

Connecting Indigenous Cultures to Design Pedagogy

Nan O'Sullivan

Victoria University School of Design Wellington New Zealand
nan.osullivan@vuw.ac.nz

Abstract

To move beyond the homogeneity currently extant in design, Alain Findeli posits design should broaden its scope of inquiry. I will argue that to facilitate this shift and enable more culturally expressive design solutions, Indigenous symbols and visual spatial strategies should be acknowledged within design pedagogy. This study introduces the Pasifika ideologies of *Ta-Vā* (time and space) and *teu le vā* (sacred connections) to illustrate the relevance and opportunity afforded design when Indigenous ideologies and aesthetics are purposefully imbued. Although the use of the term 'savage' infers a level of hegemony, Owen Jones was one of the first to ratify culture within design when he stated, "The eye of the savage accustomed only to look upon Nature's harmonies, would readily enter into the perception of the true balance both of form and colour." [1] To illustrate the relevance of Indigenous ideology design students at Victoria University, investigate individual cultural legacies to identify and validate their heritage within design. Having acknowledged these sacred connections the students employ both analogue and digital media to parallel Modernist principles alongside Indigenous markings of time in space in which geometry is used to create the common goal, beauty from chaos.

Connecting the Dots

Drawing attention to cultural diversity within twenty-first century aesthetic education is well established in the manifestos of many tertiary graduate attributes and professional standards for accreditation. Contemporary design curricula dominated by Eurocentric ideals, constantly acknowledges the value of non-Western social, cultural, and creative practice. [2] Institutes promise to graduate globally competent citizens able to work in international settings, adapt to diverse cultural demands, communicate across boundaries and be aware of global issues. Adding that, "graduates with disciplinary expertise in concert with a background in globalization, international affairs, and cultural diversity will have a higher standing as they enter the twenty-first century workforce." [3] These promises sound convincing. Yet, I suggest there is still much to be done to entice, retain and graduate students that will advance the laudable skills and knowledge offered to design pedagogy from within Indigenous cultures.

Unlike traditional art and craft, design as a discipline developed well after the colonial period in the mid twentieth century. As such, design research has

tended to disregard Indigenous culture as having little to offer the disciplines. This has left design pedagogy dominated by a model that privileges Western influences. An increased demand for diversity within design education and practice has called for a re-evaluation of this Eurocentric stance. In support of a shift away from the apparent homogeneity, design theorist Alain Findeli posits, twenty first century design should further, "open up the scope of inquiry." [4] This paper asserts that to facilitate this shift beyond the current paradigm and to enable more collective and culturally expressive design solutions, Indigenous symbols and visual-spatial strategies should be acknowledged within the pedagogical structures practiced. This study aims to show that the inclusion of Indigenous tenets, specifically those of the Pacific region known as Moana, within contemporary design pedagogy is not as much of a cultural stretch for aesthetic education as one might perceive. I will argue that visual references to culture, understood by reformists in the nineteenth century to be visually excessive, specific to few and therefore not universal, were not unequivocally removed from aesthetic education. They, if not yet celebrated as having contributed to the roots of the modernist pedagogy, certainly demonstrated, and continue to implement comparable ideologies that suggest a lineage within the aesthetic language instigated by the reformists and used in the development of the universal visual language by design modernists. I will assert that Indigenous visual spatial languages should be considered as tacit as their Western counterparts are to design education. This research will exemplar course work prepared for use in the first year design curriculum that has incorporated Indigenous symbolism and narratives in collaboration with the Tongan ideologies of *Ta-Vā* (time and space) and *teu le vā* (sacred connections). This work illustrates the relevance, opportunity and expansion of visual expression Indigenous culture can offer design thinking and practice. The following abridged historic overview of ornament acts as the platform for the student to progress their understanding from. From the borders of ancient Greek temples, pottery markings of the Lapita people, various religious iconographies, the carvings on the rafters in Māori *whare*, the lashings of the Samoa *fale*, to the embellishment atop New York's Chrysler Building, ornament is expressive. Ornament speaks to us and speaks about us through its own figurative and rhythmic languages.[5]

As an article of culture, ornament is as important as it is misunderstood and misused. Whether regarded as essential enhancement, fundamental cultural expression or immoral adornment, ornament has always been a consideration in the making of forms, storytelling and the expression of symbolic and pragmatic meanings visually.

