their daily lives, not just passive pawns of the core. Comparative studies of regional hinterlands have noted diversity in local-scale social organization, ritual practices, access to labor, and signaling of local identity and external connections (Yaeger and Robin 2004). So too, transformations in the hinterlands could have broader implications for regional cores. Commoners in the hinterlands produced more than just staple goods for the core, they actively constructed their own ritual architecture for varied means, to recreate the cosmos, to ensure fertility, and to integrate local communities via communal ritual (Zaro and Lohse 2005). Schneider's (2015) study of the role of indigenous hinterlands in the colonial period noted how commemorative trips to shellmounds, refuges, and other landscapes provided contexts for Californian Indian communities to make active decisions in the face of missionization. Thus, there can be 'power in marginality', as zones at the limits of dominant influence allow for creative responses to external threats and the ability to uphold traditions (Schneider 2015:705).

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HINTERLAND STUDIES IN EASTERN POLYNESIA

In a sense hinterlands have been a component of archaeological settlement patterns within Eastern Polynesia since the 1990s, when investigating regional variability came to the fore. In studies of the 1990–2000s, hinterlands were often broadly conceptualized as more marginal zones only extensively occupied and/or agriculturally intensified once resource rich zones or centers had seen full land situations (Hommon 1986; Kirch 2000; Lepofsky 1994). Such models inadvertently viewed hinterlands as passive places, zones expanded into only once resource-rich cores had been densely settled. Thus, early views pigeon-holed Eastern Polynesian hinterlands into normalized environmentally marginal or geographically isolated spaces, without much specific attention to how or if their localized settlement patterns or day to day social interactions varied from the core. In the last two decades, archaeological studies have refined our knowledge of Polynesian chiefly centers. Such places served as not only the residences of the highest ranked chiefs, but as social, economic, and ideological centers of consolidated political power (Clark *et al.* 2016; Clark and Reepmeyer 2015; Kahn in press; Kahn and Kirch 2014; Kirch 2010; Maric 2012, 2016). Within Polynesia, most agree that primary chiefly centers stood at the apex of three tiered settlement hierarchies in complex chiefdoms and archaic states, yet the degree to which these primary centers varied across island or archipelago landscapes is not well understood, nor is the constellation of the settlement hierarchies nestled beneath them. We must develop a similar focus on variability within and between island and archipelago hinterland regions for holistic understandings of pre-contact social complexity in Polynesian chiefdoms utilizing both bottom up and top down perspectives.

With four decades of landscape scale studies examining settlements at the cores and the margins, many Eastern Polynesian contexts are ripe for reconceptualizing diversity of, within, and between hinterlands. Several new studies have taken a more social approach, outlining both push and pull factors that drew diverse communities with varied interests to live outside the more densely settled and formally surveilled core regions (Lepofsky and Kahn 2011; Maric 2012). Taking a broader meta-approach, I argue that pre-contact Society Island hinterlands had varying socio-economic roles in the past given their multi-scalar, relational quality. As a first paper expressly outlining hinterland zones in the Society Islands, I attempt to define Māʻohi hinterlands from both an emic and etic perspective and to explore their varied socio-economic functions and relationships to more centrally located regions.

If hinterland regions are often poorly represented in archipelago-wide meta-histories in Eastern Polynesia *vis a vis* common markers of social complexity, such as monumental architecture and chiefly centers, this does not simply mean that they represent poor cousins to their more flashy cores. In addition, hinterlands are oftentimes poorly represented in extant oral traditions and myths, common markers used to infer chiefly socio-political hierarchies, competition, and alliances. So how are we to examine the social and economic roles of hinterland regions, without pigeonholing them into 'marginal' contexts that passively respond to and generally mirror larger archipelago-wide trends? A first step requires a consideration of hinterland variability at multiple scales, that of the local, community, and regional or meta-regional scale. A second step requires imagining both push and pull factors that led certain social actors to inhabit hinterland regions. As places that likely existed on the social margins of active, dominant chiefly power, hinterlands can be viewed as places that allowed for varied social actors, elite and commoner alike, to inhabit multi-faceted characteristics of their social personae. One caveat, as there has been little archaeological research centered explicitly on Society Island hinterlands, my discussion is rather preliminary. I attempt to synthesize extant archaeological, ethnohistoric, and ethnographic data in the Society Island context, yet as the reader will see, current datasets are slim so the interpretive strength of my study is preliminary and tentative at best.

GEOGRAPHICAL AND CULTURAL BACKGROUND TO THE SOCIETY ISLANDS CASE STUDY

The Society Island archipelago of central Eastern Polynesia is a resource rich high island archipelago, in contrast to the neighboring Tuamotu Island archipelago dotted with atolls to the east, and the mixed high island-makatea-atoll composition of the Cook Island archipelago to the west. Although the Society Islands extend over 725 km (450 miles) in length, the majority of its land area is formed by eight principal high islands. These are divided into the Leeward Group, comprised of Maupiti, Tahaʻa, Raʻiātea, Huahine, and the Windward Group comprised of Maiʻao, Moʻorea, Tahiti, and Mehetia. Five small atolls are found adjacent to the archipelago (Tūpai [Motu Iti], Mopelia [Maupihaa], Bellingshausen [Motu One], Scilly (Manuaʻe), and Tetiʻaroa. A 2–3 day sail via traditional outrigger canoe separates the main Windward and Leeward groups, while some of the far western atolls are as much as a 10–12 day sail from Tahiti.

