SAMOAN TĀ-VĀ (TIME-SPACE) CONCEPTS AND PRACTICES IN LANGUAGE, SOCIETY, AND ARCHITECTURE

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This essay gives new insights into indigenous Samoan spatial, temporal, and social concepts as distinctive aspects of Samoan culture, expressed linguistically, socially, and architecturally in a changing contemporary Samoan context. Four Samoan concepts are examined: (1) *mata* (the eye and a point of convergence and emanation), (2) $t\bar{a}$ (strike and a point in time), (3) $v\bar{a}$ (the interval and relation between points in space or time and society), and (4) tuā'oi (neighbor and boundary). The general $t\bar{a}$ - $v\bar{a}$ theory of reality (Māhina 2008a, 2008b; Ka'ili 2008) informs the analysis augmented by the theory of point-field spatiality as discussed by Lehman and Herdrich (2002). The analysis develops an understanding of how Samoan language, architecture, and socio-spatial and temporal practices express a cultural system through which a sense of order (or harmony) and conflict are produced and addressed in Samoan society.

IN A WORLD undergoing rapid globalization, indigenous peoples everywhere, including those of Oceania or Moana (a Polynesian term for "ocean"), are finding ways to both decolonize and re-represent themselves on the global scene. Developing and asserting an identity free from Western cultural domination engages a difficult disentanglement. Part of the effort is being brought forth through indigenous scholars of the Moana. Anthropology has long been touted as the social science that offers an intellectual vehicle for

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crossing into other cultural realms of thought and lifeways. Yet underlying this scholarship, often embedded in the underpinning theoretical frameworks, lie Western-based precepts, ideas, concepts, and aims, predisposing a certain type of cultural analysis and ethnographic representation. Increasing the cultural diversity of concepts, precepts, and ideas by which social science theory is produced is yet another part of the important decolonizing, cultural-reclaiming process that is occurring—another necessary lifeline for cultural survival in today's world.

Like the other essays of this issue, this essay applies and builds on the general $t\bar{a}$ - $v\bar{a}$ theory of reality, an indigenous Moana theory initially pioneered and developed by Tongan scholar Hūfanga Dr. 'Okusitino Māhina (2008b). It also synthesizes and bridges this theory to the theory of point-field spatiality (Lehman and Herdrich 2002). Key concepts of Samoan culture such as $v\bar{a}$ (the space between), $t\bar{a}$ (temporal marks), mata (the eye and point of convergence or emanation), and $tu\bar{a}$ oi (boundary and neighbor) are treated both as subjects and as tools of analysis. This essay describes indigenous Samoan spatial, temporal, and social concepts as distinctive aspects of Samoan culture, expressed linguistically, socially, and architecturally, in a changing contemporary Samoan context.

My underlying premise is that architecture and the built environment are integral to spatial/temporal concepts and practices, which are both culturally and linguistically conditioned and structured. As such, built forms and spaces are examined as constituting more than physical shelter and aesthetic form or as indicators of cultural traditions; they become a key framework or cultural modus operandi by which society addresses the need to produce and maintain social order and reduce conflict through spatial and temporal organization. Through this perspective, my analytical framework aims to connect architectural forms and spaces to the sociocultural life and practices that they encompass (see Stasch 2009).

The four Samoan terms—mata, tā, vā, and tuā'oi—are examined in their various linguistic contexts to illuminate distinctive Samoan cultural ways of experiencing spatial and temporal relationships. I research their expression through Samoan sociospatial practices and architectural forms and spaces as phenomenological modus operandi by which these concepts are experienced and given definition. In other words, I examine Samoan built spaces (both within and between structures) as an instrumental part (and reflection) of Samoan ways of cognitively (perceiving) and socially constructing time and space. In examining these terms and their meanings and manifestations in Samoan culture and the built environment, I also draw on the illuminating work of Lakoff and Johnson (2008) on how conceptual metaphors built into language work to influence worldviews (cognition and ways of thinking). They state, We have found . . . that metaphor is pervasive in everyday life, not just in language, but also in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature. (3)

I show how Samoan social and physical constructions are based on underlying linguistically expressed Samoan conceptual metaphors about the constitution and production of space and time. These concepts and meanings are embedded in language, in architecture, and in sociospatial and temporal practices. The essay also addresses how these concepts and cultural constructions (both physical and conceptual) are integrally related to cultural systems for dealing with conflict and developing and maintaining social order. The issue of conflict and the need to produce order in the society are seen to be central to understanding architecture, built forms, spaces, and sociospatial practices over time.

Background

The past six decades has brought about the development of a globalized Samoan community together with an increasing importance of a cash economy, out-migration, and dependence on remittances, and globalization (Anae 1998; Lilomaiva-Doktor 2009; Macherson 1992; Van der Ryn 1991, 2012b). Such trends have helped accelerate architectural and sociocultural change in Samoan villages. The change is not uniform but varies across villages, islands, and the political division of the Samoan archipelago. The traditional look of Samoan village architecture—the layout of villages and family compounds and individual structures—has been increasingly impacted to different degrees in different parts of the archipelago, politically divided since 1900 into the unincorporated U.S. territory of American Samoa and the independent nation of Samoa.

Across the diverse affects and varying levels of modernizing appearances, indigenous Samoan spatial and temporal concepts still resonate, though in modified form. This occurs because indigenous Samoan spatial and temporal concepts, which are clearly more embedded and articulated in more traditional Samoan architectural forms, have generative power. They translate into underlying principles that help guide processes of change and that then become reflected in new types of architectural forms and spaces. These unconscious generative dimensions of culture offer resilience and adaptability, evidenced through the interactive process of language, architectural forms, and sociospatial practices. The changes, nonetheless, may also result in tensions that have become an ongoing aspect of contemporary Samoan life and its negotiations. The ethnographic and linguistic material presented in this essay draws from four years (2003–2007) of fieldwork research in villages of both the independent state of Samoa (otherwise known simply as Samoa) and the unincorporated U.S. territory of American Samoa. Despite the political and economic differences created through their colonial division in 1900, the islands continue to share a common language, set of cultural traditions, and history that form the basis for a common identity and heritage, though regional variations in custom and language do exist, and the infusion of the market economy and Western ideas is more prevalent in the American Samoan community.

Theoretical Perspectives: Tā-Vā Theory and Point-Field

This study employs and synthesizes two theoretical areas from the scholarship. The primary one is the general $t\bar{a}$ -v \bar{a} theory of reality, the connecting theory for all the essays of this issue. The second and augmenting theory is the point-field (as opposed to container) theory of space.

I first learned about tā-vā theory directly through the intellectual mentorship of its pioneering architect, Hūfanga Dr. 'Okusitino Māhina, while he was my principal supervisor for my PhD study at Auckland University. I was focused on the sociocultural dynamics and implications of change in Samoan society from changing village architecture over the last half century. Māahina, who was working on developing tā-vā theory at that time, encouraged me to examine the spatial and temporal dimensions of my topic. The spatial dimension, through the concept of vā, was more straightforward and obvious; after all, a moniker for architecture is "the art of spatial construction." Māhina, however, challenged me to dig deeper to discover the temporal dimensions of my topic, especially through the concept of tā.

This I was eventually able to do, investigating the temporal dimensions of the relationships involved in getting a building made, the temporal and social bracketing of a building's physical construction, and the temporal dimensions of a building's human uses in terms of activities performed in and around the structure over time. But it was not until I was in the write-up stage of the thesis in 2008, when published works articulating the theory and various applications began to emerge (e.g., Ka'ili 2008; Māhina 2008a, 2008b), that I began to get a deeper understanding of tā-vā theory and its applications to my ethnographic material.

The first two tenets of the general $t\bar{a}$ -v \bar{a} theory of reality (M \bar{a} hina 2008a, 2008b; Ka'ili 2008) are (1) that "ontologically $t\bar{a}$ and $v\bar{a}$, time and space, are the common medium in which all things are in a single level of reality, spatio-temporality or four sided dimensionality," and (2) that "epistemologically $t\bar{a}$

and $v\bar{a}$, time and space, are social products, involving their varying social arrangements across cultures." The theory espouses that the conceptualization and organization of time/space dimensions, the common medium of all existence, is a cultural phenomenon. Furthermore, the study of these dimensions bears central importance on understanding issues of conflict, order, harmony, and beauty in various realms of sociocultural, artistic, and spiritual life, particularly within Polynesian societies. I frame the discussion of this essay in these aspects of the t \bar{a} -v \bar{a} theoretical formulation.

Augmenting my application of tā-vā theory are the perspectives of pointfield spatiality, which my colleague, David Herdrich, first introduced to me in American Samoa in about 1998 while conducting research on the relevance of point-field theory in Samoa (Lehman and Herdrich 2002). Later, in doing my PhD research on Samoan architecture, I found useful application of point-field and a positive synthesis with the tā-vā theory.

