

WHICH WAY IS FRONT?

SPATIAL ORIENTATION COMPLICATIONS IN CONTEMPORARY SAMOAN VILLAGES

Fepulea'i Micah Van der Ryn
Community and Natural Resources Division
American Samoa Community College
Pago Pago, American Samoa
f.m.vanderryn@gmail.com

Drawing on four years of ethnographic fieldwork in Samoan villages examining Samoan village architecture and spatial uses, I illuminate the culturalization of space in Samoan villages in terms of the front–back axis, deemed a key orientation in contemporary Samoan social life. The Samoan term for space is vā, defined as the interval or “between-ness” of entities in physical, social, spiritual, ideational and temporal landscapes. I highlight how perceptions of, and actions on, the vā in Samoa are the modus operandi by which relationships, boundaries and balances in Samoa are negotiated and determined, and how the front–back axis informs binary, mutually complementary and inter-dependent sets of socio-spatial relationships in that system. Central to understanding vā and the front–back axis is its Samoan articulation at different scales—from the architecture of the individual house, to household and whole layouts. This article builds on previous theoretical and ethnographic literature about Samoan space (Shore 1983, 1996, 2014; Allen 1993; Lehman and Herdrich 2002). Informed by both Samoan linguistic and ethnographic evidence and the Whorfian theory of linguistic relativity, the article demonstrates how front–back is primary to a Samoan radial spatial schema, a view that reconfigures Bradd Shore’s positing of a separate, sometimes conflicting, Samoan “front–back binary linear” model (Shore 1983, 1996, 2014).

Keywords: Front–Back, Radiality, vā

Introduction

In this article I illuminate how Samoan household and village layouts provide the physical template of a spatial schema through which Samoan social practices are enacted and

orientations gained. The research, which focuses on longitudinal village case studies conducted over four years of fieldwork in both American Samoa and the Independent State of Samoa, joins other articles of this issue in investigating the cultural significance of spatial orientation and issues of cultural construction that may complicate spatial orientation, or the understanding thereof, in a variety of Oceanic societies. This effort contributes to the continuing development of anthropological knowledge about cultural ways space is conceptualized and organized as part of sociocultural systems, that is, the “culturalization” of space; and, simultaneously, the “spatialization” of culture (Low and Lawrence-Zúñiga 2003; Mix et al 2010; Levinson 1998, Bennardo 2002; Feinberg and Mawyer 2014, et al).

Samoaan villages make an instructive focus for examining culture-based spatial schemas and orientations in the broader dimensions of culture because of the extent to which Samoa’s spatial culture is directly tied to social organization and maintenance of social hierarchy. Within the focus on Samoaan village spatial schemes I focus most specifically on the determination and dynamic of a front–back (or in Samoaan *luma–tua*) orientation and its socio-cultural significance for behavior, prestige and rank at different scales—from within individual houses, to household compounds, to whole villages. The primary authors that I reference who have directly addressed this aspect of Samoaan culturalized space include Bradd Shore (1982, 1996, 2014), Roger Neich (1985), Ann Allen (1993), F.K. Lehman and David Herdrich (2002), and Albert Refiti (2001, 2002), as well as my own previous work (2008, 2012) in which I examined the front–back axis as a strong generative principle within the design of Samoaan built forms and space.

Similar to Allen, Lehman and Herdrich, and Refiti, I describe Samoaan village space in all Samoaan villages as generally informed by a radial spatial model (see Feinberg, this issue), regardless of the varying village layouts found in the Samoaan landscape. Like Allen, I argue that the more linear looking villages demonstrate a variant expression of this radial spatial principle (which Lehman and Herdrich label as point-field), also expressed in the more round looking Samoaan villages. This view stands in contrast to Shore’s (1982, 1996, 2014) claim that the more linear looking Samoaan villages express a contrasting Samoaan spatial model that he calls a binary front–back linear model. Shore also describes the front–back Samoaan model as intrinsically bound in the Samoaan mind with a seaward-landward (*tai–uta*) axis with the sea being *luma* (front) and inland being *tua* (back). Allen (1993) and Lehman and Herdrich (2002) have already pointed out empirical problems with this claim, showing how Samoaan houses that are situated between the sea and village road or *malae* (village ceremonial green) almost never face the sea as their front. Rather, they face inland toward the road or *malae*, positioned inland of the house.

Here, I submit that the *luma–tua* axis is a very important operative dynamic axis of Samoaan village layout and behavioral orientations (in accordance with Shore), but its alignment with the *tai–uta* (seaward–inland) axis is contextually circumscribed. In other words, my research does not support the idea that Samoaan thinking and categories intrinsically bind the *luma–tua* cultural orientation into the *tai–uta* meaning domain, as Shore’s analysis suggests. I do identify that these two differing orientations can circumstantially

overlap or be associated in specific types of contexts, such as when a Samoan says *'i tai* (seaward) as a proxy for *'i luma* (to the front) when spatially referencing the coastal village from an inland position on his/her plantation. Such utterances could confuse and conflate meaning domains for outside observers. My ethnographic research finds that the two axes reference two different spatial models or ways of talking about and gaining orientations in space that only sometimes overlap in certain situations in some Samoan villages.

Thus, I demonstrate that instead of the Samoan *luma-tua* (front-back) orientation being synonymous with a *tai-uta* (seaward-landward) orientation (as Shore suggests), the front-back Samoan village axis is actually constitutive of the “center-periphery” axis that Shore describes as constitutive of Samoan radial or concentric village spatial schema. I support this point with ethnographic evidence and an examination of several Samoan spatial terms, namely, *luma* as ‘front’ or ‘center’; *tua* as ‘back,’ ‘rear’ or ‘periphery’; *vā* as the ‘space between’; *mata*, as ‘point’ or ‘edge’; and *tua'oi* as ‘boundary’ or ‘neighbor.’ The Sapir-Whorf hypothesis inspires this linguistic analysis of why the differences between “frontwards” and “toward center” and between “toward the back” and “toward a periphery” are not conceptual differences in terms of a Samoan cognition of their spatial schema.

The Islands of Samoa—Villages and Malae (Ceremonial Village Greens)

Nine inhabited high volcanic islands constitute the archipelago of Samoa, which lies in the center of the South Pacific 13 degrees south of the equator in the western part of the Polynesian triangle. The total land area of the Samoan Islands is over 3,000 square kilometers. They have been politically divided since 1900 with the larger western islands, now comprising the Independent State of Samoa (often referred to as Samoa) and the small eastern islands making up the United States Unincorporated Territory of American Samoa. Approximately 180,000 people (Samoa Bureau of Statistics 2011) live in Independent Samoa while 55,000 reside in American Samoa (US Census Bureau 2010). The vast majority in both American Samoa and Independent Samoa are ethnically Samoan, although the proportion is higher in Independent Samoa (98% versus 85%). Samoans have inhabited these islands over 3,000 years, during which time a distinctive Polynesian culture and social system developed.

The word for country in Samoan is *atunu'u*. *Atu* refers to “a collection of.” *Nu'u* means “village.” Thus, the Samoan concept of a country is a collection or confederation of linked but autonomous villages, a reflection of Samoa’s indigenous socio-political structure. Each *nu'u* in this system represents an autonomous politic occupying its own territory, which typically extends from the ridge top to the off-shore reef. No *nu'u* is politically subordinate to another. Groups of villages are connected as traditional districts (*itūmālō*), which in the past may have acted together for purposes of warfare. Marriages, formalized inter-village visitations, and the ceremonial exchanges accompanying life-crisis events continue to be part of the inter-village relationships. The settlement part of each *nu'u* is typically nucleated, and the majority of Samoan village settlements are, and have historically been, located on the coastal region where people can make use of the marine

resources as well as plant their crops and orchards in valleys and lower slopes behind the settlement. A council of chiefs or *matai* governs each *nu'u*. Each *nu'u*'s constituent descent group is represented in the council by their own appointed *matai*.