Differences in island size, island type, and island age created varied resource gradients within and between the Leeward and the Windward group and between the main Society Islands and the adjacent atolls. The older Leeward Islands group have smaller landmasses because each high island has started to subside. Yet while somewhat depauperate in terms of land resources, these islands have extensive and well developed reef and lagoon systems. Maupiti, lying at the western end of the Society Island linear hotspot archipelago, is the most extreme example. It is among the smallest islands in the archipelago at only 12 km² (Table 1). With an age of 4.2–4.6 ma, it has undergone subsidence and represents a 'near-atoll' island, with a small volcanic land mass surrounded by a developed barrier reef and

Table 1. *The Relational Quality of Society Island Archipelago-specific Hinterlands (Maupiti, Teti'aroa, Mehetia) and Extra-Archipelago 'Far' Hinterlands (Fenua'ura, Mopelia). Complex settlement pattern refers to those with all types of generalized site types (residential, ritual, agricultural) as well as evidence for elite specialized sites (council meeting platforms, archery platforms) and a range of temple styles. Simple settlement patterns refer to those with more restricted site types.*

Name	Type	Size (km²)	Relative Isolation	Settlement Pattern	Probable Function	Social Adaptations
Maupiti	Old high island, near atoll	12	Low	Complex	Resource extraction (tribute?), trade	Localized artifact styles, specialized artifact production (adzes, poi pounders), permanent habitation, frequent core-hinterland interactions
Mehetia	Young high island	7	Moderate	Complex	Place for exiles from Tahiti, elite economic expansion, trade	Entrepot for Tahiti-Tuamotuan trade, exclusive relationship with Taiarapu chiefs of Tahiti (?), specialized goods (wooden head rests), specialized labor (middlemen), permanent habitation, frequent core-hinterland interactions
Teti'aroa	Atoll	5	Moderate	Complex	Elite territorial expansion, elite resource extraction, socio-political and ritual refuge for Tahitian elites, trade	Dependent (?) or exclusive (?) relationship with Pare chiefs, specialized resources (fish, coconut oil), permanent habitation, frequent core-hinterland interactions
Fenua'ura	Atoll	< 5	High	Simple ?	Resource extraction (birds) (?)	No permanent settlement (?), pronounced provisioning needs for extended stays, infrequent use
Mopelia	Atoll	< 5	High	Simple ?	Resource extraction (birds) (?)	No permanent settlement (?), pronounced provisioning needs for extended stays, infrequent use

lagoon ecosystem. The barrier reef is capped with extensive coral islets (*motu*) comprising half of the terrestrial land area. The main island has a narrow coastal plain lacking permanent streams, although the island's small valleys have intermittent stream channels. Thus, Maupiti lacks extensive arable land, particularly for highly productive wetland taro.

In contrast to the older Leeward Islands, the younger Windward Islands (Mo'orea, Tahiti) have large landmasses heavily dissected by stream valleys, creating large inland areas for irrigated and dryland cultivation. Their coastal plains also provide rich contexts for irrigated agriculture and arboriculture. Yet the Windward group has only moderate marine resources, as their surrounding barrier reefs and lagoons are at fairly young stages. Thus, Mo'orea and Tahiti offered the most extensive array of terrestrial resources, including broad inland valleys with young (high nutrient content) soils, but these islands had limited marine resources. Mehetia, the youngest and smallest Windward island (7 km², Table 1), represents the summit of a large submarine volcano. As the youngest high island in the chain, it is somewhat resource poor, due to its steep topography, lack of a well-developed coastal plain, and absence of a well-developed fringing reef.

Finally, in contrast to the main high islands of the Society archipelago, the adjacent atolls of Tūpai, Mopelia, Bellingshausen, Scilly, and Teti'aroa were resource poor. Atolls have unpredictable climates, poor soil fertility, and an absence of surface potable water; due to these factors intensive agriculture was typically restricted to swamp taro and tree crops (Anderson 2009). Archaeological studies have documented how low density human populations can suc-

cessfully subsist on resource poor atolls when local adaptations (food storage, diverse fishing techniques, population regulation) and regional adaptations (maintenance of social ties and economic connections to nearby resource rich islands) are developed (Addison *et al.* 2009; Fitzpatrick *et al.* 2016; Weisler 2004). Following this, Fitzpatrick and colleagues (2016:165) have argued that while small islands (like Mehetia or Maupiti) or atolls (like Teti'aroa or Mopelia) may have been geographically or ecologically marginal, they could be used strategically to access their rich marine resources and to position certain social groups deliberately within wider regional trade and exchange systems.

EMIC VIEWS

So how did the Mā'ohi characterize remote places within specific high islands or remote islands within or adjacent to their archipelago? In terms of emic views of Mā'ohi hinterlands, oral traditions and historic texts are remarkably silent. The earliest Tahitian dictionary lists *hiti* as referring to an edge, a border, extremity of a place, or thing. *Hitiapa* are glossed as the inhabitants of a border land (Davies 1851). Thus, emic views focus on spatial relationships, with lands and inhabitants at the borders and margins, presumably to more centrally located lands and inhabitants, seen as hinterlands.