To clarify the backdrop that incited the removal of any cultural referencing within what is currently taught as the modernist aesthetic language, an abbreviated review of what ornament and adornment were perceived to be and why such visual expressions fell from favour is required. Aesthetic education celebrated the formal embellishments of Vitruvius (c. 90 - c. 20 BCE) in the first century AD, Leon Battista Alberti (1404 - 1472) in the fifteenth century and the decades that ensued where ornament flourished in both theory and practice to the late nineteenth century where the extravagant use of ornament within industrialised production caused it, along with cultural, religious and historic visual references to be considered obsessive and to be scrutinised as such. Reacting to the denunciation of excess and wastefulness of the Rococo, the horrors of emergent mass-production and an economical social divide that flamed discontent, the reputation of ornament and visual expression bore a substantial weight in the social reformations led by John Ruskin (1819 - 1900), Owen Jones (1809 - 1874) and associates. As part of the Reformist's legacy and as a well-constructed trajectory to these ideals, early twentieth century architects and designers began to question the uses of ornament. Austrian architect and follower of the Vienna Secession, Adolf Loos (1870-1933) scorned ornament, labelling it degenerate and no less than a crime. [6] Loos defamation, in which he cited expressions of indigeneity as counteractive to the evolution of a modern culture devoid of primitive ornament was one of the earlier and most fanatical outbursts that initiated the turning point in which the study of ornament began to be eliminated from the curricula of art and architecture. [7] Polemic as many of the arguments were, the success of the nineteenth century aesthetic reformations gained traction. Throughout the late nineteenth and the early twentieth century Ruskin and Jones' ideals were imbued in an education that sought a less elitist approach to aesthetic understanding and use than Loos with the emergence of a more egalitarian and universal approach. The reformists although paralleling Loos in the trajectory toward reductive graphic codes, offered an understanding to the use of aesthetic languages that class, status or Loos for that matter, could not own or define. The historical trail that followed was filled with

as much politics, diplomacy, economics, war, peace personalities, jealousy, duplicity, success and demise as any efficacious work of fiction let alone historic non-fiction could promise.

To begin, I will summate educational theorist Friedrich Froebel's (1782-1852) instigation of aesthetic education that armed Ruskin and Jones and then enabled the development of modernist design pedagogies. Building on these I will elucidate how these holistic, and abstractive theories were further cultivated by Johannes Itten (1888-1967) and László Moholy-Nagy (1895- 1946) within the German design academy, the Bauhaus (1919- 1933) and then as part of their later endeavours in the United States. This study will reveal, a hidden connection between Froebel's theory, Ruskin's and Jones' manifestoes, the Bauhaus, and Indigenous Pasifika and Māori visual spatial languages. The efforts made by Froebel and the Bauhäusler, have been accredited, with fashioning the bedrock of a modernist aesthetic education. Additionally, Jones extensively documented the abstracted graphics, flat patterning and ornamentation of many cultures whose aesthetic strategies became highly visible, albeit without recognition, in modernist work. These ideals continue to be widespread within Western design pedagogy and practices today with, quite quixotically, no mention of the Indigenous visual spatial strategies that pre-existed the industrial reformation and that also clearly demonstrate numerous and distinct similarities to the reformists ideals. These holistic strategies and rationalised reductive visual expressions were established well before Froebel, Ruskin, Jones or Loos noted their own discontent with the irrational, excessive and visually meaningless aesthetic work that they sought to banish. Using the ideals of *Ta-Vā* and *teu le vā* championed by Tongan academic Hūfanga 'Okusitino Māhina in his Theory of Reality this research will draw analogies between Indigenous visual-spatial strategies and those of Froebel and the Bauhaus and elucidate not only the relevance but the opportunity Indigenous culture holds for contemporary design thinking and practice. By paralleling the historical trajectories of both, the uses of reductive graphic codes and the holistic ideologies as espoused by Froebel and the Bauhaus with those embedded in Māhina's theory this study will not only expose the historical connections but also the congruence between the ideals imbued in *Ta-Vā*, *teu le vā*, and contemporary design education. I posit that the acknowledgement and inclusion of Indigenous culture should not be considered an interesting historic or cultural deviation but as a visual spatial language deeply rooted and highly relevant to the enrichment of



Fig 1. Examples of Froebel's Gifts, Circa 1850, Norman Brosterman, Inventing Kindergarten, Norman Brosterman.

design education, theory and practice.