Independent Samoa boasts 362 traditional *nu'u*, American Samoa, some 62. Historically, and in contemporary times, the *nu'u* settlements are nucleated and centered around a village *malae* (village ceremonial green), which forms a front and center and sense of unity and identity to each *nu'u* community. In 1998 I supervised the research and production of the documentary film, *Malae: Sacred Ground*, produced at American Samoa Community College during which many important points about the significance of the village *malae* were documented. First, Samoan creation legends reference the sacred ground of *malae* as the meeting ground of chiefs and gods, where the first councils were held to create social and cosmological order.¹ We also learned through a survey of all the villages that every village has a named *malae* that figures prominently in its history and identity. A village's *malae* name is saluted and honored as the hollowed grounds of the village in the oratorical speeches that begin any ceremony in a village. Reference to the *malae*'s name helps demarcate the village's identity and place in history and its structural relationships to other villages and the rest of Samoa. The *malae* is the only proper place in Samoan custom for any important village ceremony or meeting to occur.

The spatial centrality of the *malae* signifies its cultural centrality. I cite below two Samoan chiefs in American Samoa who spoke in the documentary on this topic.

You cannot have the *fa'asamoa* [Samoan culture] without the *malae*. It's the truth to me as a *to'oto'o* [a high ranking orator in the Manu'a Islands of American Samoa] because it's the first thing that comes to mind for a cultural event, such as a funeral or a wedding of a high chief. Without the *malae*, it has no meaning. [Documentary Interviewee: High Talking Chief Paopao of Manu'a]

It's critical to maintain in the heart of the Samoans that the concept of the *malae* does not stop with the open space because it does reflect the relationships to the gods and the relationship to the inner self and how the relationship is brought to a realistic bearing on the life of the people. It is very critical to maintain the openness and preserve that physical part of the *malae* because it becomes the embodiment of soul of the Samoan as the Samoan lives in his village. [Documentary Interviewee: High Chief Pulefa'asisina P. Tu'iasosopo]

Spatially and temporally, the *malae* can be understood as a sacred central starting point of a village. The village's founding chiefs built their houses on them, or next to them forming the first ring of structures. Over time, those ancestral structures became the descent group meeting or guesthouses associated with the village chieftain titles, which are vested upon a selected living member to fulfill the chieftain role. The living chiefs build their main residential houses and additional household structures behind the ancestral houses, called *faletele* 'grand house,' *falelimālō* 'guesthouse' (literally, "house to receive guests"), or *falefono* 'meetinghouse' whose primary purpose is now for family and village meetings, gatherings and ceremonies. As the descent group grew over the generations, the village physically grew outward from its sacred *malae* center. This is the basic radial spatial schema that informs the village space. The *malae* thereby marks the ultimate front and center for the whole village and is, thus, also called *lumāfale*, literally,

farthest to the front in front of all the village houses. *Lumā* is the emphatic form of *luma* ‘front,’ indicating something like “further in front, further forward” (Milner 1966:115).

This radial spatial schema is alluded to in Serge Tcherkézoff’s (2005:246–248) discussion of the *alofisā*, which may be glossed as ‘sacred circle.’ The *alofisā* is a polite chiefly term for the Samoan ‘ava (kava) ceremony in which chiefs sit in a circle, typically in the round meetinghouse, but Tcherkézoff discusses the concept in more metaphorical terms as a model that stands for how the Samoan system offers identity, unity, membership and representation through the chief as representative of his/her descent group.

The photo in Figure 1 depicts an *alofisā* performing a chiefly title investiture ceremony (*saofa’i*) for the high chief title of Gaoteote in the village of Vatia in American Samoa in 1998 in which the entire village *malae* is utilized. The radial spatial schema of the *alofisā* is thereby ritually enacted at the village scale. Note the chiefs of the entire district sit on the inland side of the *malae*, the orating chiefs of the village sit on the opposite seaward side of the *malae* (right side in photo), the ‘ava is prepared and served from the far end of the *malae* (signifying a back-side) to the high chiefs sitting on the frontside (the side from which the photos is taken). Everyone in the ceremony faces inward and frontwards into the sacred center of the open space of the *malae*, which serves as the center to which they face as front. The *aumaga* (association of the village’s untitled men), who wear red *lavalava*, stand *i tua* with their sticks on all sides of the circle of *matai* forming the *alofisā*, forming a protective boundary to the sacred and prestigious event occurring the center. After the village’s high orator chief declares the sacredness of the *malae* and the prohibition of any trespassing on this sacredness, the conch shell is blown



Figure 1. The *saofa’i* (investiture ceremony) for the chieftain of Gaoteote being conducted on the *malae* of Vatia Village, American Samoa, 1998. Note the outer ring of *aumaga* (association of untitled village men) dressed in red *lavalava* standing on the outside perimeter of the space to protect its sacredness. (Photo by the author.)

in four directions by two men, signaling the beginning of the event at which all the *aumaga* sit down in this outer perimeter.

My own research (2008, 2012) confirms Shore's (1982:51) observations of the village space of the *malae* and the immediately surrounding guesthouses that form the village a'ai, 'central area'. People's behavior in this zone typically becomes more formal, dignified, socially controlled than in more peripheral areas where more individual impulse behaviors are allowed. Deviant forms of behavior are much more controlled and sanctioned against in the central area under the close observation of the village and its chiefs.

Radial Space and the *Luma–Tua* 'Front–Back' Axis

The visual of the chiefly investiture ceremony occurring on the village *malae* (seen in Figure 1) is a useful reference for describing the Samoan radial spatial schema, which operates at multiple scales from whole village, to household compound to individual houses. Figure 2 diagrams the schema, demonstrating these multiple scales which influence spatial layout, architecture, daily life behaviors and the structure of ceremonial rituals.