Historic texts and oral traditions flesh out aspects of the form and the function of pre-contact Mā'ohi hinterlands. At the island-wide scale, Mā'ohi hinterlands were likely envisioned as remote places at the borders and margins of landscapes of daily use. Such zones encompassed

high-altitude mountainous regions that at times were engulfed in cloud forest. That European Explorers visited such steep tree and fern covered regions and noted their exploitation by the Māʻohi, who climbed ropes of bark to collect semi-cultivated *fei* (mountain bananas) (Banks in Hooper 1896:106–107; Forster 1778:404; Parkinson 1784:35) and perhaps bamboo and sugarcane (Lepofsky 1994:66) on their steep slopes and cliff faces, supports their economic use (Hamilton and Kahn 2007). These places were also important refugia for valued endemic species of flora (such as rare ferns, mosses, and flowers; see Meyer 2010) and fauna (land and sea birds). Materials from such wild species were used in personal adornment and for decorating elite clothing, prestige items, and ritual prestige goods such as feathered god figures (Kaeppler 2007:100). In times of war, mountainous regions also served as refugia for Māʻohi populations, who fled to fortified ridge sites and other places of protection (LMS Archives, in Oliver 1974:406–407; Kahn in press; Robineau 1985:120).

High altitude cloud forests also had clear ritual and cosmological significance. The Māʻohi viewed mountains as sacred areas and places where the dead spirits went to dwell. Boasting chants of district chiefs named mountain peaks as among the important natural features linked to ruling *ariʻi rahi* (high chiefs), as with 'The mountain above, at Opoa, is Te-aʻe-tapu (Prevailing sacredness)' (Henry 1928:95), referring to the mountain looming over the coastal plain at Taputapuātea, the most sacred of primary chiefly centers. Mountains delimited the interior boundaries of socio-political districts but also symbolized the head, the seat of *mana*, as well as the resting place of the gods (Maric 2012; Oliver 1974:66, 133, 140). High elevation was associated with the gods and the most sacred chiefs, thus it is unsurprising that chiefly burial caves were sometimes nestled in high mountain cavities, like Mount Rotui on Moʻorea (Charleux 1980). Perhaps mountains and cloud forests served in another sense as sacred liminal zones, situated at the borders of the land of the living (*te ao*) and the land of the dead (*te po*).

As I will argue, the scale at which the Māʻohi characterized hinterlands was likely relational. Three nested spatio-relationships are possible, hinterlands relative to one's own home island, those relative to other islands in the Windward and Leeward groups, and those far afield, namely outside the general Society Island interaction sphere. In an attempt to model multi-scalar views of Māʻohi hinterlands, I now turn to these three scales to broadly investigate settlement patterns and social interactions, including resource extraction, long-distance exchange, and down the line trade, to provide a more holistic view of the role of remote places within and around the archipelago.

A MULTI-SCALAR VIEW: TYPES OF HINTERLANDS AND HINTERLAND TO CORE RELATIONS

Island-specific hinterlands

From an emic perspective, the most basic element of a Māʻohi hinterland is the reference to an extremity of a place or a thing. In terms of small to moderately sized high islands, oftentimes the most remote extremities include high altitude mountainous locations. Emory (1933) and others (Handy 1930) first noted the presence of Māʻohi hilltop forts (*pa*), where high altitude hilltops were leveled and a series of terraces built in easily defensible locations. While high altitude zones lack extensive survey in the Society Islands, other strategic uses include the construction of house terraces and agricultural sites on knife ridges, another type of naturally defensive site with strategic position (Cauchois 2015; Eddowes 2003:61, 65; Kahn *et al.* 2015). 'Lookout' platforms situated on top of rockshelters with excellent surveillance functions (views of the valley, bay, and lagoon pass) have also been identified in upper valley contexts (Cauchois 2015:103). Thus, while we lack well excavated examples of fortified sites, their spatial layout, form, and location suggest a myriad of defensive/surveillance features.

Archaeological and ethnohistoric documents allude to the 17th to mid-18th centuries as a period of intense competition between warring chiefdoms in the archipelago. Oral traditions and historic sources recount how chiefly families fled to adjacent socio-political districts, other islands, or mountain refuges in times of war. Those of the general populace who could would also flee to the mountains (LMS Archives, in Oliver 1974:406–407; Robineau 1985:120). A passage in Henry (1928:299) speaks to some of the specific types of social personae who used *pa*:

> Fortifications, called *pa*, were strongholds in the mountains, rendered more secure by walling and fencing in weak parts, and embankments upon low ground, formed of trees hewn down and piled over with sand and earth. Inside the *pa* were huts for the men (warriors), in the rear of which was also a camp for brave women, who aided the men by cooking for them, dressing their wounds, and joining in the fight. In secluded places were houses of safety called the *fare hua* (houses of the helpless), for old or disabled men and for women and children, places which in war time were under the protection of a priest…. (Henry 1928:299).

Defensive practices, which included elements of resistance, were performed in order to avoid being taken as a *tītī,* a war captive, a term that has a negative connotation as it is also glossed as a slave or refugee (Ellis 1829: II, 342; Oliver 1974:750). While poorly dated, defensive sites become more frequent in the Late Classic Phase

(AD 1650–1767), when the ʻOro war cult led to increased chiefly competition and endemic warfare. Such trends indicate that Māʻohi communities intentionally targeted the use of hard to access uplands and mountainous zones for defensive purposes.