Significant to point-field theory is the assertion that there are only two possible ways to cognitively perceive (and thereby cognitively construct) space; these are container and point-field. Both these modes are cognitively available and possible in any culture, but one will tend to dominate. Language may be examined as an indicator and facilitator of which way of thinking about space predominates. For example, in English, there are such common phrases heard in America as "Give me some space" or "He needs some space" (in reference to a person thought to need time alone).

The guiding conceptual metaphor in such expressions is that of a container. Space is viewed as containable, quantifiable, and something you can possess and own. This way of perceiving fits with a cultural worldview that emphasizes the singular identity of entities, including individual people, as autonomous beings whose identity remains independent of the sets of relationships to which the individual is also connected. The principle of container space models is that boundaries predetermine space. Boundaries are drawn, and space is what is on the inside of those boundaries. Western architectural concepts and practices are based on container models of space, as evidenced with cubic forms and formulas that described building areas (contained space) in terms of square feet or meters.

Point-field spatiality offers a strong contrast with that of the container model. Rather than beginning with a boundary to define a quantifiable space that it contains, point-field begins with points (they may be people of the social landscape or significant cultural points in the landscape). Each point generates its own field (space) that interacts with other fields. Those fields constitute space (physical, social, and spiritual) that necessarily interacts with the fields of other points. Boundaries emerge as negotiations of the relationship between adjacent fields. Thus, in contrast to container space, where boundaries axiomatically precede a notion of space, point-field space is diametrically the opposite boundaries emerge only as an outcome of space (space that is immediately relational and not quantifiable). Lehman and Herdrich (2002) describe the two epistemologies of space in the following way:

Point-field views space as the topological neighborhood of a given point, and boundaries are derived as the adjacency of the closures of pair-wise distinct point fields. [As such], boundaries, instead of being axiomatic, as in the container view of space, are derived theorems on the point-field view. (181)

I illustrate the conceptual difference between point-field spatiality and container-modeled spatiality in the schematic diagram of Figure 1.

Examining Samoan linguistic and ethnographic evidence, Lehman and Herdrich demonstrate the predominance of point-field spatiality in Samoan culture. In addition to mata and $v\bar{a}$, the other Samoan terms and ideas that Lehman and Herdrich investigate include *moa* (center point), *maga* (the intersecting point) and *'ave* (ray, tentacle, arm). They have a section on boundaries but never include the Samoan term tuā'oi, which may be glossed in English as "boundary" or as "neighbor."

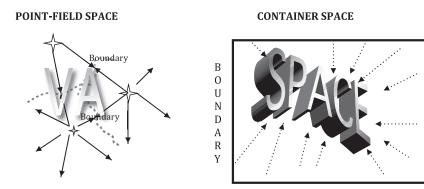


FIGURE 1. Left: Schematic diagram of point-field model of space. Space (va) begins with points (represented by stars) that radiate fields (represented by vectors) outward. Boundaries (dotted lines) form between adjacent fields as derived theorems and become synonymous with the concept of a relation. In contrast, the container spatial model (right) begins axiomatically with established fixed boundaries (the rectangle). Space then is defined and measured as the area inside those boundaries (adapted from Lehman and Herdrich 2002, 82).

Regarding boundaries, they state that "land boundaries in Samoa are frequently found to be overlapping and are almost constantly disputed. The boundaries derived from relationships that are agreed to are seen as temporary and likely to change relative to the changing relationship" (Lehman and Herdrich 2002, 187). The predominant lack of fences on land boundaries, particularly within the village, and an ethos against it are given as evidence of point-field spatiality.

My work here both confirms and extends their analysis of the relevance of point-field spatiality in Samoa. I also explore how point-field spatiality in Samoa extends to a point-field temporality, an effort that incorporates the Samoan term tā, and a synthesis with the tā-vā theory of reality. I also draw into the discussion more of the indigenous Samoan scholarship and my own fieldwork on Samoan concepts of vā and tuā'oi as well as associated concepts of *feagaiga* (covenant). In particular, I explore the application of my developing understanding of a tā-vā framework (together with that of point-field) to an explication of Samoan architecture and built space.

A third important contributor to my analysis derives from the writings of Samoa's head of state, His Highness Tui Atua Tupua Tamasese (2008a). I initially met Tui Atua in Auckland in 2004 and subsequently both heard him give talks and read some of his essays on Samoan cultural themes that he develops from a hermeneutic method of investigating the deeper meaning of Samoan words, proverbs, and customs in an effort to restore their significance and relevance to contemporary life, both in and out of Samoa.

This search is what is being referred to as the indigenous Samoan reference and involves a search that uncovers and reconnects Samoans to the rich meanings of the culture, which remain as relevant and important today as ever. Tui Atua (2008a) states,

In the Samoan indigenous religion the unity and harmony between the temporal and the divine, between time and space and all living things is God. Man's purpose in life is to search for that unity and harmony, to search for God. (112)

This quote helpfully introduces a Samoan cultural reference for delving into understandings about the constitution of order and harmony in a Samoan cultural worldview. How order or harmony, which Tui Atua translates as *lagimalie* (agreeable or pleasant skies), is created and maintained and how conflict is addressed is both a theoretically and a socially salient topic to further explore ethnographically.

Through the analysis, new understandings emerge about how spatial and temporal organization articulates with sociocultural order and conflict and how these perspectives are expressed and reciprocally reinforced in language, social customs, and architecture of the built environment.

Samoan Cultural Concepts of Vā, Tuā'oi, Mata, and Tā

Tā-vā theory initially suggests that the Polynesian term vā ($w\bar{a}$ in Maori and in Hawaiian) is the Moana term for space, while tā is the Moana equivalent to time (Māhina 2008b, 78); thus, vā = space; tā = time. Kaʿili (2008) slightly revised the concept, explaining tā as a term that signifies *points in time*, in which vā can be understood as the space between these points, that is, temporal space. Samoan words, such as *vaiaso* (week), demonstrates this use: vaiaso = $v\bar{a}$ -*i*-*aso* (an interval of days).

My integration of point-field analysis stimulated my development of revised equations for defining space and time concepts in Samoa and other parts of the Moana using these terms but incorporating the term mata. These equations are as follows:

Synchronic (geographical) space (i.e., spatiality)= $v\bar{a}$ + mata.

Diachronic (temporal/social) space (i.e., time) = $v\bar{a} + t\bar{a}$.

Through these equations, $v\bar{a}$ is defined as intervals (or relations) between points, which are mata (in synchronic space) and $t\bar{a}$ (in temporal space). This framework now more properly shows $v\bar{a}$ to be the common denominator for both space and time. In addition, when we recognize that $v\bar{a}$ denotes social, spiritual, and ideational space as well as geographical space, then the sociality and spirituality of spatiality becomes evident. The same may be said for temporality; that is, temporality is directly tied to sociality and spirituality. While these notions receive further explication as the article proceeds, my first step is to briefly examine each of these terms ($v\bar{a}$, mata, $t\bar{a}$, and $tu\bar{a}$ ⁽ⁱ⁾) and how they may be generally understood to fit into a web of Samoan cultural meanings.

Vā: Intervals and Binding Relations Between Entities

 $V\bar{a}$ denotes "between-ness," or the interval between beings or entities that both binds and separates them together in various ways. Many writers, especially Samoan ones, have noted its cultural significance in Samoa (e.g., Le Tagaloa 2003; Lilomaiva-Doktor 2009; Refiti 2007; Tuagalu 2008; Wendt 1999). Albert Wendt (1999) states that important to the Samoan view of reality is the concept of $v\bar{a}$: $V\bar{a}$ is the space between, the between-ness, not empty space, not space that separates but space that relates, that holds separate entities and things together in the Unity-that-is-All, the space that is context, giving meaning to things.

Lealiifano Albert Refiti (2007) poetically elaborates vā as

the radiating force that shifts and rolls like the surface of the sea . . . an opening, a space or in-between place that dislocates and disconnect people and things, not in a negative way but as a reality that provides a way to bond them "positively." (34)

Le Tagaloa (2003) had this to say about $v\bar{a}$:

 $V\bar{a}$ governs all things and holds all things together. . . . $V\bar{a}$ is relationship, connection, affiliation, boundaries, difference, separation, space, distance, responsibility, obligation, state of being, position, standing, and so much more. (9)

One informant in my fieldwork described to me five types of $v\bar{a}$: (1) the spatial $v\bar{a}$, (2) the temporal $v\bar{a}$, (3) the social $v\bar{a}$ (between people and other people), (4) the $v\bar{a}$ between people and their environment, and (5) the $v\bar{a}$ between people and the Creator. Those varied categories for understanding $v\bar{a}$ are found frequently expressed in everyday conversation and speech. $V\bar{a}$ is an emphasized theme in Samoan everyday and ceremonial life.