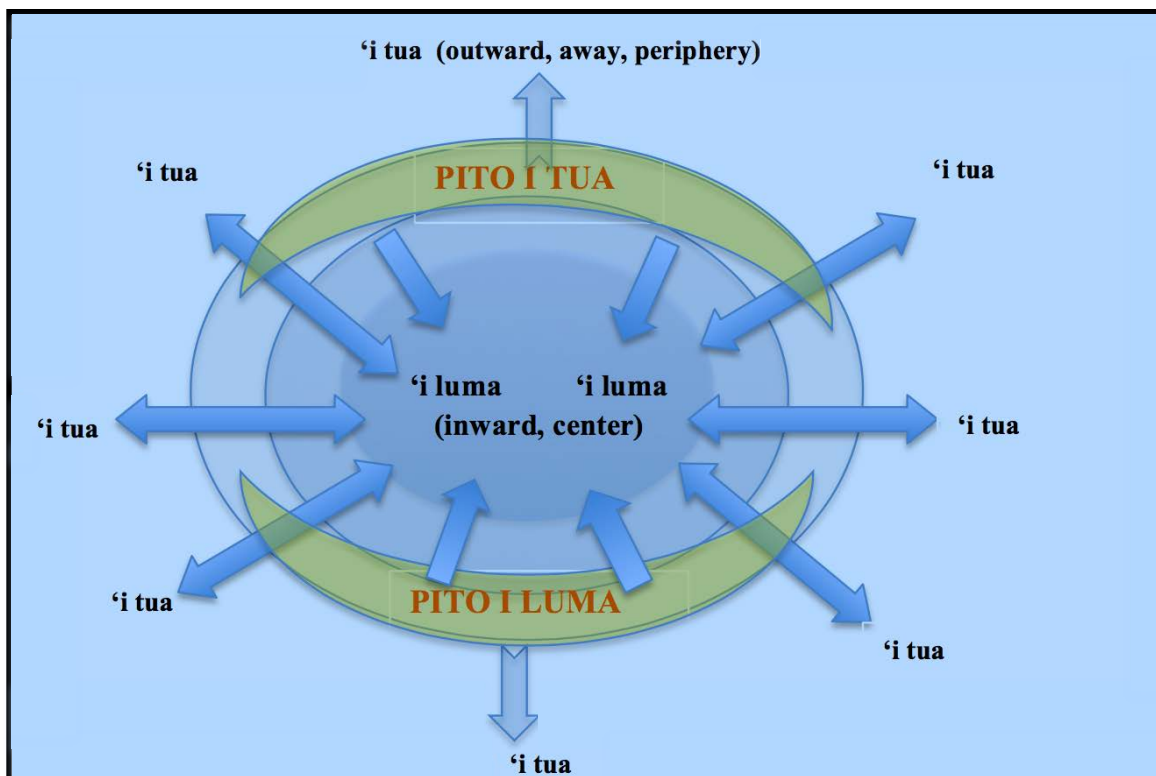


Figure 2. Schematic diagram of the radial schema, applicable at different scales from a house to a household to a whole village. The blue arrows represent the radial axes of the schema in which space is graded. The yellow zones represent the binary categorical front–backsides within the schema.

Shore (1982:51), calls the spatial axes of the radial model “concentric–periphery.” The Samoan terms are ‘*i luma*–‘*i tua* (toward the front/toward the back). Facing inward, or moving inward toward the center, is ‘*i luma*. The inverse, moving to the periphery is ‘*i tua* (toward the back). As Allen (1993:36) states, “The distinction between center and edge is structurally and verbally expressed by Samoans in the opposition of front and back.”

Shore (1996:275) describes the radial schema as a ‘graded,’ ‘analogue’ system. This quality is expressed in the Samoan lexicon through emphasis on the last vowel. Thus, “further to the front” is *lumā*, “further to the back” is *tuā*. If the front–back orientation is part of a Samoan radial schema, then what of Bradd Shore’s discussion of the front–back binary linear Samoan spatial model, which he says is a distinct and separate model? My analysis, like Lehman and Herdrich and Allen, views the binary front–back as part of the radial schema.

Samoan radially also involves an open space, whether that space is the village *malae* with its perimeter of chiefly guesthouses, or the open space of the house interior with its perimeter of posts, each denoting a special rank to the chief who sits there when chiefs have formal meetings in the house. The more formal the social situation, the more likely Samoans will move outward to the sides to form their social position, and thereby the spatial dimensions of their social relationships with others in the situation.

In the space of the house, or the *malae*, or even a household compound, Samoans stress the importance of front-side and back-side. While these may simply be called the “front” or “back” (*luma* or *tua*), the insertion of the word *pito* (side) helps maintain clarity. To say to someone “*alu nofi i le pito i luma*” (go sit at the front-side) contrasts with *sōsō* ‘*i luma* (move forward [an incremental amount] toward the front). An alternate term for ‘side’ is *itū*. Each house has an *itūiluma* and *itūtua*.

It is understandable that when we refer to front-side and back-side, a categorical, not graded dimension is created because the front-side and back-side are specific locations of an object in space (like the house, or the *malae*)—the emphasis in Samoa on social positioning on front-side or back-side with an open space in between is an important dimension of this spatiality, to which an understanding of the Samoan word for space, the *vā* gives useful insights.

The *Vā* (Space of “The Between”)

The Samoan (and Polynesian) term *vā*, references a Samoan cultural principle of space and relationships that has a growing indigenous Samoan scholarship (Duranti 1992, 1997; Lilomaiava-Doktor 2009; Le Tagaloa 2003; Refiti 2004; Tuagalu 2008; Van der Ryn 2008, 2012; Wendt 1999). *Vā*, sometimes translated as ‘the between,’ refers to a relational space between entities (people, objects, ideas or concepts) that both binds and separates them in special relationships. *Vā* denotes spatial, social, spiritual and ideational relationships. When people maintain the open center and occupy the sides facing each other on opposing sides of the space, a physical *vā* space is felt which contributes to the enactment of socially productive *vā* relationships. There is an analogous parallel between the

physical space and the social relationship; various performative acts across this *vā*, include speech making, serving of ‘ava, or food, and presentation of gifts.

People’s identity in a group-focused society is highly dependent on the network of *vā* through which they operate, and the ethos of *vā* emphasizes the dynamics of relational, contextual, and situational factors. How we deal with our spatial relationships with others as part of our social relationships as we move about is expressed in the Samoan word for etiquette, *vāfeāloa’i*, literally referring to the reciprocal “between” in the act of facing each other.

Vā is central to Lehman and Herdrich’s (2002) discussion of the applicability of point-field spatiality to Samoa. In most Western cultures the dominant mode of thinking about space uses the container model. Container space is conceptualized as the area defined within a pre-determined boundary. Point-field space begins with points in the physical or social landscape. Space becomes the ‘fields’ emanating from these different points and intersecting with the fields of other points. Boundaries are then formed at these intersections of fields. *Vā*, as the space between signifies the fields. Boundaries or *tua’oi* emerge from the *vā* as an issue of mutual understanding about the relationship of the two adjacent points. *Tua’oi* also means neighbor, which is congruent with the point-field principle—you form a mutually understood physical and social boundary with your neighbor through the relationship you have with them (see also Tui Atua 2005:9). This model adds to the understanding of a strong relational dimension in Samoan space and social organization.

The open, wall-less traditional Samoan architecture, which has undergone many changes over the four decades, supports this contextual *vā* principle as it encourages awareness of the larger environment of which one is a part. An important topic of my Samoan research was investigating the impact on *vāfeāloa’i* of inserting walls into previously wall-less Samoan architecture by examining a host of Samoan socio-spatial practices and social customs (Van der Ryn 2012).

Traditional Samoan architecture has two-fold symmetry: front and back are symmetrical, as are the house ends (Refiti 2007:34). That means that there are no intrinsic features in the architecture to differentiate the front-side and back-side. Knowing the front and back is very important in the society, but knowledge of the sides is determined relationally. The side closest toward higher-ranking space and structures (which are *iluma*) is the front-side and vice versa for the back. Here, again the *vā* principle of relational space by which identity is gained through relationship is emphasized.