Other recent archaeological surveys suggest that high altitude zones with marginal environments, such as areas with steep topography or arid conditions, saw permanent and intensive use by commoners for residence, subsistence agriculture, and raw material extraction. In an ʻOpunohu Valley, Moʻorea Island study, Lepofsky and Kahn (2011) suggested that varied social conditions impacted late precontact Māʻohi settlement patterns. Sites complexes such as ScMo 313–318 are situated on a steep narrow ridge at high altitude (*c.* 150 m). That these complexes include simple *marae* (ScMo-313, -314), simple residential structures (-315, -316), and extensive agricultural complexes (ScMo-317,-318) testifies to how Māʻohi farmers expanded into more marginal ecological contexts. Yet rather than being exclusively related to demographic growth or elite driven surplus production, Lepofsky and Kahn posited that such expansion was perhaps linked to everyday farmers' efforts at risk minimization (i.e. extending the harvest season) and a desire to live in a social context outside the watchful eyes of the elites. Accordingly both push versus pull factors should be investigated when interpreting Māʻohi decisions to intentionally inhabit hinterlands in a permanent manner, as some aspects of hinterland landscapes offered positive environmental and perhaps more importantly, social conditions.

Others have explored how some Māʻohi high altitude hinterlands offered a range of benefits that more desirable lower altitude and environmental niches lacked. In a Tahiti Island case study, Maric (2012:153) investigated 15th-18th century settlement and use of marginal, high altitude environments on the Taharuʻu Plateau, Tahiti (800 m high, see Maric and Cauchois 2009). While the nearby Papenoʻo Valley had high rainfall and moderately productive soils, its steep slopes lacked expansive flats, making the construction and maintenance of residential sites, agricultural complexes, and water-control features a labor-intensive proposition. Taharuʻu likely had less productive soils and a shorter growing season than adjacent valleys, yet, its growing season differed from its neighbors, thus diversifying the pace and tempo of harvests, labor allocation, and the length of annual food production for certain species. The region also had pull factors, notably extensive flatlands, permanent water sources, raw material sources for stone tool production, and naturally defensible conditions (Maric 2012); it also provided a social context outside the pressures of living in close proximity to demanding elites. Such patterns contradict normative resource rich core versus resource poor hinterland dichotomies, once again reminding us of the importance of examining both push and pull factors when studying multi-faceted hinterland use.

Archipelago-specific hinterlands (Maupiti, Tetiʻaroa, Mehetia)

Zooming out to take a regional perspective on Māʻohi hinterlands, we turn to contexts on the extremities of the archipelago. Within hot spot archipelagoes, Pacific Island archaeologists have proposed that small remote islands, atolls, or atoll archipelagoes neighboring them, had to maintain long-standing relationships to adjacent high islands to facilitate trade in subsistence goods, access to raw materials for prestige goods' production, and availability of marriage partners (Weisler 2004; Weisler and Walter 2017). Such relationships also provided a buffer to the more marginal environmental communities, offsetting the impoverished resources of the dry season (McNiven 2015) and providing refuge and resources after catastrophic events such as inundations from storm surges, tsunami, or prolonged drought (Yamaguchi *et al.* 2009). Small islands and atolls adjacent to high islands also likely had enclaves of less disturbed habitats, notably marine habitats and bird rookeries, suitable at a minimum for seasonal resource extraction and at times for permanent settlement (Jones *et al.* 2007). We can then view small islands, atolls, and atoll arcs not only as having key push factors, but key pull factors leading to their varied exploitation and use by diverse pre-contact communities.

In terms of archipelago-specific hinterlands for the Society Islands, I focus on Maupiti, Tetiʻaroa, and Mehetia. As previously mentioned, Maupiti and Mehetia are the smallest islands within the archipelago, found at its more remote western and eastern margins. Both islands have environmental constraints, due in part to their isolation, their small size (12 km² or smaller), and their age (old age, Maupiti; young age, Mehetia) (Table 1). Tetiʻaroa atoll, found at 42–52 km to the north of Moʻorea and Tahiti, lies at the periphery of the Society Islands. Twelve vegetated islets of varying size (0.005–1.6 km²) are situated on its reef ring; the total land area is 5.1 km² with a maximum elevation of 3 m (Russel *et al.* 2011; Sachet and Fosberg 1983). Its low elevation leaves it particularly susceptible to drought, flooding, and vegetation disturbances due to cyclones and tropical storms.

Maupiti

As a small island with a somewhat marginal environment at the periphery of the Society archipelago, Maupiti posed some constraints to human settlement. Today, Maupiti's some few thousand residents live in a highly peer managed landscape, where resource use, notably water and pigs, is tightly surveilled (Kahn unpublished field notes, 2014, 2017). The island has a rich archaeological settlement pattern, with 48 temples, 11 house sites, and numerous rockshelters situated on the coastal plain (Conte 1981, 1998); other residential sites, agricultural complexes, and fortification sites are located in the interior (Kahn *et al.* 2015; see also Emory 1933, Handy 1930, 1932).

Archaeological and ethnohistorical analyses indicate that in its past, Maupiti buffered relative isolation, small size, and more marginal terrestrial resources in varied ways. The islands's residents were known for exporting adzes and distinctly shaped poi pounders to the rest of the archipelago (Figure 1; see Forster 1778; Kahn 2018; 5; Oliver 1974). The island's leaders also actively chose to frequently reconfigure their socio-political alliances (Kahn *et al.* 2015). Genealogies suggest a long period of independence (Henry 1928), while temple chants call out connections to elites on Borabora and Raiʻatea (Emory 1933; Ropiteau 1932). Despite efforts to align with Tahiti, Huahine, and Raiʻatea (Oliver 1974), Maupiti was subservient to Boraboran chiefs by the 1800s. Archaeological data demonstrates that subsistence intensification and ridge top residences in Haranai Valley correspond to the late prehistoric phase when the relatively independent island was drawn into alliances with island and supra-island chiefdoms in the archipelago (Kahn *et al.* 2015). Considered together, these patterns demonstrate a need to increase island productivity due to socio-political competition, with the ridge top residences suggestive of external competition from neighboring islands. That 50% of the current sample of Maupiti artifacts analyzed via WDXRF derive from off-island sources suggest sustained external contacts and trade with other islands in the archipelago,

including Tahiti (Kahn unpublished data).