As a keen observer of nature and humanity Froebel's beliefs were akin to many Indigenous peoples. Both approached the transfer of knowledge from a biological and a spiritual perspective. Froebel believed that what separates humankind from other life forms is the ability to alter our environment. His philosophy embraced all things in nature as connected. Froebel's work expressed interrelationships between the living and the innate, again replicating Indigenous ideologies. Importantly, Froebel's work honoured the relationships and connections held in the space between nature, people and things. It was upon holistic, sensory, spatial and social ideals that Froebel built his pedagogy and introduced, perhaps more correctly, re-introduced, to the new world, the values of nurturing and respecting the individual and acknowledging their progressive contributions within a larger collective, be that family, community or the environment. His approach, although instigated as early childhood education has been credited with having had a direct, "influence in the history of architecture and all plastic arts beyond any predictable proportion." [8] It is well established that Froebel's teachings influenced the creative process and social ideologies of inspirational Bauhaus founder Walter Gropius (1883-1969), his studio masters Johannes Itten (1888-1967) Paul Klee (1879-1940), Wassily Kandinsky (1866-1944), László Moholy-Nagy (1888-1967), Swiss architect, Charles-Édouard Jeanneret, known to all as Le Corbusier, (1833-1965) and prominent American architects and designers Frank Lloyd Wright (1867-1959), Buckminster Fuller (1895-1983) and Charles Eames (1907-1978), to name only the grandfathers of the Western aesthetic influence and instigators of its subsequent embedding in design

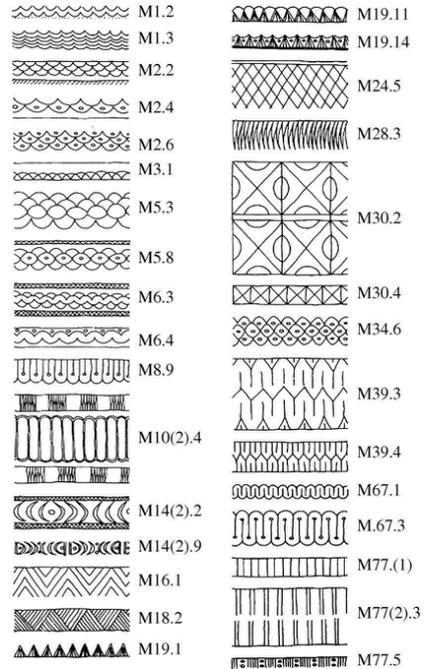


Fig 2. Lapita markings, 3200-2700 AD, Patrick Vinton Kirch, The Lapita Peoples: Ancestors of the Oceanic World, Wiley Global.

education. Froebel's Gifts, as his teaching tools are known, introduced a reductive graphic code based on a sparse grammar of straight lines, diagonals and curves to express the abstracted essence of form and space. The Gifts encouraged physical experimentation with scale, balance, unity, perception, connection and divisibility. The Gifts shifted successively from simple to complex and two-dimensional to three dimensional, moving through point, line and plane to create inter-connected relationships with nature. It is worth noting, that similar simple grammars and codified instructions for use can also be found in the dentate stamping on the pottery produced by the Lapita peoples dating as far back as 1500BC. [9] The Lapita peoples are the common ancestor of the Polynesians, Micronesians and Austronesians-speaking Melanesians who colonized the islands of the Pacific, including New Zealand. This observation, I would assert illuminates the first correlation I make between traditional



Fig 3. *Savage Tribes Plate*, 1857 Ornament of Grammar, Creative Commons.

Indigenous practices and what ironically aesthetic education refers to as the inception of the modernist approach. [Figs 1 and 2] Jones, unlike Loos who had remained elitist in his aesthetic endeavours, would also look toward numerous ancient and Indigenous, although foully referred to as ‘savage’ cultures, for much of his inspiration when developing bold new theories on geometry and visual abstraction. [Fig.3] Less than half a century later, French reformist and inspiration to both Itten, and his Bauhaus colleagues, Eugene Grasset, (1845-1917) also looked to Indigenous culture and asserted similar beliefs in reductive graphic codes and chronological connections. [Fig 4] Grasset stated; “The return to the primitive sources of simple geometry is a certain guarantee of the soundness of our method.” [10]

Froebel also reasoned the existence of connections within space and the importance of nurturing these connections by employing spinning to show how form is perceived to change when treated differently within space. Within this experiment Froebel had described appearance and illustrated perception. As a summation of this exercise, Froebel



Fig 4. *Gunta Stözl*, 1928 Bauhaus Weaving Workshop, Creative Commons.

historian, Norman Brosterman described this exercise as, “a straightforward demonstration of cosmic mutuality and universal interconnectedness that even a child could understand.” [11] Contrasting the Western paradigm of space as a separator, the ideals embedded in the Pasifika constructs of *Ta-Vā* and *teu le vā*, like Froebel’s, also place an emphasis on connectivity. Importantly, this offers the second indication of how the connections offered within Indigenous visual-spatial strategies intersects with aesthetic education. Froebel’s exercises expressed, as do *Ta-Vā* and *teu le vā*, immaterial connections, sensory perception and shared understanding; all intangible yet present. As part of this ideology, *vā* is expressed in Hawaiian and Māori cultures as *wā*. Samoan born academic and author Albert Wendt explains the symbiotic relationships and relative space between entities. He explains that through nurturing and respect, they grow and change over time. [12] “*Vā* is the space between, the in-betweenness, not empty space, not space that separates but, space that relates, that *vā* holds separate entities together in the Unity-in-All, the space that is context, giving meaning