All of these Samoan explanations help signify the salient Samoan emphasis on viewing the relations and context of things as opposed to focusing on objects, entities, or people in and of themselves (typically a more Western cultural pattern). Anthropologist Bradd Shore (1982) made similar observations in his earlier Samoan ethnography, stating,

Lacking any epistemological bias that would lead them to focus on "things in themselves" or the essential qualities of experience, Samoans instead focus on things in their relationship, and the contextual grounding of experience. (136)

In the $v\bar{a}$ of people, things, and entities, harmony (and/or conflict) is created and managed. This helps explain the Samoan attention to spatiality and temporality of social practices, especially at formal ceremonial exchanges, such as at funerals, weddings, chieftain bestowals, church, and guesthouse dedications, when sociopolitical stakes and potential for conflict are high. Such events serve as a framework for negotiating, building on, and reproducing historical and genealogically-derived vā between kin-based groups.

This point underscores the importance Samoans give to such Samoan social practices of *teu le vā* (adorn the relationship) and *tausi le vā* (tend to and care for the relationship over time) in Samoan life. It also underscores importance of other Samoan social practices, such as *tapua 'i* (and *tapua 'iga*), a Samoan practice and concept of worship and social support for others' endeavors, and feagaiga (covenant and agreement), a term that also refers to the binding nature of certain types of complementary relationships, such as between brother and sister, between *tulāfale* and *ali 'i*, or between a minister and his congregation. Similarly, vā is also used to discuss spiritual relationships, such as the vā between God and people, always invoked in Samoan Christian prayers. In sum, the existence and identity of things becomes necessarily perceived through the context of relationships and interactions, or what I call "relationality."

Mata: "Emanating/Convergence Point" or "Eye"

Mata is the Samoan (and Polynesian) term for "eye," "face," "point," or "edge" (Milner 2003, 134). Mata, as eye(s), is the principal sensory organ for perceiving relational space, that is, $v\bar{a}$ (in the synchronic frame). Mata, as eyes, represent a point in which light rays converge and intersect to form images of the world in our mind from which the relational coexistence of objects, beings, and significant points in the physical and social landscape are cognitively discerned. Anything that can be construed as a focal point can be a mata, such as *o le mata o le afā* (the eye of the hurricane). Here, clearly English also takes on similar double uses of the word "eye" (e.g., the eye of the needle or the eye of the potato).

One finds mata as the prefix morpheme of a number of compound words. Some examples include *matāvai* (freshwater spring), *matātalo* (the crown of a taro), *matāuila* (an electric lightbulb; *uila* means "electricity" or "lightning"), and, as Lehman and Herdrich (2002, 184) point out, *matāgaluega* (government section or department).¹ Across these examples, mata stands out as a point source of intersection from which something (water, light, the growth of the taro, or work) emanates. Such a meaning seems less embodied in the English words. For example, as Lehman and Herdrich (2002, 184) point out, in English a government department is viewed as a bounded space in which certain work gets done, whereas a matāgaluega is a point from which work emanates.

Mata also encompasses the English concept of an edge; for example, the mata of a knife is its sharp edge, and a *matāfaga* (beach) literally means

"edge of bay." Here, I would propose that the same theme of intersection and source from which something emanates manifests in the meaning. The beach represents the intersection of the sea and the land, a point at which harvests from the sea came to land, but also visitors from other islands would land, opening up possibilities for new relationships and exchange.

Mata is also prefix in compound words to denote important societal positions. For example, *matāfale* refers to the holder and caretaker of a title as well as a roof gable. The term is used today in Samoan contexts mainly to refer to the social units, traditionally formed around a *matai* (a titled person, sometimes glossed in English as "chief") through which church contributions are made. *Matā 'āiga* refers to the extended family household with a matai residing in it. The word matai itself consists mainly of mata. The matai position can be conceptualized as the eye, authority, and source of family solidarity. That mata also means "eye" or "face" only gives these associations more significance.

Mata offers a concept of point of intersection and source of power that makes mata (as person, landscape, or architectural feature) culturally significant, something for our mata (as eyes) to discern and measure in relation to other mata, including each owner of a pair of eyes in the vā of existence. In sum, mata may be a person (of position) in the social landscape or a culturally valued fixed point of the built environment. Vā (social and spatial relationships) are principally perceived (and thereby constructed) through the eye (mata) and viewed as the interval space or relation between points/edges in the inhabited conceptual, social, symbolic, and physical world.

Tā: "Strike," Material Intersections Marking "Points in Time"

It is of some interest that the Samoan word for "ear" is *taliga* (or *tāliga*, depending on which dictionary one is using). If space is perceived through the eyes (mata), the taliga (ears) are the primary sensory organ I suggest by which time it is sensed. Through the ears (and through the sense of touch), our bodies listen to the beats that make up time.

When one looks up the word tā in either a Tongan–English or a Samoan– English dictionary, the English gloss given (in both cases) is "to strike"; nothing about "time" is given as a gloss. If you look for the Samoan word for "time" in the English–Samoan section, the word given is *taimi*, a transliteration of the English word "time." Clearly, Europeans introduced the word taimi together with the clock and the use of quantification of time, which also refers to a Western container concept of time that I see as parallel with the container model of space.

Such English expressions often heard in American "culture" as "Do you have enough time to do this?" or "Thank you for giving me some of

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your time" are rarely heard in Samoan cultural contexts, nor are they easily expressed in the language without use of the transliterated word taimi. Such phrases immediately signify specifically *papālagi* (foreign) ideologies and values embedded in the modern Western industrial concept of time as a quantifiable and containable commodity.

But certainly, Samoans had and have a sense of time rooted to their language and pre-European contact culture. The idea of past, present, and future is represented grammatically in Samoan language. Samoan also has a well-specified indigenous (pre–European contact) way of telling "times" of day using the word *itiulā* (literally, the side or position of the sun [in the sky]). Months and years were also all specified and had specific meanings (see also Unasa in this volume).

I propose that the sense of time conveyed in Samoan language is, like its spatial counterpart, modeled as point-field (not container). Māhina (2008a, 2008b) generally uses the word tā as a shorthand reference for a Moana sense and concept of time. Ka'ili (2008) describes how he first had trouble identifying tā in Tongan as "time" (given the dictionary definitions) until he realized how tā as "tempo, beat, pace, rhythm, and frequency" (15), was the core feature of a Tongan sense of time. It is from this perspective that I arrived at the equation time = tā + vā; that is, time is composed of beats that mark "time" plus the vā (or intervals between each beat), giving rise to a temporal sense, a rhythm. In this temporal framework, vā signifies the intervals between points ($t\bar{a}$) in the temporal frame.

The temporality associated with the word $t\bar{a}$ that I worked on identifying in Samoan expressions and thought. Here, a few examples I found included $t\bar{a} t\bar{a} le fatu$ (the continued beating of the heart), which is also a euphemistic way of referencing "I'm still alive, and time/life goes on. In the well-ordered Samoan village, there is the $s\bar{a}$ (the curfew time), which is marked at its beginning and end by the $t\bar{a} le s\bar{a}$ (literally, striking of the curfew) involving the striking ($t\bar{a}$) of a bell or wooden drum (*lali*). In such examples, time is being marked, a tempo is set, and the markers ($t\bar{a}$) plus the intervals between ($v\bar{a}$) constitute the complete point-field time equation. The connection between strike ($t\bar{a}$) and time is not completely foreign to European language and thought. Just consider the phrase "The clock struck five o'clock." In Samoan, one does not ask, "O le a le taime?" ("What time is it?") but rather "Ua $t\bar{a}$ se fia?" (literally, "How much has been struck?").

The connection between the physical act of strike $(t\bar{a})$ and time is also reflected in the *Solo o le Vā* creation myth, a significant Samoan creation myth that early missionaries recorded in both narrative and chanted forms in the Manu'a Islands (Fraser 1897). The narrative describes the creation of the earth, its oceans and islands, and the heavens through the progenerative and creative powers of Tagaloalagi, who near the beginning roams hither and thither in the $v\bar{a}nimonimo$ (the illimitable void) until coming to the primordial rock named Tagaloa-Fa'atutupunu'u (Tagaloa, to cause places). Tagaloalagi strikes (tā) the rock, dividing it into two halves. The result created by this first tā is the first measurable and limitable vā, the space now existing between the two halves of the rock that used to be one.