In sum, while Maupiti can be considered a hinterland given its spatial location on the edges of the archipelago, it ultimately was subsumed under the control of its nearest island neighbor, Bora Bora. Yet all the while its residents maintained aspects of their local identity in their material culture (poi pounder and temples styles), settlement patterns (a single chiefly center), and social system (prevalence of warriors, yet notable reduced hierarchy in relation to the other high islands, see Handy 1930, Kahn *et al.* 2015). Here again we can see some of the social flexibility as well as the constraints that living in a relatively remote hinterland island afforded for local communities in the Society Islands.

Mehetia

Like Maupiti, Mehetia is a young, small island with a somewhat marginal environment at the periphery of the Society archipelago and as such, posed some constraints to human settlement. While potable table water is available on the central plateau, the problem is living on a young island with steep slopes and little coastal plain. The archaeological record for Mehetia is poor, with basic survey data available but no detailed excavations. Surface surveys have identified
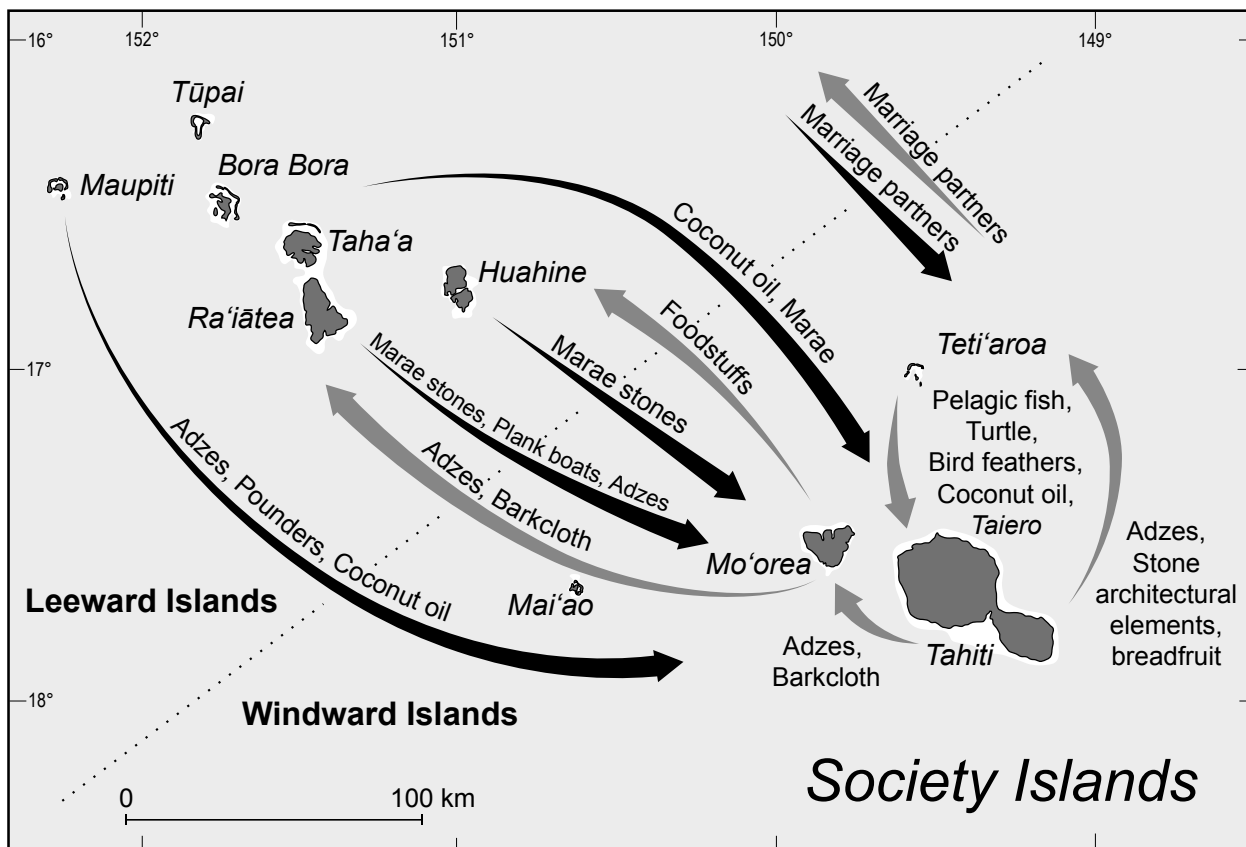

Figure 1. Late Prehistoric and Contact era exchange patterns within the Society Islands, as reconstructed from ethnohistoric sources and archaeological data.

numerous residential sites and ritual sites (Emory 1933) and a probably council meeting platform (Verin 1962a). Of the ten or so *marae*, several are intermediate styles or more complex forms with stepped altars and fancy raw materials (cut and faced coral, basalt, and red and black tuff). Temple styles are suggestive of Windward Society Island forms, with some hints of Tuamotu influence (i.e. the use of coral uprights). Surface artifacts include adzes and poi pounders similar in form to Windward Group styles.