Every Samoan village is composed of a number of descent groups, each headed by their *sa’o* (‘head chief’) with additional lower ranks chiefs in each of those descent groups. Each descent group in a village will then have a number of related extended family households living on the lands under the authority of the *sa’o*. The extended family household compound of the *sa’o* is typically located closest to the descent group’s *faletele* or *falelimālō* in a central location of the village close to the village malae. The *faletele* signifies the unity of the entire descent group headed by its *sa’o* to the village, and is used for functions of the village and the descent group (Van der Ryn 2012; 168-169). Figure 3 diagrams the general layout of a prototypical extended family house-

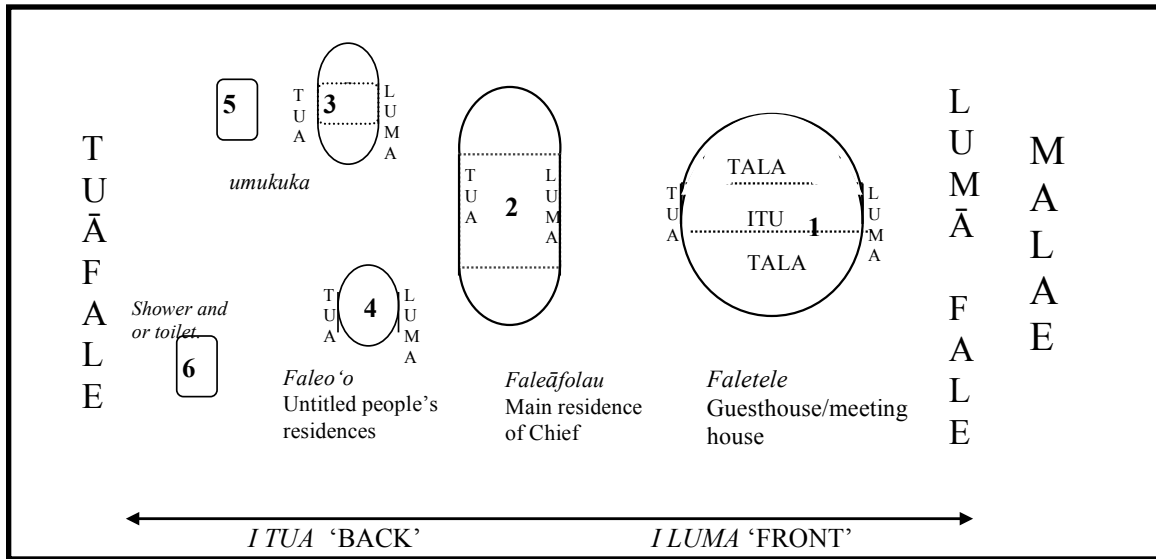


Figure 3. Schematic illustration of traditional Samoan household, front–back axis and designation of front–back sides for each structure.

hold of a Samoan *sa'o*. The household compound is ranked along a *luma–tua* 'front–back' axis, such that higher ranking, more important structures closely associated with family pride and dignity, are positioned *i luma* 'in or at the front,' while lower ranking structures are increasingly found *i tua* 'in or at the back.' The highest-ranking household structure is the guesthouse or *faletele*, which typically faces onto the village *malae* 'the ceremonial village green,' traditionally, the ultimate front, that is, *lumā*, of the village (called *lumāfale*).

I tua 'to the rear' of the guesthouse one typically finds the main residential house of the *sa'o*. Further to the rear are smaller sleeping quarters of adult children of the chief, their spouses, and their children, followed by bathrooms. Still farther to the rear are the cook hut, then piggeries, and family gardens. Procurement, production, and serving of food involves a process and flow that moves along the axis from *i tua* toward *i luma*, with which specific roles and activities are associated.²

Each Samoan house has a definite front (*itūiluma*) and back (*itūtua*) understood through the relational aspects to other exterior spaces and structures, the awareness of which is facilitated by the open wall-less forms. These front and back sides play a role for knowing where to sit, the direction in which it is acceptable to sweep debris, and a number of other spatial aspects of household, or ceremonial activities with many implications. For example, people bringing food to serve in a house must always enter the house from the back, where the food is dished out and then brought forward to the front to eat. There are two ways to bring gifts of money or fine mats to contribute support to a family preparing for a family event, such as wedding, funeral, title bestowal in which much wealth will be distributed and given away. As one chief explained to me, if you bring your stuff to them through the front of the house, they will feel obligated to provide immediate reciprocities, but if you come from the back, your help can be accepted without any immedi-

ate reciprocities. Thus, knowing the back and front of houses and knowing how to make culturally appropriate actions in relation to the front–back axis in Samoan village space is an essential dimension of a Samoan sociality and worldview.

How Samoans conceive and use the front-sides and back-sides of spaces to articulate social hierarchy and complementary social roles was first impressed upon me as a child while living for several months with a Samoan family. During family meals the higher-ranking family members—generally consisting of the chief, his wife, a special small grandchild, unwed daughters, and any visitors (such as myself)—sat cross-legged on the mat along the front–side of the house facing across the house’s center towards the house’s rear. Across from them on the back–side of the house would sit the lower ranking serving household members—the chief’s untitled sons, their wives, married daughters, their husbands, and various household youth and children. Those sitting on the rear side ate later, after those on the front–side were completely finished and there were no jobs remaining to do for them regarding the meal. The servers, who dished out the food on trays, served it to those sitting at the front, refilled tea cups, and fanned the flies away, were also generally those who had procured, prepared, and cooked the food in the cook hut in the rear of the household compound.

One day, as mealtime commenced, I chose, despite being told to sit on the higher-ranking house’s front–side, to sit among the line of servers sitting cross-legged along the back of the open house. The change in spatial position brought with it an immediate change in my social role. Suddenly, I was no longer waited on in the manner that had made me feel almost like a king. I became a server, answering the demands and serving the needs of the now higher-ranking family members. I was expected to behave in a subservient manner and to wait along with the other servers until much later to see what food was left over for us to eat.

I learned a valuable cultural lesson that day. First, I became aware of the strong hierarchal structure that ordered family members in terms of rank and privilege along the front–back axis across the house. Second, it only took changing where I sat to change my role in the event. This understanding resonated with a comment I read many years later by Margaret Mead concerning Samoans: “Their eyes are always on the play, never on the players, while each individual’s task is to fit his role” (Mead 1937:286). This social emphasis on the play, not the player, produces a dynamic, flexible sense of personal identity that allows individuals to adjust social position and role to fit situational needs so group “cultural scripts” can get performed. It is this same kind of situational flexibility that is part of Samoan sociality that can be applied to understanding how a radial spatial model informs a variety of Samoan village shapes and changes over time.

The Radial Schema in Both “Linear” and “Concentric” Samoan Villages

Bradd Shore (1982:48–51; 1996:Ch.11) discusses two types of Samoan village shapes—a concentric or round shape and a more linear form usually running along the coast line. He describes these two forms as informed by two alternate spatial models—the radial or concentric (also called center–periphery) model and the binary linear front-back model. In the former the central Samoan village *malae* form the village focus (front and center);

in the second the front aligns to the sea, the back to the inland region. Here I found several issues in the analysis. One is the reduction of contemporary Samoan village shapes to just two when empirical evidence indicates a variety of village shapes. The second is that Shore neglects any discussion of the topographical influences on these village shapes, which may be the cause of their differences, as opposed to differences in the spatial schema being employed. Third, is the lack of any discussion of how Samoan village shapes have also been changing over the last sixty years or more due to population growth and the building of modern government roads to link all the villages to commercial centers and modern shipping and transport to the larger globalizing world. All of these factors surely impact the village shapes and thereby the analysis of how spatial orientations and schema may be understood to inform them.

Importantly, Shore (1982:50) does identify the spatial significance of the new roads within Samoan village spatial orientations as comparable to the *malae* as a public space where there are heightened constraints on behavior. Often, many of the behavioral rules that apply to the *malae* also apply to the road, and punishments for deviance in those zones may be more severe than when committed elsewhere further ‘*i tua*, ‘to the back.’ While the *malae* signifies a space of agency and prestige tied to the social transactions of important village ceremonies and exchanges, so does the road carry similar meaning. The fact that the road has become the main avenue by which visitors and material goods of exchange now enter or exit a village makes it public and central to village interests, in a similar vein as the *malae*. Per Shore, roads, like *malae*, are places of social control and public attention.