That moment of the first great mythological tā is thus really the beginning of both space and time creation in Samoa cosmology. The rest of the narrative continues along the same themes to describe the full construction of space and time in Samoan indigenous mythological thought. This vā signifies separation but also connection (through time and space). Vā denotes the necessity of relationship through separation and connection as part of constituting harmony and unity. Tā is continually found as the marker of time and thereby space and relationships and vice versa. (For additional analysis of the *Solo o le Vā* myth for understanding Samoan architecture and spatiality, see Allen 1993; Van der Ryn 2012a)

Further investigating the concept of $t\bar{a}$ in relationship to time or a sense of time reveals a number of words or phrases that incorporate $t\bar{a}$ and that do not always denote physical striking of an object but rather more abstractly the denotation or marking of points in time. These are the following:

- (1) *Taeao*: morning, tomorrow, historical era.
- (2) Tapena: to tidy up, in preparation for a new activity, event, etc.
- (3) *Ta'ape*: to disperse in different directions, such as after a social event is finished.
- (4) Tā le gafa: literally, to strike the genealogy; refers to the conjugal relationship resulting in children. The phrase can be applied whether or not the conjugal relationship lasts.

The connecting idea in all these applications is that of a temporal intersection and a temporal bracketing of events; for example, taeao ($t\bar{a}$ -e-ao), literally, the striking of daytime, means both "tomorrow" and "morning." Taeao, as morning, represents the point of intersection between night (darkness) and day (light) and a way of bracketing the start of each new day. Taeao is also used metaphorically in Samoan to refer to a "new era" or "new beginning." The establishment of Christianity in Samoa involved a new intersection in history officially referred to as a taeao. The day of a bestowal of chiefly title may be referred to as taeao fou (new day).²

The nuanced meanings reflected by the word $t\bar{a}$ as not only "strike" but also a momentary intersection of materials marking points in time are reflected in tapena (to tidy up, get a physical space ready for a new social

event) and ta'ape (to disperse in different directions, i.e., after a social event is finished). The two activities suggest external activities engaged to bracket important socially significant events where social vā will be worked on or constructed. Tā le gafa (literally, striking of genealogies) is a phrase used to refer to a conjugal pairing resulting in offspring. The tā in this case is the point of intersection of two different genealogies (gafa) that occurs through male-female coupling. That tā le gafa indicates a "mark in time" within the genealogical sequences of two different descent groups. Similarly, *talepe* (to break or smash) and *tāma 'i* (a war or calamity, to be destroyed) also resonate with those same nuances of meaning. Pratt's Grammar and Dictionary of the Samoan Language (Pratt 1977, 39) describes the use of tā as a prefix added to some Samoan nouns and verbs. He describes how as a prefix added to nouns, for example, *ili* (fan) and *fale* (house), the noun is turned into an active verb with repeated action. Thus, *tāili* denotes the repeated action of fanning, and *tāfale* means going to house to house. Adding tā to verbs denotes a further extent and multiplicity of an action. Thus, *fana* (to shoot) becomes *tāfana* (to shoot a lot), and *motu* (to be broken off) becomes *tāmotuina* ([used in the passive] to cut off limb by limb).

Tuāʻoi: Boundaries/Neighbor

A crucial dimension of the definition of any $v\bar{a}$ is that the boundary emerges as part of that $v\bar{a}$ (the between). In terms of social $v\bar{a}$, there exists a particular $v\bar{a}$ between husbands and wives, between a matai and those that serve him or her, between ali'i and tulāfale (the two complementary classes of matai), between ministers and their congregations, and so on. Each of these $v\bar{a}$ relationships has its own set of mutual responsibilities, obligations, and boundaries that are conceived as an essential part of that relationship. As point-field theory predicts, the boundaries emerge as theorems from that relationship, a point independently confirmed by Tui Atua Tupua Tamasese (2008a):

In the harmony between fellow men Sāmoans find that there exist special relationships between people . . . called feagaiga [a particular type of vā involving complementary opposites). As a result of these *tapu* and/or feagaiga, boundaries or tuā'oi emerge. (108)

This view matches perfectly with the understanding that point-field spatiality begins with the perception of mata, then the $v\bar{a}$ between them. Space relationships thereby precede the construction of boundaries; boundaries are the outcomes of the relationships, not the other way around. Once those relationships are understood, the mutual boundary in that relationship emerges

from it. This cognitive process resulting from a specific sociocultural dynamic contrasts with the container way of perceiving and creating space, in which space and relationships therein become understandable only through the existence of boundaries in advance. That the tuā'oi emerges as a result of the relationship is equivalent to it being a "derived theorem." Further evidence of the point-field model is found in the fact that the Sāmoan word for "neighbor" is also tuā'oi. After all, a boundary is made in the vā between neighbors in the landscape; point-field spatiality makes the concept of vā almost synonymous with tuā'oi. They imply each other.

Temporal space (whether container or point field) is often metaphorically structured through the more tangible concrete experience of space (Borodotsky 2000; Casasanto and Bordotsky 2008). A good example is a common Samoan way an orator may begin a speech with the Samoan proverb *se'i tō le niu i le tuā 'oi* (plant the coconut tree on the boundary). The use of the proverb politely acknowledges the previous speaker (if the latter is a high chief or an orator of rank) (Schultz 1980, 31). Such polite statements help facilitate harmony in these social situations by showing clear order and respect for boundaries as they emerge in relationships.

In addition to demonstrating the metaphoric structuring of a temporal boundary through the metaphor of a spatial boundary, the example reinforces the view of space and time as part of a common medium of existence represented in the term vā. The relationship to a neighbor is defined through the dynamics of the boundary, a point that clearly highlights the strong relational dimension of a point-field/mata-vā time-space culture in Samoa.

Lagimalie and Vevesi: Harmony and Conflict in Samoan Thought and Practice

The discussion so far has been illustrating the tā-vā theory tenet that "space and time are ontologically the common medium of existence, though epistemologically they are social constructs" (Māhina 2008b, 78). My discussion progresses now to illuminate how "conflict and order [constituted through the arrangement of space and time] are of the same logical status, in that, order is itself an expression of conflict; and the symmetrical arrangement of tā-vā gives rise to *malie* (beauty) while the asymmetrical configuration of tā-vā leads to *tāmaki* (disharmony)" (Māhina 2008b, 78). In reference to Samoan terms as the cultural realm in which I am working, I choose Tui Atua's term for harmony, lagimalie (literally, agreeable heavens), not the more common Samoan term for "peace" (*filāmū*). The former denotes an active balancing of elements, while the latter, a more passive absence of problems or disharmonies. Here I draw on my Samoan fieldwork to build on the ethnographic examples of Lehman and Herdrich (2002) and the cultural insights of Tui Atua (2008a) to illuminate underlying cultural issues and themes of harmony and conflict in Samoa.

In full alignment with the tā-vā theory, Samoa's head of state, Tui Atua (2008a), states that "conflicts arise when the tuā'oi or boundaries within are transgressed or misunderstood. Conflicts are products and reflections of disharmony" (109). Lehman and Herdrich (2002) and Shore (1982) relate considerable ethnographic evidence to show the salient Samoan cultural theme by which boundaries (particularly land boundaries) are often hotly contested in Samoa in part because they are deliberately often not well marked. They argue that they are not well marked because it is implicitly understood that the boundary may change and be adjusted as a response to the changing nature of the relationship. Samoans thus like to have flexibility in the determination of the boundary.

This interpretation may sometimes be given as the direct explanation, but the more frequent response Samoans gave me is that a fence or wall signifies distrust and lack of mutual understanding. Harmony is understood as the result of the mutual understanding and respect about the boundary. This point, however, only reinforces Tui Atua's point that conflict erupts when boundaries are transgressed, which the political dynamic of point-field might and would eventually predict. This very point illustrates how and why conflict and order are of the same logical status. It is only by the constant balancing of relationships that an equilibrium that can be understood as harmony is developed while the boundary continues to get tested, shifted, or reaffirmed.

Harmony is not simply the absence of conflict but rather is actively constructed to counter the potentials for conflict. This basic understanding is integral to Samoan social ethos and the social activities. Four basic common social practices can be mentioned here to illuminate. They are *teu le vā*, *tausi vā*, *tautua*, *tausiga*. The concepts in all these terms address ways of fostering relationships in a Samoan social order that will ideally foster positive social outcomes. Teu le vā (usually glossed as "adorn or tend to the relationship") has been highlighted the most in the literature. The phrase refers to actions or relationships that will harmonize them (especially if there was some disharmony that had occurred), restoring warm and beautiful feelings about the relationship. Certain distributions of wealth also are referred to using the word *teu* (adorn or fix), such as teu le *'āiga* (family), which is when reciprocity is given to supporters of an event (such as title investiture, a funeral, a wedding, or a building dedication) after the completion of the event. The redistribution of wealth given away to those participating contributors is referenced as *teu*, in contrast to other types of distributions during the event, which may be referenced as *fa aloalo* (respect).