Given the lack of well excavated sites, we have to rely heavily on ethnohistoric texts to define Mehetia's hinterland status. Like Maupiti, oral traditions recount an earlier time when Mehetia was independent of outside usurpers (likely from Tahiti or Mo'orea) who invaded their land (Emory 1933:111–114). These themes are expressed in at least one Tuamotuan legend (Emory 1933:111–112), underlying the close association between these two regions. Spanish missionaries also describe Mehetia as a place of banishment for Tahitians who had fallen out of favor (Corney 1914:264). Such a conception broadens our emic perspectives of Society Island hinterlands as places on the geographic margins for exiles considered to be on the social margins.

Varied historic texts refer to regular trade between Mehetia and the Society Islands, in particular between Mehetia and Tahiti. Some three to four times a year Mehetia would exchange barkcloth, wooden headrests, mats, cloth, coconut oil, pigs, pearls, and pearlshells with Tahiti (Figure 2; see Wilson 1779: 402–403; Salmond 2009). While the terrestrial-based resources likely derived from Mehetia, the pearls and pearlshell originated from the island's regular exchange with the Tuamotu archiepelago, particularly Ana'a (Salmond 2009). Several types of exchange systems and hinterland interactions are evident here. Historic accounts indicate that chiefs ruling the southern district of Tautira, Tahiti iti (domain of Taiarapu chiefs) regulated and controlled regular trading interactions with Mehetia (Morrison 1935: 201; Wilson 1779). The specific mention of wooden headrests in these exchanges is notable. Such objects served as prestige goods for high chiefs (Kahn in prep.). Mehetia seems to have specialized in headrest production and exchange, similar to how other islands in the chain, like Maupiti, specialized in producing specific goods (adzes and poi pounders) for exchange. Mehetia also served as a middleman in down the line trading between the Tuamotus and the Society Islands. In this way, residents of the Mehetia hinterlands actively exploited their
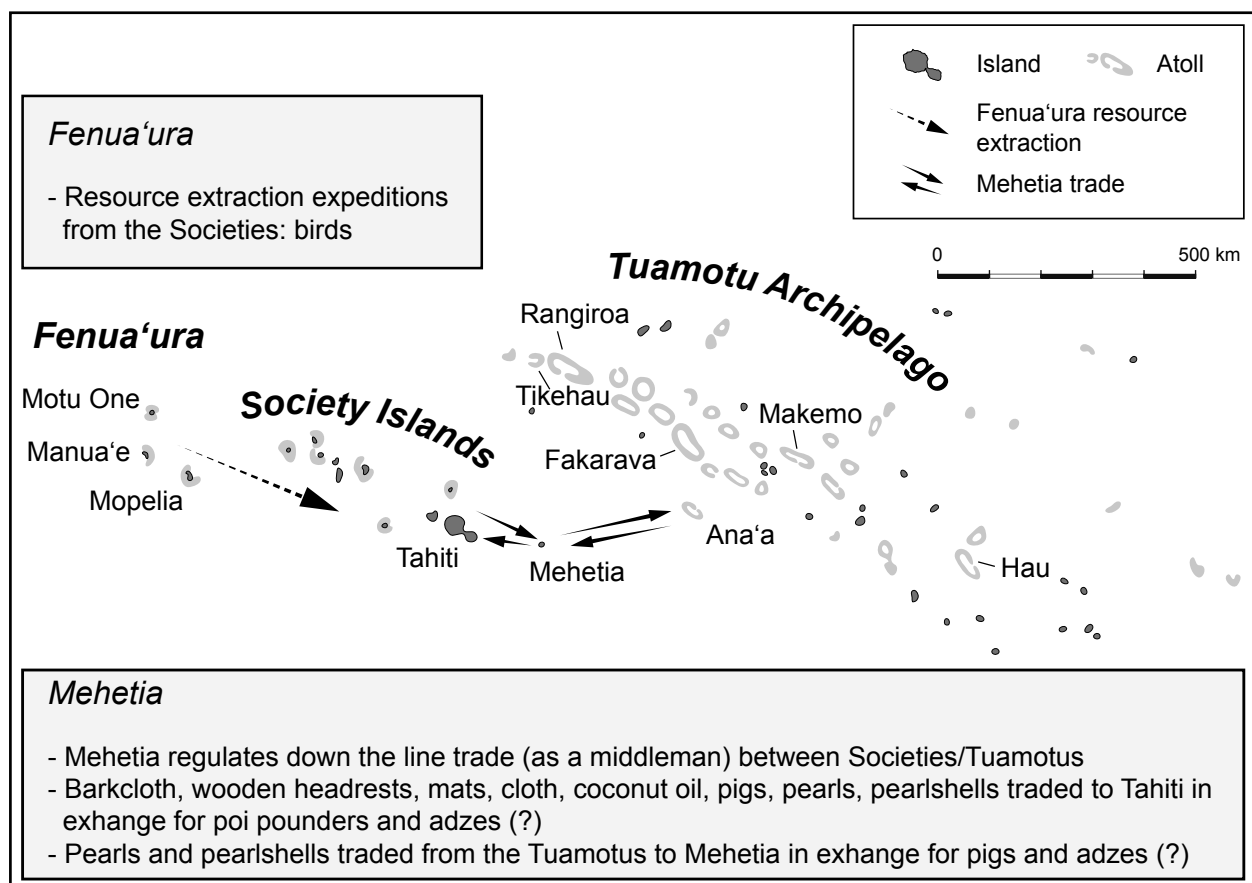

Figure 2. Late Prehistoric and Contact era exchange patterns and social mechanims linking the Society Islands and its near and far hinterlands, as reconstructed from ethnohistoric sources and archaeological data.

key spatial positon vis a vis their closest neighbors, Tahiti iti and Anaʻa.