Of course, roads are also thought about and treated much differently than *malae*. *Malae*, not roads, are the hallowed village grounds whose names are saluted and honored at the beginning of village speeches. They are linked to the identity and prestige rendered through ancient history, while roads are linked to identity and prestige linked to the outside world, and the change that may bring. Village *malae* and government roads thereby represent opposites in their temporal symbolic meaning while occupying the same orientation of “front” in the village spatial schema. This topic of the road relation to the *malae* as both providing a fixed point in the village for establishing front-ness is an important focus of this article further developed in the village case studies.

In relation to village shapes and spatial schema, Shore does make the interesting observation:

The ideal village is conceived as circular rather than linear ... [even though] most villages in modern Samoa are now linear.... However, if we view the government road as a kind of central focus and the household compounds on either side of it as an inner core, with the bush, sea, and village boundaries as the other periphery, then the circular pattern is suggested, with all of its major symbolic associations. (Shore 1982:50)

Shore’s observation of the road gaining a front status in a village similar to that of the *malae* is accurate. However, he omits an important point that all Samoan villages have a named *malae*—it’s a basic feature of the traditional Samoan nu‘u politic, and continues to influence the front–back spatial orientation in all Samoan villages, despite or in addition to that of the road’s influence. It is also of interest that he does not follow

through with his intuition regarding the road's significance in a radial schema, instead shifting to a focus on the sea's importance in shaping the alternate binary linear front-back schema in more linear-looking villages.

Shore describes the front-back binary spatial model as being bound with a *tai-uta* (sea-inland) semiotic dichotomy in Samoan thought. He states:

The sea-inland model, in which geographic features are used for mapping social, kinesthetic, and moral attributes, appears to be a fundamental orientation framework for Polynesians. A set of concrete geographic features is encoded culturally in binary fashion. The eye is swept back and forth across a diameter that defines opposing sides of a landscape which has at once physical, social, and moral implications. (Shore 1996: 272)

Shore also states:

As with front and back, *tai* (shore) and *uta* (bush) are also moral orientations for Samoans. *Tai* suggests not only the sea, but the open coast and areas of intense social contact. *Tai* suggests organized human life, civility, and the rule of the chiefs and their laws. (Shore 1996: 272)

And then,

The front-back spatial model is in apparent conflict with another cultural model,.... In this model, the reference points in village orientation are not sea and bush but rather the central *malae* (village green) and the outskirts of the village. The front of the village, in this model, is interior to the back of the village, which is considered exterior. (Shore 1996: 270)

Shore's discussion of contrasting semiotic associations Samoans have between the populated coastal region and a much less populated inland region is generally accurate, and not the problem that gives rise to him viewing two separate yet conflicting Samoan spatial models. I submit that the problem may derive in part from his concept of the binary front-back model as linked inextricably to the sea-inland spatial orientation, and from a failure to keep in mind the issue of scale. In the overall physical and cultural landscape, the populated coastal region may elicit the sets of associations Shore describes Samoans have (social control, etc.) with village life, but that is because this is where villages exist. Those associations are not directly attributable to the sea, thus the seaward-landward orientation operates separately, though sometimes in contextually circumscribed overlapping ways with that of front-back. Thus, the cultural meaning associations that Shore describes as linked to the sea should be viewed as only incidental, not intrinsic.

I would venture to guess an additional influence on Shore's emphasis on a strong symbolic significance of the *tai-uta* axis in his spatial analysis is the village of Sala'ilua where he did most of his fieldwork. Sala'ilua is a coastal village that resembles a strong linear formation on a coastline with the vast majority of structures facing directly onto the coastal road, which is directly contiguous with the beach. In this context there is a lot of spatial and semiotic overlap of *tai* and *luma*, and, as I have observed, Samoans may use the term *tai* as a proxy for *luma*, which could trigger the slippage in the anthropological analysis of Samoan space.

It is now helpful to diagram (see Figure 4) a fairly typical shape of a coastal Samoan village in which the *malae* and coastal road are both contiguous with beach and sea. As such, all the chiefly village guesthouses form the inland perimeter of the village

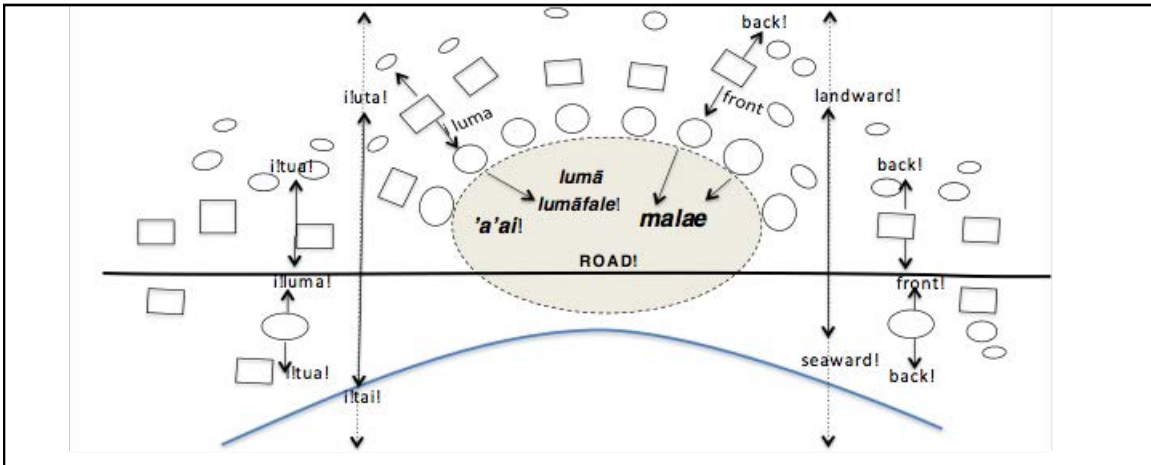


Figure 4. Schematic of typical Samoan coastal village with the central/front *malae* space (which includes the main road), contiguous with the coastal road and the shoreline.

malae. None form a perimeter on the seaward side. All structures on the inland side of the road and/or the inland side of the *malae* thereby face the sea. But should this be attributed to a spatial schema that views the sea as front, or other factors more related to topography? It may be possible that at some larger scale the villages are built with the idea of the sea being in front of them, as a location from which the village originally became settled, but I would assert the need to analyze that as a larger framework or scale. Within the specific spatial schema of the village itself the central (front) focus is on the *malae* first and second, the road. This dynamic is demonstrated by the layout of houses along the road at each end of the village after passing the village 'a'ai (central area where the *malae* is). The houses turn more directly to face the road, and the houses on the seaward side of the road, also use the road, which is inland of them, as their front. The sea is conceptualized and treated as back.

I know only one family in the large American Samoan village where I currently live who view the sea, which is directly adjacent to their house (no road or *malae* in between) as their front. They specifically built the house with that orientation (meaning the kitchen will be on the inland side of the house) quite deliberately, with full understanding (they explained to me) of it being a complete anomaly in the spatial schema of Samoan villages. The house is far from the center of the village, so breaking the norm of the usual village habitus regarding spatial orientation and behavior was less of a constraint. One reason I learned they had made this deliberate choice was a land feud they had with a distantly related family living on land inland of them. By orienting themselves to the sea as their front, they put their neighbors in back of them. If it were the other (normal) way around, they would be behind (and thereby subservient to) their neighbors, a situation that was antithetical to their disposition and intentions regarding this relationship.