Tausi le vā is similar to teu le vā. The difference is that teu le vā refers to individual acts, but tausi le vā refers to the longer-term repeated actions that support the relationship over time. The Tongan cognate of tausi le vā is tauhi $v\bar{a}$, which Ka'ili (2008) explains as the "Tongan art of creating and maintaining beautiful socio-spatial relations through the mutual performance of duties" (3). He demonstrates tauhi vā in Tonga as the art of producing social space through symmetrical socioeconomic reciprocity. Ka'ili shows how tauhi vā functions to produce symmetry as a necessary attribute of creating harmonious and beautiful relationships. Note that the English gloss for malie in Tongan is "beauty," but in Samoan, malie means "agreeable" or "pleasant." Clearly, across these glosses, we can see a definition of beauty as holding qualities of order and harmony. While Tongan and Samoan cultural and social orders and customs have distinctive differences, *tausi* vā in Samoa has similar qualities to tauhi vā in Tonga. The back-and-forth giving of food and engaging in friendly conversation on a regular basis between neighbors exemplifies *tausi* vā in Samoa.

While teu and tausi vā signify the tending of relationships between more or less equal ranks, tautua (service) and tausiga (care and protection) signify the social tending of unequal relationships across Samoan hierarchy. In the case of Samoa, untitled people perform *tautua* to their matai (titled family head) who stand in a higher position within the social hierarchy. In return, the matai provide *tausiga* to those providing *tautua* (i.e., the matai are responsible for their welfare). If a chief performs poorly in his *tausiga* and does not uphold his side of the relationship, people performing *tautua* reserve the option of moving residence and performing *tautua* elsewhere to someone else, typically another to whom they hold genealogical or marriage ties.³ Thus, there exist numerous checks and balances in the system that help ensure mutuality, which can be considered to hold symmetry.⁴

There is also a strong traditional belief that one receives *manuia* (blessings) from serving chiefs as well as elders. Through exchange of *tautua* and *tausiga*, symmetry is managed within an unequally graded social hierarchy.⁵ Also, the performance of *tautua* is one of the most important criteria considered when the descent group meets together to choose the next successor to a matai title, hence, the common Samoan expression "O le ala o le pule o le *tautua*" ("The way to authority is through service").

 $T\bar{a}$ -v \bar{a} theory suggests that potential conflict (realized or not) underlies social actions whose prescribed aim and ethos are to produce and maintain beauty and harmony in society. Harmony directly reflects the ordering of spatial and temporal arrangements in particular ways that will reduce the possibilities of conflict. It is thus not surprising that moments of disorder and conflict arise within these social situations whose express aim is to produce harmony in the v \bar{a} . This insight corresponds with the t \bar{a} -v \bar{a} theoretical tenet "that all things, in nature, mind and society, stand in eternal process of relations of cycle and exchange to one another, giving rise to conflict or order."

The *Tā-Vā* Applications to Samoan Architecture and Built Environments

Tā-vā theory has also been applied to the cultural arena of art. Examining Samoan oratory, music, dance, building traditions, tattooing, and other material arts, one finds that these activities, like other areas of social life, are governed by the same principles for creating harmony and beauty. As Māhina (2009) states, this aspect of culture affects a space/time transformation "where conflicts in the form (*fuo*) and content (*uho*) of things are symmetrically arbitrated in the creative process" (1).

Conventionally, social behavior is usually judged in terms of ethics (e.g. this behavior was good or bad, harmonious or divisive, etc.). Art is more often evaluated in terms of "aesthetics" (e.g. this painting, object, or music is beautiful). Tā-vā theory illuminates how both ethics and aesthetics are two sides of the same coin. Both are associated with ideas and feelings of harmony and beauty. Because art expresses the transformation and arrangement of space and time in various ways, the tā-vā analysis of art necessarily analyzes the localized concepts of vā, mata, tā, and tuā'oi as applied principles.

I apply tā-vā theory to the rich ground of Samoan architecture and built environments. It is rich ground because architecture is the three-dimensional art form that physically structures the spaces of human lives and social interactions over time in ways that reflect and reinforce cultural values and ideas.

In Samoan tradition, architecture or, more precisely, house building, exists as one of three main *tufuga* (master material artist) trades—*tufuga tāvaʿa* (boatbuilders), *tufuga faufale* (master architect/carpenters), and *tufaga tātatau* (master tattoo artists)—that historically had formed prestigious guilds of specialists who plied their trade throughout the islands.

Before moving to an explication of vā, tā, and mata concepts within the architecture of Samoan built environments, it is helpful to first make an application of these concepts to a different simpler art form: tatau (tattooing). I say "simpler" because whereas architecture involves space-time transformations in four dimensions (three dimensions of space plus time), tatau art involves only the two-dimensional surface of a person's skin (plus time).

The tufuga intently uses his mata (eyes) to discern and measure the space of the skin he will be covering in his designs. He uses no stencil (and to do so would be forbidden by the tradition) but rather projects the design through his mind's eye onto the skin. He begins the tatau by making several small marks (mata) on the central back as a starting point from which the tattooing of the design proceeds. He then dips the points (mata) of the tattooing comb (*au*) in black ink and places those points slightly above the skin. He begins to rapidly tap ($t\bar{a}$, $t\bar{a}$, $t\bar{a}$) the mallet against handle of the *au*.

In concert with the tapping rhythm, the tufuga moves the au along over the surface of the skin, using his discerning mata (eye) to measure the $v\bar{a}$ between marks in space (on the skin) in coordination with the $v\bar{a}$ (temporal space) between the t \bar{a} , t \bar{a} (rhythmic striking) of the au with the mallet. Time-space transformation occurs in the coordination between time, in the $t\bar{a}t\bar{a}$ (tapping, a temporal $v\bar{a}$), mata (the eyes) focused on the mata (points) where the au enters the skin, and the $v\bar{a}$ (spatial intervals) on the skin between design markings, created as the tattoo master moves the instrument leaving gaps between marks. Suffice to say that while this work of beauty on the person's skin represents a time-space transformation, it also represents a transformation of the person from one status to another—for the Samoan man gains the important social status of a *soga*'*imiti* (a traditionally tattooed male) once the entire painful tatau process is complete.

Tā, Mata, and Vā in the Building Process

Traditional Samoan house building follows similar principles to that of traditional Samoan tattooing. For example, to predraw (e.g., blueprints) or to produce a model of the envisioned building in advance lies outside Samoan tradition and in fact goes against it (see Refiti 2009). The entire design in all its intricate, interconnected parts is stored as knowledge in the master builder's mind. Traditional builders explained to me, and I observed, that traditional Samoan structures were not only built without predrawn plans, but also without levels, tape measures, or squares. Such tools were deemed useless; the discerning and measuring master's eye was the essential tool.

For the building of a traditional *faletele* (or meetinghouse), the tufuga starts by placing the central point of the *fale* (house) where the central post(s) will be planted and raised. Those central one, two, or three posts will hold up the entire dome-shaped roof. The tufuga faufale has already asked the commissioning chief how many *so'a* (crossbeams) the house should have (Buck 1930). The answer tells him not only how many crossbeams to expect to build but also how high the central posts will be and, by proportion, what the diameter of the structure will be, determining then the number of outer posts that will be needed.

The planting in the earth of the central posts marks the first temporal point in the construction process (this is not counting the contractual events

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between tufuga faufale and the commissioning chief to form the relationship to make the building). The tufuga faufale uses 'afa (coconut husk twine) to draw a radius outward from the central posts to form the perimeter where the outer posts of the round ends of the structure will be placed at six-foot intervals. Note how this building process perfectly illustrates the point-field spatial model at work. The central point is marked first, then a radius is drawn outward to define the outer limits of the house. Contrast this with the Western building process, whereby the perimeter of a building's space where exterior walls will be built is measured and staked out on the ground first, a perfect reflection of the container model.

The next step is to construct the $it\bar{u}$ (or middle straight section supported by the central posts), which arches from the structure's front to back sides. Once the middle section is built, each of the two round ends (tala) is built, attached to each side of the itū. While the central posts and the itū are the main supports of the structure, the outer perimeter of posts, which will be the sitting posts, add important stability. Once they are added, the rock foundation is built up to the level that has already been determined to a height that is eyed to be appropriate to the village ranking of the structure's associated chief. For example, it should not be higher than any higher-ranking chief or lower than any lower-ranking chief in the village.

Physical Structure Symbolizing Social Structure

Looking up into the roof structure of the "round" faletele, one finds a masterfully crafted reflection of the culture that created it (Fig. 2). Notably, the structure has a twofold symmetry (Refiti 2007, 33); front and back are symmetrical, as are the two round tala. The structure of the roof (and the floor space under it) thereby has a tripartite structure, consisting of the straight middle itū, the front side of which faces to the *malae* (open central ceremonial village green) and the two semicircular tala attached to each of its sides.