In sum, within regional exchange systems, Mehetia served as a satellite community for Tahiti Island chiefs, as a specialized craft producer, and as a middlemen entrepôt. Such interactions represent economic and social adaptations, wherein smaller resource poor islands and atolls maintained links to larger, resource rich high island communities. Yet this was done so in a day to day hinterland context outside of what must have been oppressive surveillance by the watchful eyes of land managers (*raʻatira*) and the chiefs (*arii rii, arii rahi*) on the main islands in the Society Island archipelago.

Tetiʻaroa

Tetiʻaroa atoll lies at the periphery of the Windward Society Island group. Like all atolls, it offers a marginal environment in terms of crop production, with limited water resources and high susceptibility to storm surges. Ethnohistoric sources indicate that Tetiʻaroa largely functioned as an extraction colony for foodstuffs and other objects funneled to the ruling Pomare chiefly lineage from Tahiti and as a relaxation spot for Tahiti Island elites and *ʻarioi* (Babadzan 1993: 266; Hermann *et al.* 2019; Oliver 1974: 435; 1988: 102, 138–139; Salmond 2009). Historic sources recount how the atoll was utilized as an extraction center for Pare-Arue chiefs of Tahiti. Pelagic fish (notably mahimahi), coconut oil, and taiero (fermented coconut milk) were traded to Tahitian chiefs by Tetiʻaroa residents in exchange for stone adzes, stone architectural elements (i.e. stone uprights), and breadfruit (Hermann *et al.* 2019; see also Bligh 1792: 163b; Oliver 1988: 138; Morrison 1935: 201–2). Yet given its place on the margins, Tetiʻaroa also had a somewhat 'liminal' connotation, being one of two places that the high status fertility cult, the *ʻarioi*, retreated to at the start of the season of scarcity, the other being Lake Vaihiria, Tahiti (Badadzan 1993: 266). In recent history the atoll serves as an enclave for marine resources and birds, with its islets and lagoons exploited by fisherman from Tahiti and Moʻorea during night time excursions to fish for mahimahi, to hunt turtles, and to collect shellfish and other resources (Kahn unpublished field notes 2000–2002).

Archaeological survey and excavation have documented a rich settlement pattern on Tetiʻaroa. Habitation sites and temple sites are well represented, in addition to archery platforms (Sinoto and McCoy 1975; Verin 1962b). Recent surveys have noted large *fare poteʻe* (or round-ended houses, often associated with elites, see Kahn 2016), council or meeting platforms, and at least twenty *marae* (temples) of varying form, with stylistic characteristics of both the Windward and Leeward Society Island groups and the Tuamotu archipelago (Molle *et al.* 2019). Part of the dependent relationship between Tetiʻaroa and Tahiti relied on the seasonal swarms of mahimahi and tuna that frequented the waters between the two islands (see Wilson

1799: 402). Large pits for aroid cultivation (Molle *et al.* 2019) and fishing weirs built up along the margins of the islets (Emory 1933: 120) likewise increased the atoll's marine and terrestrial productivity. Taken as a whole, the diversity and types of Tetiʻaroa's archaeological sites and surface features demonstrate sustained permanent habitation (Hermann *et al.* 2019; Molle *et al.* 2019).

Archaeological sites on Tetiʻaroa likely had varied ritual and socio-political function. These include use for elite sport (archery games), for ritualized fattening and whitening of the skin of the chiefs' children, for recovery from illness, and for vacationing and meeting amongst chiefs and *ʻarioi* in an isolated context removed from the general populace (Ellis 1829: I, 173; Henry 1928: 76; Oliver 1974: 213). Of the current sample of Tetiʻaroa stone tools, oven stones, and architectural elements (stone uprights) studied via geochemical analyses, 90% are consistent with Tahitian volcanics, leading Hermann and colleagues (2019: 13) to argue that 'the communities living permanently on Tetiʻaroa were politically related to Tahitian polities and relied on Tahitian imports for basic domestic activities'. I argue that, similar to Mehetia, a spatial location at the margins afforded Tetiʻaroa's residents and users with unique resources (rich marine ecosystems, relative isolation, yet spatial propinquity to Tahiti and Moʻorea) that could be exploited for their own benefit, moving our conception of the Māʻohi hinterlands beyond simply resource based extraction.

EXTRA-ARCHIPELAGO 'FAR' HINTERLANDS

Other more remote islands and atolls lacking permanent human settlement apparently were used as extraction zones for staple and wealth finance goods, the majority of which were likely directly or indirectly funneled up to Society Island elites. European explorers described how red feathers were collected from the abundant bird populations on Fenuaʻura (Manuaʻe in the Scilly Islands, see Salmond 2009), a set of small atolls about a ten days' sail west of Tahiti (Figure 2). Birds were also taken as food and likely for their feathers from Mopelia, about a two day's sail farther from Fenuaʻura (Corney 1915: 193). We lack survey and excavation data from these locales and have to rely exclusively on the historic record. Yet it is interesting to note that these 'far' hinterlands were exploited for their bird populations. Bird meat and eggs were sources of protein in the Māʻohi diet. Yet more importantly, bird feathers, particularly red and yellow bird feathers, served as wealth items. They were considered *ʻata*, shadows or incarnations of the gods, such as Taʻaroa and ʻOro (the late prehistoric war and fertility god), in addition to serving as symbols of the *ʻarioi* cult, (Oliver 1974: 59; see also Henry 1928: 338, 88). Bird feathers could be used to pay ritual and craft specialists and served as part of the objects given as annual tribute to the high chiefs (Henry 1928: 154). Colored feathers were key materials for fabricating and decorating a wide range of high status prestige items such as feathered breastplates

(*taumi*), feathered headdresses (*hau*), other everyday caps used by the elites, feathered loincloths (*maro*), and god figures (*to'o*) (Kaeppler 2007; Oliver 1974:1003–1005; Stevenson and Hooper 2007). Thus, the 'far' hinterlands of Fenua'ura and Mopelia provided significant refugia for bird populations that could be actively exploited by Mā'ohi communities making targeted resource extraction trips from the main archipelago.