Both Allen (1993) and Lehman and Herdrich (2002) have suggested alternative interpretations to Shore's analysis of two alternate Samoan spatial schemas. They have

both suggested, but in different ways, how a radial spatial schema informs the spatiality and sociality of Samoan village space regardless of the particular village layout—its degree of linearity or roundness. Allen uses the terms “focal point” to describe a Samoan radial or concentric spatial schema. She views the more linear coastal village shape as simply a modification of the Samoan ideal village concentric shape to which a Samoan cognitive flexibility is able to apply the radial schema, as depicted in Figure 5.

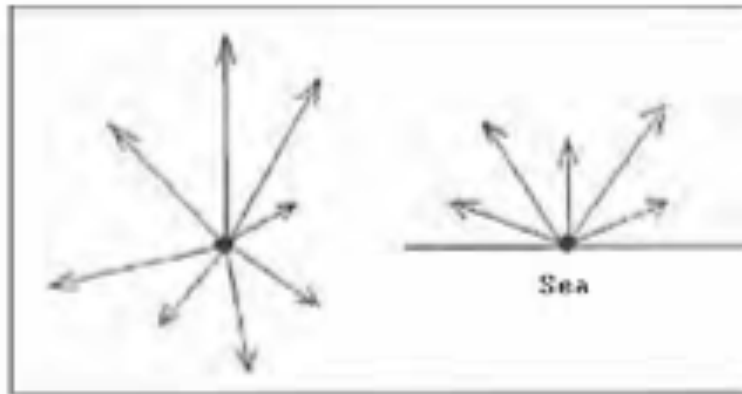


Figure 5. The radial spatial schema on the left, a special case of it on the right, where the adjacent sea prevents the creation of a circle of guesthouses and households surrounding a village *malae* (after Allen 1993: 36).

The diagram on the left represents the basic focal point (or radial) spatiality of the Samoan schema. The diagram on the right side expresses the adaptation of this schema to a coastal village situated on a narrow strip of flat land near the sea (such as is the case in Bradd Shore’s Sala’ilua). The sea and the narrowness of the land do not inhibit the understanding of a radial spatiality, only its full expression in the village’s built environment. The narrow flat land, the road and the sea all limit the ability to develop the spatial prominence of an open central *malae*, as well as the construction of buildings on the *malae*’s seaward side. Allen’s diagram and analysis illustrates the flexible nature by which Samoans utilize their radial spatial schema in more linear-looking built environments.

I have already described the point-field concept of space that Lehman and Herdrich’s (2002) research demonstrate as applicable to Samoa, and how it is similar to the radial absolute spatial frame of reference as denoted by Feinberg (this issue). The added value for me of Lehman and Herdrich’s exegesis is the analysis of the explanation of the cognitive bases and structure of how this kind of spatiality works. I particularly like how they explain point-field spatiality as constitutive of social relationships and boundary construction in ways that explicitly contrast with the container model of space that predominates the language and thinking of Western cultures. Lehman and Herdrich also use



Figure 6. The coastal village of Vailoa Tai, Tutuila, American Samoa. Visible is the large *malae* (*Male o le Asotau*) surrounded by guesthouses and households on all sides and the government road, which was constructed to jog inland to form the *malae*'s inland border rather than dividing the *malae* space into two. Note seaward houses have their back to the sea and face inland onto the *malae* space. (Google Earth Image 2012)

point-field spatiality to address Shore's discussion of conflicting alternate Samoan spatial schemas.

While Lehman and Herdrich's analysis is somewhat similar to Allen's, they add the concept of scale and sides as an important piece of the puzzle (Lehman and Herdrich 2002:191). They do this in part with an anecdotal reference to a personal communication with me about a chief from the village of Vailoa-Tai (see aerial image in Figure 6), a coastal village with a large *malae* and with a perimeter of guesthouses and residences on all sides. The chief explained how the village layout was modeled after the layout of a Samoan chiefly guesthouse. Each of the guesthouses at the perimeter of the *malae* was like each of the posts with the *matai* sitting in a single guesthouse, just at a larger scale. Thus, the back-side of the seaward guesthouse and residences was to the sea, just as the *tulāfale* (orator chief) sitting at the front posts of a guesthouse faced inward towards the house's center/front, with his back to the village's *malae* (the village's front and back). This anecdote helps illuminate a Samoan spatial thinking in terms of models, of which



Figure 7. Exterior view of a Samoan *faletalimāalō* (guesthouse) in Vaimoso Village (near Apia, Samoa). A residential house whose architecture is more influenced by “European” materials and forms is visible in back. (Photo by author.)

the indigenous Samoan house (see Figure 7) is a perfect embodiment, one that expresses a radial spatiality.

Samoan spatial designer, Leali‘ifano, has also commented on this spatial radiality of the Samoan house in relation to the larger space of the Samoan village.

The house’s relation to the overall schema of a village is more like that of a rippling effect in water when a stone or an object is dropped in the liquid causing waves in ringed formation to spread outwards getting larger and larger. ... The radiating space can be thought of as having a hold on space, a force that keeps space constant and where things are held in-between each other— together and apart at the same time. ... characteristic of the notion of the *vā*. (Refiti 2008:5).

The analysis already given in this article’s last section builds on Shore’s, Allen’s, Lehman and Herdrich’s, and Refiti’s analysis. My work so far has been to show how the binary front–back spatial axis is integrated as an issue of front and back–sides into the radial spatiality of Samoan village spaces at different scales of built form, and to show how this axis is implicated with the Samoan concept of *vā* to orchestrate Samoan social relationships of respect and hierarchy. It is now also evident why and how the more linear looking village shapes in Samoa do not necessarily imply or necessitate a different Samoan spatial model to inform them as Shore’s analysis suggests. In addition, to the influences of topography on village shape, are the contingencies of village population growth, local political structure in a village and its dynamics, the road and other devel-

opments, all factors that are viewed later in this article in the longitudinal village case studies.

First, however, is one other area to examine—a linguistic one—that sheds further light on why Samoans would not perceive any significant conceptual distinction between their more linear looking village layouts and the more round ones in terms of a need to have a distinct alternate spatial schema to inform them and to give spatial orientations to their inhabitants.

Samoan Language—Distinctions that Make a Difference for the Shape of Space

Arguing that a single spatial schema informs all Samoan villages, regardless of their shape poses the question: how can the same spatial schema inform differently shaped villages? While this issue has already been partially addressed in my discussions so far, there is an important linguistic dimension the examination of which further enlightens the understanding. This dimension views the relationship of language to categories of thinking and examines where conceptual distinctions are made within a language speaking group that constitute substantive differences. The perspective I draw on in this analysis is a weak version of the Whorfian principle of linguistic relativity in which it is believed that the language a people use influences (but does not determine) their way of thinking and behavior (Wolff and Holmes 2011; Whorf 1941; Bross and Pfaller 2012; Kou and Sera 2007).

An examination of the conceptual distinctions as well as semantic bundling that Samoans register in their spatial terms supports the investigation of whether or not the different village shapes would conceptually make a difference for the spatial schema involved in people's orientations and behaviors.