The outstanding feature of the rounded tala are the *vaega fau* (arching purlins), which are fashioned from joined pieces of carved breadfruit and are highly bound with 'afa lashing. Each end of the lower half of the arching vaega fau descend to the *fau lalo*, which performs the role of an eave plate. The ends of the each of *fau* of the upper half of vaega fau ends at the itū. The visual and structural results beautifully reflect the Samoan duality between the sacred and instrumental powers associated respectively with the two types of matai: ali'i and tulāfale. The sacred ali'i, whose authority is associated with the *lagi* (heavens), sit in the sacred space of the structure's round tala. The tulāfale (sometimes referred to as administrative chiefs) who speak on behalf of the ali'i and mediate the

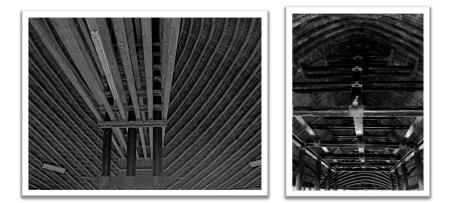


FIGURE 2. Left: Interior roof of a round faletele, showing how the arching purlins of the vaega fau from each round tala converge toward the middle itu section. Right: Samoan *faleafolau*—the arching purlins of the vaega fau are visible at both the top and the bottom. The itū of the faleāfolau is greatly lengthened, while the itu of the faletele is made very short, thereby accentuating the round tala.

ceremonially constructed $v\bar{a}$ of the event, sit at the front posts of the it \bar{u} , the back side of which sit the preparers of the *'ava* (ceremonial drink). The it \bar{u} is the instrumental and mediating part of the structure; it sits between and supports the two large rounded tala, just as tulāfale act as the agents of instrumental (or administrative, not sacred) power in the structure of the culture.

Tā-vā theory would predict that the architectonics of the traditional Samoan house's form—its two fold symmetry, rounded ends, gently convex sloping roof, arching purlins, and so on—produces a harmonious aesthetic effect that helps manifests a cultural vision of order and unity within and between groups. My fieldwork findings support the validity of this claim. As such, the idea of "order" (as function) and "harmony or beauty" (as aesthetic) unite and become synonymous. As Māhina (pers. comm. 2008) suggests, a focus on "the function of things necessarily follows after a reflection on both their form and content have been established in the first place, where the former is based on the use of art, and the latter, on art, in itself."

Building form and spatial dimensions, as well as the social and technical process of construction, contribute towards that significance. Traditional Samoan architecture has no facades or ceilings to hide the structural elements that hold the building together. The clear view of the structural form is central to its aesthetics, so function and aesthetics are one and the same, and the various building parts take on symbolic importance in how Samoans use their language to describe social parts and dynamics in their society (Van der Ryn 2012a: 107–108; Schultz 1980: 32–33; Tui Atua 2008b, 95). Examples are also found in Samoan terms. Tulāfale (short for tulāgafale), which literally means "the place the house stands," signifies one of the two main types of chiefs or matai. Tulāfale are the orator chiefs (also glossed in English as "talking chief" or simply "orator"). Taualuga (the top peak of the house) also refers to the climactic dance performed by the taupou (the titled daughter of the high chief) that concludes a dance entertainment. These examples highlight how the Samoan house serves as a meaningful, tangible metaphor, and mnemonic tool – a kind of model for society and the system of relations and principles that form its structure. This point brings the aesthetic dimensions of architecture into alignment with the intricacies of Samoan social organization and its constituent values (Van der Ryn 2012).

Sociospatial Practices in the House

It $[v\bar{a}]$ means space and it means we are always negotiating the truth at that moment. Nothing is absolute. A Samoan house is a good example of this concept. It's open, there's no privacy; you have to negotiate how you exist in that. A Western house has closed doors, so it's easy. (Lemi Ponifasio in M. Amery, "A Dancer Alone," *Sunday Star Times*, July 16, 2000)

Samoan choreographer Lemi Ponifasio's comment on the connection between the Samoan concept of $v\bar{a}$ and the open Samoan *fale* opens my discussion of Samoan sociospatial practices. His comment immediately highlights the *fale*'s openness, which requires people to negotiate and manage their identity. The traditional Samoan *fale* provides clues within its design for the culturally in-tune person of how to negotiate that space and their identity. In turn, one's identity in this openness is defined through one's negotiation, which always has cultural prescriptions.

The sides of the structure consists of posts rather than walls, each post conceived and perceived as a point that will signify specific ranks and relationships in the society when a person sits at that post in a formal meeting. The open space $(v\bar{a})$ between each pair of posts is called *faitoto*[•]a (door or doorway). Technically, anyone could enter the house through any of the many faitoto[•]a, but where and how one enters is defined largely by one's social status, position, and role within the specifics of the event. Generally, lower-ranking people of a group enter and exit only from the back as well as



FIGURE 3. A village meeting in session in the village meetinghouse. The open walls provide the ability for additional, lower-ranked people to observe and listen to the meeting from the lower-ranking exterior space.

sit on the back, and also, generally, one also enters from the side where one plans to sit so as not to have to stand and walk in front of people already sitting, an action that is considered rude.

Thus, from which side one enters the structure, how one moves within the structure, and where one sits are all telling indicators to others of that person's sense of their own position and relationships in relation to others in the surrounding environ. This process involves being constantly conscious of one's vā (social and spatial) with others and behaving with respect to that vā. How people negotiate space shapes others' responses and interactions. This point is certainly true in all cultures, but in open space without the physical channels of doors, chairs, and sofas, I propose that a different and heightened sense is produced of "being in the world," creating or maintaining relations with others.

The wall-less feature accentuates the use of posts to support the large domelike roof. The visibility of the posts from both the structure's interior and its exterior makes them stand out as mata (points) defining interior space without confining and enclosing it with walls. The $v\bar{a}$ between interior and exterior is thereby facilitated and mediated by the posts, a $v\bar{a}$ that walls would serve to block. Those mata (points) of the posts become even more accentuated as points in the social landscape when people gather in the structure for

a formal meeting. Each matai sits at his or her appropriate socially ranked post in the structure (Fig. 3).

In formal meeting of the matai, the tulāfale sit and orate from the *itūluma* (front side) posts of the meetinghouse's straight middle section. The central post of this row of posts is reserved for the highest-ranking tulāfale. The ali'i sit at the posts of the curving tala (which may also now sometimes be straight). The *matuātala* (the central post at the apex of the curve) in the tala is the highest-ranking post of the tala, reserved for the highest-ranking ali'i (or sometimes the church minister). Lower-ranking matai without posts are called just that: *matai vā i pou* ("between the posts chiefs"). If the meeting is of the association of *tausi* (wives of tulāfale) and *faletua* (wives of ali'i), a similar arrangement is followed whereby the wives take the same spatial positions that would be occupied by their husbands. The same parallels occur for meetings of the *aumaga* (association of untitled men) or *aualuma* (unmarried natal women of the village).

The absence of walls removes a hindrance to more than just the cooling trade winds needed in the warm tropical climate. Importantly, observers on the outside of the structure may easily know who is sitting where. They may also sit on the house platform outside the perimeter of sitting posts to listen and observe the meeting. This situation promotes sociopolitical transparency as well as education of the culture in general and the particulars of that specific village, a dynamic that is hindered if the house has walls.

The open Samoan house (as well as the absence of fences) also facilitates Samoan practices, such as the sharing of food between neighbors, calling to passersby to come and eat (Fig. 4), and ritualized exchanges of fine mats, food, and money between and across exterior and interior house spaces—all activities engaging the productive development of $v\bar{a}$. Openness also serves the purpose of giving household heads and elders the ability to direct and supervise household activities. Matai or elders sitting inside a *fale*, perhaps weaving the mats or braiding the 'afa for the building of the next structure, have a clear view of the other activities occurring in both the interior and the exterior spaces of the family compound and may signal or call people more easily as needed.

The open sides also help conceptualize the difference between dividing a single house up into different rooms to create different interior spaces and the traditional Samoan way of building multiple open houses for the lodging of various parts of an extended family household. In the first instance, walls are used to create and separate the different spaces (rooms) of a single structure. In the second instance, it is vā between each structure that both connects and separates those different structures and their individual spaces. Thus, the individual structures and their spaces are more clearly understood

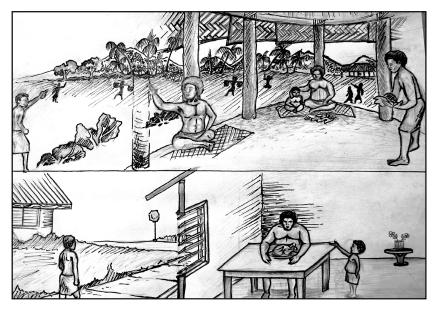


FIGURE 4. Illustration of a "difference walls make." Top: Open *fale*—a meal is being served, and a passerby is called to come and eat. Bottom: Man having a meal at a table in enclosed house. The walls cut him off from the passerby outside, and no interaction occurs.

as part of a larger interconnected space. When houses are open, people stay much more aware not only of what is going on outside the structure they are in but also of other structures, who is in them, what people are doing in them, and what their own relationship is to them and the activities occurring in them. The spatial and social vā becomes highly accentuated through this open architecture in a way that walls most definitely impede (for more detailed account of all aspects that open house architecture facilitates, see Van der Ryn 2012a: 172–76).