CONCLUSIONS

A multi-scalar view of Mā'ohi hinterlands illuminates their diverse socio-economic roles as well as their relational quality (Table 1). In terms of geography, time investment to reach specific regions, and provisioning required for extended stays, not all Mā'ohi hinterlands were alike. Those within particular islands, such as localized interior mountainous zones, could be reached after a several hour hike, while small islands at the limits of the archipelago could be reached in a day's sail from the nearest visible island. The extra-archipelago 'far' hinterlands took the most effort in terms of transportation time and provisioning for extended stays. Yet this energy investment was balanced by a significant 'pull factor' – abundant birds as a source of food and as a key source of feathers for tribute, gift exchange, alliance building, and the manufacture of elite prestige items. Future archaeological studies will undoubtedly uncover additional dimensions to inter- and intra-hinterland diversity in the Society Islands. Nevertheless, the present synthesis illustrates that all Mā'ohi hinterlands share some key characteristics, whether a marginal environment, a marginal spatial location, or a small size (under 12 km²).

While many of these hinterlands regions only have basic survey data available, current evidence suggests that Mā'ohi communities made real investments in island-specific and archipelago-specific hinterlands in terms of residential, ritual, and subsistence infrastructure. Because both mountainous regions and remote islands and atolls on the margins of the archipelago are replete with sleeping houses, agricultural features, temple sites and smaller shrines (Table 1), we can infer that their use represented permanent settlement zones with diverse function. We can also infer that not all of this activity was elite driven. In the mountainous hinterlands of Mo'orea and Tahiti, what appear to be largely commoner communities actively constructed ritual architecture for varied means – to recreate the cosmos, to ensure fertility of the land, and to integrate extended households and neighborhoods via communal ritual. Yet more work is needed to parse out who was living in particular hinterland communities in terms of social personae (exiles, lower class farmers and fishers, elites) and cultural affiliation (Mā'ohi or Tuamotu). This is a particularly thorny question for the archipelago-specific hinterland of Mehetia, where we can envision enclaves of Tuamotuan residents given the island's middleman status in Mā'ohi-Tuamotuan trade (see Henry 1928; Molle *et al.* 2019).

Overall, archaeology provides a more holistic view of the Society Islands, one where we can envision elites reaching deep into the hinterlands as a form of political aggrandizement and as an expression of economic power. Such places could also serve as elite refugia for Mā'ohi chiefs, priests, and *'arioi*, in the sense that they created isolated spaces for political negotiation as well as places of rest, recuperation, and ritual. At the same time, hinterland communities also reached deep into the cores in order to maintain their own economic viability through precious socio-political alliances and networks. Teti'aroa offers a prime example of these push and pull factors. Its relatively isolated context provided a tranquil vacation spot for Tahitian chiefs and *'arioi*, an isolated context for ritual and alliance building, and a context free from the day-to-day worries of *tapu* and social transgression. Such seasonal or more frequent visitors came to these atolls with much needed goods and resources. In this way, core-hinterland interdependencies must have afforded opportunities for elite and hinterland dwellers alike.

The Society Island case study also documents how inhabitants of places on the margins were active agents in their daily lives, not just passive pawns of the core. Many of my examples include signaling of local identity and external connections via unique architectural styles and material culture. There appears to be a key emphasis on some sort form of specialized production, whether the manufacturing of adzes or wooden headrests or poi pounders, or specialized labor, such as serving as middlemen for trading partners in two adjacent archipelagoes. In the future, targeted analysis of material culture in expanded provenance studies may illuminate differences between ratios of off-island imports for long-independent hinterlands more recently under the control of an adjacent external power (such as Maupiti) and what appear to be longer-term, formally controlled satellite communities of Tahiti (such as Tetia'roa and Mehetia).

Given the multiplicity of functions of Mā'ohi hinterlands, one is left with an impression that we have much to learn from investigating core-hinterland relations, notably their use by varied social personae in the past and their relationships to regional socio-political transformations. Among the different social mechanisms indicated (see Table 1, Figure 2) are expansionist efforts by elites to add newly controlled lands to their ancestral landholdings, patterns in line with traditional core-periphery models (Wallerstein 1974). Entrepôt scenarios with small far islands or atolls specializing in trade and exchange of particular goods in middlemen fashion echo specialized adaptations to small islands seen in the Western Pacific (Kirch 1991; Irwin 1985). The use of high altitude mountainous interiors can be viewed as an adaptive choice, with commoner agency increasing productivity, buffering risk, and lengthening the harvest, or as a social response by some communities to remove themselves from the prying eyes of chiefs and land managers. In all cases we can begin to envision how

there was real power in marginality. Māʻohi hinterlands at the limits of dominant chiefly influence or outside the realms of normal day-to-day chiefly influence allowed for creative social responses and the ability to uphold traditions in particularly localized manners, adding much to our knowledge of regional variability in complex societies.

Acknowledgements

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