A brief examination of Samoan spatial terms of *luma*, *tua*, and *mata*, shows semantic bundling that differs somewhat from their English glosses. The Samoan language conflates such English-based distinctions as 'point' and 'line' (*mata*), and 'center' and 'front' (*luma*), or between 'back' and 'periphery' (*tua*). '*I luma* may also refer to both "toward the center" and "toward the front." Likewise, '*i tua* refers to both back and to periphery. I find additional semantic merging with the term *tua*. For example, "get off (or move away from) the *malae*" in Samoan is "*alu 'i tua le malae*"; "get off the road" is "*alu 'i tua le auala*"; the "river overflowed its banks" is "*ua pā le vai 'i tua*"; and when patients are released from the hospital, they are "*te'a 'i tua le falema'i*." Such phrases show how position, location, and direction are constructed as "*tua*" relative to an object or entity of special interest (e.g., *malae*, road, river, hospital) conceived as front or center in what can be conceptualized as a radial schema.

In Samoan *mata* means a point (as in the central point of a circle, the eye of a person or animal, or the sharp point of a pen), but also mean edge or 'line': essentially a stretching of a dot on a piece of paper. The latter meaning is denoted in many Samoan words. The *mata* of the knife is its sharp edge and a beach is a *matāfaga*,⁴ literally, the edge of the bay. Note may be made here that sometimes Samoans use the Samoanized English word *laina* to denote imported English ideas a "line," for example a telephone line (Milner 1966:393).

This examination of some Samoan spatial terms supports and gives insights into why Samoans would not classify different looking Samoan village layouts as different enough to warrant a need for a different spatial model to inform them. The same basic spatial organizational principles derived from the radial spatial schema are found to still apply to them as with the more round concentric layouts. The language influences the Samoan ability to flexibly apply the radial spatial schema to a wide variety of village layouts.

Conclusion

This article has examined some important aspects of the “culturalization” of space in Samoa, while building on existing literature on this topic. The discussion is aimed to further understandings about Samoan village space and the cultural schemas that inform them, and also to perspectives on the culture/space connection—how people of a specific culture and language conceptualize and organize space through language, social and architectural processes, and the symbolic and phenomenological dimensions of these processes.

The Samoan term *vā* (the space between) was illustrated to be a significant concept for understanding differences between the highly relational Samoan concept of space that emphasizes contextual relationships amongst and between people, objects, and ideas, and the Western one which emphasizes how one can put boundaries around, possess, own, and measure space separate from viewing relational contexts. Point-field spatiality, as applied by Lehman and Herdrich (2002) to the Samoan situation, helped support this analysis. However, the main ethnographic material from which the article has drawn is from over seventeen years of living in Samoan villages, and from four years of fieldwork within that time frame of focusing on the relationship between Samoan socio-cultural change and architectural change.

It was in this research that I found that the front–back axis was a persistent generative feature of Samoan architecture and spatial construction in general. Here, I use the phrase “generative feature” to reference the extent to which the axis was reproduced architecturally and ritually in Samoa and how that axis was thereby used in social action that would influence social relationships and hierarchy. I developed an understanding about how social actions across a space of “between-ness,” in other words a *vā*, is repeatedly constructed, viewed, and used to do productive work on the social system, through reproducing, reconfirming, enhancing, or manipulating social relationships that constitute the system. My Samoan architectural research showed how Samoans construct and use their village-built forms and spaces to help them articulate and facilitate social aims. Changing the architecture over time thus has implications on social organization and behavior that my research investigated.

This article did not cover all of this research; suffice to say that this research gave an important background for this article as it focused more specifically on existing literature, including my own research, about the cultural constitution of the front–back spatial orientation in Samoa. “Which Way is Front?” in the article’s title metaphorically refers to issues that have developed in the literature concerning culturally locating the front–back

axis in Samoan villages. The key literature on this topic that was examined and built on, together with my own research, includes Shore's (1982, 1996, 2014) discussions of two alternate Samoan spatial schema, and Allen's (1993) and Lehman and Herdrich's (2002) work identifying and addressing issues they found in Shore's discussion of this topic. My work here has aimed to extend and build on this scholarship.

The key ethnographic and theoretical concerns addressed in this article included Shore's: 1) supposition of two separate yet co-existing Samoan spatial models—a linear binary front–back model and a concentric or radial model; 2) notion that the Samoan seaward–inland axis is intrinsically bound together with the binary front–back Samoan spatial orientation; and 3) reductionist observation that just two Samoan village layouts exist, each of which is associated with one of the two schemas he describes. The article examined and built upon both Allen and Lehman and Herdrich's discussion of these three ethnographic issues and their own analysis of Samoan spatial dynamics.

I specifically proposed that the binary front–back axis that Shore describes does exist in Samoan social behavior, and spatial cognition, but can be observed as an integral dimension of the overarching radial spatial schema informing all Samoan villages and social behavior at different scales. The specificity of the particular layout of the Samoan village (i.e. its shape) is not an important element to this understanding. What is important is seeing and understanding the flexible and adaptable dynamic by which Samoans apply the binary oppositions of front and back, within the radial schema. Perhaps, for the non-familiar observer, the issue is that the radial axis of this absolute frame of reference also uses the Samoan terms for front and back, that is, *luma* and *tua*. As my analysis indicated those terms are applied to a number of situations in which the English speaking person would not use 'front' or 'back.'

Thus built environments and spaces that appear to have a linear form are still conceptualized as radial in nature. That Shore sees the operation of the front–back binary (not radial) spatial axis as separate from the radial schema and linked to the seaward–landward axis I would hazard to guess could be a result of researcher bias and not thoroughly examining observations. My observations reveal that the seaward–landward axis in Samoa lies cognitively separate from the front–back, though it may only circumstantially overlap with the front–back axis under certain contexts. It is this situation that I suggest may have (mis)lead Shore to his notion of the two spatial axes (front–back and seaward–inland) as intrinsically linked. A Whorfian inspired analysis of Samoan spatial terms helped further illuminate why the different village shapes can still be understood to express (for Samoans) the same radial schema.

In concluding this article it is important to emphasize that I am not advocating a view that Samoans lack multiple spatial models or frameworks by which they communicate and represent spatial orientation and locations. Certainly, there are multiple spatial models at work in Samoa, and binary front–back, and seaward–inland are two separate models regularly used in Samoa, while additional ones, such as up and down, left and right, cardinal directions and more are all part of a repertoire of frameworks that may not only help give physical orientation and location, but also denote sociological and emotional conditions among speakers. This study just focused on three models—the seaward–

inland, the front–back and the center–periphery axis of a radial schema, and found that the binary front–back axis operates within the radial schema, while the seaward–inland axis operates separately (even if it sometimes overlaps with front–back) primarily without reference to sociological positions and status in the society.

All in all, anthropology as a social science in which ethnography is a keystone, often involves re-analysis of cultural phenomena that has already been studied and theorized. This article did just that. Shore’s Samoan ethnographic work marks an important landmark in both Samoan ethnography and the application of culture based structural analysis to both cognition and behavior. Bradd Shore seems to have correctly identified several important cultural elements of Samoan spatial conceptualization, organization and dynamics. However, given observed incongruences with their own observations, other scholars of Samoan space, including myself, have worked on alternative ways of fitting the pieces of the puzzle together. In this regard, this article represents yet another effort that builds on the ideas and work of others while incorporating my own careful ethnographic Samoan work. This effort fulfills the aim of increasing ethnographic and theoretical understandings about the culturalization of space, and the spatial dimensions of sociality and culture. Samoa itself makes a great case for examining this relationship due to the emphasis placed in the culture on this relationship as demonstrated by the application of the *vā* concept discussed in this article, and of which there continues to be a growing literature.