Sociospatial Practices in the Broader Spatiality of Samoan Villages

I now examine how open Samoan architecture fits into the broader general landscape forms and practices of Samoan villages and how point-field spatiality/temporality is also reflected in these practices. Examining Samoan village layouts one can see that traditional Samoan villages originally developed, centered on a village malae (the sacred central village ceremonial green used

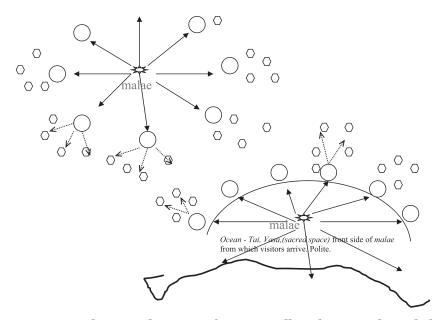


FIGURE 5. Schematic diagrams of Samoan village layouts. The radial or point-field spatiality of the village layout is visible by which the malae forms the central point from which space radiates outward. In the top layout, the village is farther from the sea, so the structures make a complete circle. In the lower half, the sea offers an extension of the malae space, so the village does not make a full circle of structures around its malae. The road is not included in the diagram but typically is made to run through some part of the malae.

for village ceremonies and sporting events). The malae gave and still gives a spatial orientation of front and center for the rest of the settlement, which is now complicated by newer orientations to modern roadways (Van der Ryn 2008, 2012, 2016; Neich 1985) (Fig. 5).

Each malae is conceived to have a center eye (mata) (Lehman and Herdrich 2002, 184). As such, the mata of the malae corresponds with a starting temporal point ($t\bar{a}$) in the founding events of the village as a Samoan polity in the larger Samoan sociopolitical structure. Each malae has a name, which often gives clues to specific events of the past that signify the foundation of the village within larger sociopolitical and historical processes. It is custom for tulāfale to honor the malae in name at the beginning of their speeches (American Samoa Community College 1999).

The high spatial ranking of front and center in Samoan space usually aligns to the malae, the initial basis for village identity and prestige. The prestigious guesthouses associated with the titles of founding village chiefs and the most prominent village churches form the malae's perimeter. Modern roads have been accommodated into this spatiality with only varying degrees of success in not creating disharmony in this spatiality.

Until recently, Samoan villages were characterized by a lack of fences or walls within or between households. This feature, plus the open wall-less houses, was considered to be integral to "a well ordered village" where "life is *maopoopo* (well-ordered), and the lives of its residents are *puipui* (protected or literally 'walled in') by customary institutions" (Shore 1982, 118). As I investigated the Samoan ethos against construction of fences and walls at land boundaries, I got interesting responses relating to the need to respect and trust others. Informants explained that constructing strong boundary markers signifies a lack of mutual understanding and trust in relationships. Unmarked boundaries suggest a good relationship with common understanding about where the boundaries lie and must be respected.

Lehman and Herdrich also point out that this system allows for flexibility in the boundary; it is easier for it to be shifted to reflect any possible changes in the relationship from which that boundary emerges. As Lehman and Herdrich (2002, 187) point out, "Relationships between people (conceived as points) are, if not well tended, subject to potential change. Hence, boundaries in Samoa have a built-in and recognized potential to shift relatively frequently." One also finds, especially now, that land boundaries in Samoa are often overlapping and in dispute. The Lands and Title Court of Independent Samoa and the High Court of American Samoa see a continuous stream of cases disputing communal family land boundaries. Other land boundary issues are worked out outside the courts. Trees planted as boundary markers by one neighbor are sometimes cut down by the adjacent neighbor. A neighbor may plant crops across the "boundary line," even though they have enough spare land on their side.

Disharmonious relationships thus get expressed through land boundary conflicts, signaling the need to restore the harmony in those relationships with a possible reconfirmation of where the "boundary" actually lies. The traditional cultural ethos could be stated as "one does or should not need to have strong physical boundary markers in order to have respected boundaries because boundaries are based on the harmony produced in the $v\bar{a}$ between neighbors." I found this type of explanation more prevalent among informants than explanations about a need for flexible land boundaries. One could argue that such disputes present an opportunity for proper relational perspectives to be enacted, taught, and remembered.

An important and highly significant "commonsense" daily landscape practice in Samoan villages is to physically teu le vā, that is, tend the spaces of the grounds between house structures and households. Every morning, a common household chore, often given to children, is to collect all the leaves that have fallen on the family compound during the night. Later, often in the late afternoon, other family members (usually older women) spend hours meticulously weeding patches of ground, particularly areas of the compound that are meant to be plant free, for example, covered in a layer of smooth river pebbles or lava rock. Often, neighbors might come to weed on their side of the invisible boundary while they engage in sociable conversation, thereby sharing the work/duty of physically engaging in teu le $v\bar{a}$ (adorn or tend to the vā). As evidence of the social meaning of this practice, consider the Samoan proverb "O le fili vā i fale" ("the enemy between the houses"). The proverb is used to signify petty quarrels between families that do not threaten the peace of the community but nonetheless make lives less harmonious (Schultz 1980, 31).

The social significance of this landscape practice has been illuminated in various ways. For example, an American friend living with her Samoan husband and family in American Samoa one time commented to me how when the household members spend Saturday doing household chores and clean up, they focus mostly on the outside grounds, wherein community $v\bar{a}$ with others is constructed and experienced. Hardly anyone other than herself, she said, focuses much on the house interior, in particular the bathroom. In another example, I remember arriving together with a Samoan family in a village of Savai'i. One of the family members immediately commented on the continuous, seamless, well-kept weedless grounds between households. This feature, he stated, signified that this was a harmonious, unified village.

Conclusion

I have analyzed Samoan built spaces (both within and between) as an instrumental part (and reflection of) Samoan ways of cognitively perceiving and socially constructing time and space. This instrumental part has been viewed as a dynamic dimension of cultural experience with both ontological and epistemological bases. This essay has also addressed how these concepts and cultural constructions (both physical and conceptual) are integrally related to cultural systems for addressing conflict and developing and maintaining social order, a point that further supports the second two tenets of tā-vā theory: (1) that all things, in nature, mind, and society, stand in an eternal process of relations of cycle and exchange to one another, giving rise to conflict or order, and (2) that the symmetrical arrangement of tā-vā gives rise to mālie (beauty), while the asymmetrical configuration of tā-vā leads to *tamakitāmaki* (disharmony).

Clearly, architecture and the built environment in general can be examined as integral to spatial and temporal practices. Buildings serve aims far beyond the simple necessity of offering shelter from the physical elements. The arrangement of space and time through built forms and spatiotemporal practices in architectural spaces also addresses issues of potential conflicts and the need to produce order in society. This essay, like the others in this volume, has begun to conceptualize this integration.

An important thrust of the essay has been to demonstrate how $t\bar{a}$ -v \bar{a} theory helps extend point-field modeling of space to the fourth dimension of time. Simultaneously, the theory of the point-field versus container model of space has given further insight into the strong relational dynamic of Moana spacetime. Further, Tui Atua and other Samoan authors' discussion of boundaries, conflict, harmony, and v \bar{a} illuminate two things: a coalescence between pointfield model of space and $t\bar{a}$ -v \bar{a} theory, and the contrasts between Samoan and Western cultural epistemologies of space/time and boundaries construction.

The cultural aspect of the temporal and spatial dimensions of constructing order and harmony in Samoan family and community life has been described in terms of both indigenous language terms and indigenous Samoan built forms and spatial arrangements. Samoan spatial and temporal concepts and practices, as expressed in terms of mata, tā, and vā, are embedded in the principles of traditional Samoan architectural designs and building processes as well as in human uses of the final structures and their spaces.

The essay has examined architecture and built space as being more than an artistic form of shelter, a marker of territory in the landscape, and a signifier of social advancements. It has been examined also as a cultural instrument of "order" or "harmony" in the society. The house remains a cultural tool for harmonizing social relationships through various forms of social interaction involving teu le vā, *tausi* vā, *tautua*, and *tausiga*. The harmonizing beauty, functional attributes, and symbolism of traditional Samoan architecture persists as an icon of culture in the minds of Samoans, as something valuable worth retaining, even as these traditional forms and their associated ideas continue to fade from the actual Samoan village landscapes.

Today, in both American Samoa and Independent Samoa, many other types of architectural forms and spatial practices have become part of the built environment, reflecting the influence of foreign, mostly Western, spatial, temporal, and social concepts into the culture. Much of that influence comes through Samoan experiences overseas, though interaction with foreign governments (which may be providing financial assistance) or companies, as

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well as non-Samoan visitors to the islands. Samoan returnees tend to prefer to have houses with walls as well as to have well-defined land boundaries so as to avoid as much of the constant sense of having to negotiate their $v\bar{a}$ with others with whom they now may feel greater difference and separation. Thus, the walls and fences go up.

Regardless of changes in culture and built environment, the underlying Samoan framework for the cultural construction of space and time that I have described persists, though in continually adjusting form. The underlying structure of the culture epistemologies is discernable, expressed, and reproduced through the use of indigenous language. This latent cultural dynamic supports the necessary flexibility and spontaneity by which Samoans adapt and adjust their practices to accommodate change without loss of cultural identity.

NOTES

1. The macron over the "a" in these examples represents an elision, substituting for an extra "a"—for example, matāgaluega = mata-a-galuega, literally, point of work.

2. Pratt (1960) always uses a macron, which calls for emphasis in the pronunciation, over the "a" in the morpheme "tā" in all these examples (e.g., $t\bar{a}eao$). Milner uses the macron only when, without the macron, the word would not be pronounced correctly. So without the macron, the same, and the morpheme in all these words is $t\bar{a}$.

3. Suaali'i-Sauni (2007, 54) also refers to the traditional Samoan belief that a descent group can put a curse $(mala'\bar{a}iga)$ when the *tausiga* of the chiefs is "not truly just."

4. Shore (1982) goes into ethnographic depth on symmetrical versus complementary social relationships in Samoan social structure (e.g., two high chiefs hold symmetrical relationships, while a high chief and his talking chief hold complementary relationships). Shore argues that symmetrical relationships are inherently competitive and less stable than complementary ones. Discussion of these finer points are outside the scope of this essay but suggest more work that may be done in tā-vā theory to discuss the differences of these types.

5. The idea of reciprocity between *tautua* and *tausiga* was gleaned from Tamasa'ilau Suaali'i-Sauni (2007, 54) discussing information provided her by His Highness Tui Atua Tupua Tamasese.

REFERENCES

Allen, A.

1993 Space as social construct: The vernacular architecture of rural Samoa. Doctoral diss., Columbia Univ.

American Samoa Community College

1999 Malae: Sacred ground. Documentary film. Samoan Studies Institute.

Anae, M.

1998 Fofoa—Vao-Ese: The Identity Journeys of N.Z.-born Samoans. PhD diss., Univ. of Auckland.

Borodotsky, Lera

2000 Metaphoric structuring: Understanding time through spatial metaphors. Cognition 75 (1): 1–28.

Buck, Sir P. H. Te Rangi Hiroa

1930 Samoan material culture. Honolulu: Bishop Museum.

Casasanto, Daniel, and Lera Bordotsky

2008 Time in the mind: Using space to think about time. Cognition 106 (2): 579–93.

Fraser, John

1897 Folk songs and myths from Samoa. Journal of the Polynesian Society 6 (1): 19–36.

Kaʻili, Tevita O.

2008 Tauhi Va: Creating beauty through the art of sociospatial relations, diss., Univ. of Washington.

Lakoff, George, and Mark Johnson

2008 Metaphors we live by. Chicago: Univ. of Chicago Press.

Le Tagaloa, Fanaafi Jr.

2003 Tapua'i: Samoan worship. [S.1.: Fanaafi aiono-Le Tagaloa], Apia, Samoa.

Lehman, F. K., and D. Herdrich

2002 On the relevance of point-field spatiality in Oceania. In *Representing space in Oceania: Culture in language and mind*, ed. G. Bennardo, 175–95. Canberra: Pacific Linguistics.

Lilomaiva-Doktor, S.

2009 Beyond migration: Samoan population movement (Malaga) and the geography of social space (Vā). *The Contemporary Pacific* 21 (1): 1–32.

Macherson, Cluny

1992 Economic and political restructuring and the sustainability of migrant remittances: The case of Western Samoa. *The Contemporary Pacific* 4 (1): 109–35.

Māhina, 'Okusitino Hūfanga

2008a Faiva Fakaoli: The Tongan art of humour. Pacific Studies 31 (1): 31-54.

- 2008b From Vale, ignorance, to Ilo, knowledge, to Poto, skill, the Tongan theory of Ako, education: Theorizing old problems anew. *Alternative: An International Journal of Indigenous Scholarship*, 66–96 (Special Edition: *Critiquing Pasifika Education*).
- 2009 Takohi: Drawing in Tongan thinking and practice. In *The traction of drawing:* 2009 Interstices Under Construction Symposium. Auckland, New Zealand.

Milner, G. B.

2003 Samoan dictionary. Auckland: Pasifika Press.

Neich, Roger

1985 Material culture of Western Samoa: Persistence and change. *National Museum of New Zealand Bulletin* 23.

Pratt, George

1960 Pratt's grammar and dictionary of the Samoan language. Apia, Western Samoa: Malua Printing Press. Original edition, 1862.

Refiti, Albert

- 2007 The origin of Samoan architecture. In *Das architektonische Erbe Samoas*, ed. E. Lehner, H. Muckler, and U. Herberg, 33–37. Wien: Neuer Wissenschaftlicher Verlag.
- 2009 Against drawing: Line-making and the Tufuga guild. In *The traction of drawing: Interstices Under Construction Symposium*. Auckland.

Schultz, E.

1980 Samoan proverbial expressions: Alaga'upu fa'a—Samoa. Rev. ed. Auckland: Polynesian Press in association with the Institute of Pacific Studies, Univ. of the South Pacific.

Shore, Bradd

1982 Sala'ilua: A Samoan mystery. New York: Columbia Univ. Press.

Stasch, Rupert

2009 Society of others: Kinship and mourning in a West Papuan place. Berkeley: Univ. of California Press.

Suaali'i-Sauni, Tamasa'ilau

2007 E Faigata le Alofa: The Samoan Fa'amatai—Reflections from afar. In *Changes in the Matai system: O suiga i le Fa'amatai*, ed. A. So'o. Apia: Centre for Samoan Studies, National Univ. of Samoa.

Tui Atua, Tupua Tamasese Ta'isi Efi

2008a In search of harmony: Peace in the Samoan indigenous religion. In Sue'su'e Manogi: In search of fragrance: Tui Atua Tupua Tamasese Ta'isi and the Samoan indigenous reference, ed. Tamasa'ilau Suaalii-Sauni, I'uogafa Tuagalu, Tofilau Nina Kirifi-Alai, and Naomi Fuamatu, 104–14. The Centre for Samoan Studies, National University of Samoa, Lepapaigalagala, Samoa Apia: National University of Samoa.

- 2008b Resident, residence, residency in Samoan custom. In Sue'su'e Manogi: In search of fragrance: Tui Atua Tupua Tamasese Ta'isi and the Samoan indigenous reference, ed. Tamasa'ilau Suaalii-Sauni, l'uogafa Tuagalu, Tofilau Nina Kirifi-Alai, and Naomi Fuamatu, 93–103. The Centre for Samoan Studies, National University of Samoa, Lepapaigalagala, Samoa Apia: National University of Samoa.
- Tuagalu, I'ugafa
 - 2008 Heuristics of the Vā. Alternative: An International Journal of Indigenous Peoples, 107–26 (Special Edition: Critiquing Pasifika Education).
- Van der Ryn, Fepulea'i Micah
 - 1991 The Matai system: A transnational study of Samoa's indigenous system of leadership, status, and prestige, and its role within South Central Los Angeles. Master's thesis, Univ. of Southern California.
 - 2008 The Measina of architecture in Samoa: An examination of the Vā. In *Measina a Samoa*. Vols. 2 and 3, 73–89. Apia: National Univ. of Samoa.
 - 2012a "The difference walls make": Cultural dynamics and implications of change in Samoan architectural traditions and socio-spatial practices (1940–2006. PhD diss., Univ. of Auckland.
 - 2012b Return migration to American Samoa. *Journal of Pacific Studies* 35 (1/2): 252–79.
 - 216 Which way is front?: Spatial orientation complications in contemporary Samoan villages. *Structure and Dynamics: eJournal of Anthropological and Related Sciences* 9 (1): 111–35.

Wendt, Albert

1999 Tatauing the post colonial body. In *Inside out: Literature, cultural politics and identity in the new Pacific*, ed. V. Hereniko and R. Wilson, 399–412. Lanham, MD: Rowman & Littlefield.