Studying spatial cultures and learning more about how they work within the larger fabric of society and culture we may begin to discern the socio-cultural implications of changing spatial dimensions of our humanly constructed built environments. This article suggests how Samoan culture is bound up with notions of space and its organization, but the research is beginning to discover the flexible nature of this spatiality by which it may be applied to a changing environment, thereby facilitating cultural continuity. More research, however, needs to be done to study these dynamics, and a recommended strategy for doing so would be longitudinal village case studies that examine how Samoans incorporate changes in the spatial structure of built environments over time, and for example how the *malae* and the road as constituting a fixed village front and center may cause ambiguities or complexities in this picture.

¹ This understanding of *malae* derives from the Samoan creation legend of *Solo o le Vā* from Manu‘a, published by Fraser in 1897.

² The exact number of residential structures constituting a household may vary according to household size, but the existence of a single *umukuka* ‘cookhouse’ at the back is a common way for counting a single household.

³ The insertion of the glottal stop before *‘i luma* (or *‘i tua*) indicates the directionality “toward the front” (or forward in direction) or “toward the back.” The lack of the glottal stop (e.g. *i luma* or *i tua*) indicates location, as in, “in” or “at” the front or back.

⁴ The macron over the second /a/ in these examples represents an elision (e.g. *mata a vai* ‘eye of water, i.e., a spring,’ is written as *matāvai*).

References

- Allen, A. 1993. Space as Social Construct: The Vernacular Architecture of Rural Samoa. Ph.D dissertation: Department of Art History. Columbia University.
- American Samoa Community College. 1998. *Malae: Sacred Ground*. Documentary Film. American Samoa.
- Bennardo, G. 2002. *Representing Space in Oceania: Culture in Language and Mind*. G. Bennardo, ed. Canberra: Pacific Linguistics, Research School of Pacific and Asian Studies, Australian National University.
- Bross, F. and P. Pfaller. 2012. The decreasing Whorf-effect: A study in the classifier systems of Mandarin and Thai. *Journal of Unsolved Questions* 2: 19–24.
- Duranti, A. 1992. Language and bodies in social space: Samoan ceremonial greetings. *American Anthropologist* 94 (3):657–691.
- _____. 1997. Indexical speech across Samoan communities. *American Anthropologist* 99: 342–354.
- Feinberg, R. and A. Mawyer, eds. 2014. Senses of space: Multiple models of spatial cognition in Oceania and Indonesia. *Ethos* 42(3):243–397. Special Issue.
- Fraser, J. 1897. Folk songs and myths from Samoa. *Journal of the Polynesian Society* 6(1):19–36.
- Kou, J. Y. and M. D. Sera. 2007. Classifier effect on human categorization: The role of shape classifiers in Chinese. *Journal of Consumer Research* 25:108–122.
- Lehman, F. K. and D. J. Herdrich. 2002. “On the relevance of point-field spatiality in Oceania,” in *Representing Space in Oceania: Culture in Language and Mind*. Edited by G. Bennardo, pp. 175-195. Canberra: Pacific Linguistics.
- Le Tagaloa, F. Jr. 2003. *Tapua ‘i: Samoan Worship*. Apia, Samoa: Malua Printing Press.
- Levinson, S. 1998. Studying spatial conceptualization across cultures: Anthropology and cognitive science. *Ethos* 26(1):7–24.
- Lilomaiava-Doktor, S. 2009. Beyond migration: Samoan population movement (Mala-ga) and the geography of social space (Vā). *The Contemporary Pacific* 21(1):1–32.
- Low, S. M. and D. Lawrence-Zúñiga, eds. 2003. *The Anthropology of Space and Place: Locating Culture*. Oxford: Blackwell Publishers.
- Mead, M. 1937. “The Samoans,” in *Cooperation and Competition Among Primitive Peoples*. Edited by M. Mead, pp. 282-312. New York and London: McGraw Hill.
- Milner, G. B. 1966. *Samoan Dictionary: Samoan–English, English–Samoan*. London: Oxford University Press.
- Mix, K. S., L. B. Smith and M. Gasser, eds. 2010. *The Spatial Foundations of Language and Cognition*. Oxford: Oxford University Press.
- Neich, R. 1985. *Western Samoa Material Culture*. New Zealand Bulletin 23.
- Refiti, A. 2004. The Vā body in Pacific thinking. *Journal of the Manukau School of Visual Arts*, (1):48–52.
- _____. 2007. “The origin of Samoan architecture,” in *Das Architektonische Erbe Samoas*. Edited by E. Lehner, H. Muckler and U. Herberg, pp. 31-37. Vienna:

- Neuer Wissenschaftlicher Verlag.
- _____. 2008. The forked centre: Duality and privacy in Polynesian spaces and architecture. *Alternative: An International Journal of Indigenous Scholarship* Special Edition, Special Issue 4(1):97-105.
- Samoa Bureau of Statistics. 2011. Population & Demography Indicator Summary. Downloaded from <http://www.sbs.gov.ws>.
- Shore, B. 1982. *Sala 'ilua: A Samoan Mystery*. New York, Colombia University Press.
- _____. 1996. *Culture in Mind: Cognition, Culture and the Problem of Meaning*. New York: Oxford University Press.
- _____. 2014. "A view from the islands," in *Senses of Space: Multiple Models of Spatial Cognition in Oceania and Indonesia*. Edited by R. Feinberg and A. Mawyer. *Ethos* Special Issue 42(3):376–397.
- Tcherkézoff, S. 2005. "Culture, nation, society. Secondary change and fundamental transformations in Western Samoa: Towards a model for the change of cultural dynamics," in *The Changing Pacific: Identities and Transformations*. Edited by S. Tcherkézoff and F. Douaire-Marsaudon, pp. 245–301. Canberra: Australian National University Press.
- Tuagalu, I. 2008. Heuristics of the Va. Critiquing Pasifika education. *Alternative: An International Journal of Indigenous Scholarship* 4(1):108–125. Special Issue.
- Tui Atua, T. T. T. E. 2007. In search of harmony: Peace in the Samoan indigenous religion. Pacific Indigenous. Paper presented at the Colloquium Organized by Pontifical Council for Interreligious Dialogue, Vatican City, Rome, Italy 12 – 15 January 2005.
- US Census Bureau. 2010. American Samoa – 2010 Census Results. Downloaded from <http://www.census.gov>.
- Van der Ryn, M. 2008. "The *measina* of architecture in Samoa: An examination of the *Vā* in Samoan architecture and sociocultural implications of architectural changes," in *Measina a Samoa* Volumes 2 & 3, pp. 73–89. National University of Samoa: South Pacific Books Ltd.
- _____. 2012. The Difference Walls Make: Cultural Dynamics and Implications of Change in Samoan Architectural Traditions and Socio-Spatial Practices (1940–2006). Ph.D. dissertation. Department of Anthropology, University of Auckland.
- Wendt, A. 1999. "Tatauing the post colonial body," in *Inside Out: Literature, Cultural Politics, and Identity in the New Pacific*. Edited by V. Hereniko and R. Wilson, pp. 399-412. Lanham, MD: Rowman & Littlefield.
- Whorf, B. L. 1941. The relation of habitual thought and behavior to language. *ETC: A Review of General Semantics* 1(4): 197–215.
- Wolff, P. and K. J. Holmes. 2011. Linguistic relativity. *Cognitive Science* 2(3):253–265.