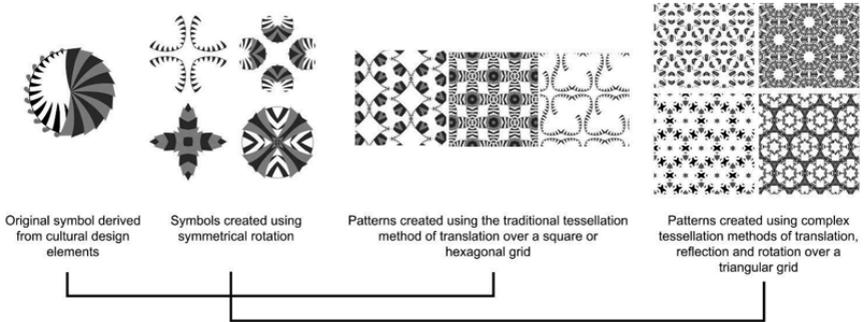


Fig 5. Diagram from course work, 2015, N. O'Sullivan.

to things.” [13] Following on from Froebel’s educational reforms and motivated by twentieth century industrialization, Itten and Moholy-Nagy, as two of the most influential Bauhaus masters, shaped a preliminary year (*Vorkurs*) pedagogy. Much of which continues to be central within modernist educational approaches still delivered within Western, and many non-Western, aesthetic programmes. Important to this research is the recognition of the ideals that were embedded in Bauhaus pedagogy but not the aesthetic model that emerged to be known, and dominate the aesthetic landscape, as the Bauhaus Style. Itten’s *Vorkurs*, understood to be the backbone of Bauhaus pedagogy laid a pathway for individual exploration and analysis of one’s self, nature and the world of artistic creativity within the guidelines of a collective. [14] This was done to produce not a common result or style, as wrongly interpreted within mid-twentieth century American architectural and design education, but a shared and universal understanding. Itten’s tenets, like *Ta-Vā* and *teu le vā* had offered students the ability to see, synthesize emotion and senses, and expressively articulate the essence of form and space. Itten explained, “Walls with windows and doors form the house, but the emptiness in them establishes the essence of the house. Fundamentally, the material conceals utility; the immaterial establishes essence. The essence of a material is its effect on space, the immaterial. Space is the material of the immaterial.” [15]

Post Moholy-Nagy’s emigration in 1933 from the Bauhaus to the United States due to Nazi pressure, his ideals were further challenged within design pedagogy as he attempted to disseminate Bauhaus tenets at the New Bauhaus in Chicago. At this time Bauhaus founder, Walter Gropius, (1883–1969) now teaching at Harvard Graduate School of Design, highlighted

Moholy-Nagy’s new conception of space saying it, “opened design considerations to the problems of the fourth dimension and a modern conception of space” [16] Moholy-Nagy himself wrote: “Today spatial design is an interweaving of shapes; shapes which are ordered into certain well defined, if invisible, space relations; which represent the fluctuating play of tension and force.” [17] When the relevance of Moholy-Nagy’s ethical, environmental and socially responsible doctrines were brought into question by politically motivated industrialists Moholy-Nagy retorted, “the artist’s work is not measured by the moral and intellectual influence which it exerts in a lifetime but in a lifetime of generations.” [18] Peder Anker states that, “Moholy-Nagy believed the future held the possibility of a new harmony between humans and their earthly environment if forms of design followed biological functions.” [19] For the most part, American industrialists of this period sought immediacy and profit and therefore, Moholy-Nagy’s ideology fell predominately on deaf ears. Although never compared before, I would suggest a correlation between the canons of Moholy-Nagy and Māhina’s Theory of Reality, *Ta-Vā*. Māhina charges current political and economic trends for the loss of, “mutually holistic, symbiotic human-environmental relationships.” [20] Findeli observed of Moholy-Nagy that the “key to our age is to be able to see everything in relationship.” [21] I suggest that Māhina’s *Ta-Vā*, time and space theory sits very comfortably alongside Moholy-Nagy’s 1947 work, *Vision in Motion* and reveals further correlations to Froebel, Itten and the Bauhaus.

What remains of the Bauhaus pedagogy post the American translation is the reductive code, material-explorations and the desire to unite creative practice with technologies, predominantly for financial reward. I posit that what has been diminished within

Itten and Moholy-Nagy's teachings are the holistic applications, and the environmental concerns that connected design to the past, the present and the future, known within Pacific Island cultures as *teu le vā*, sacred connections. Within *Tā-Vā* these honoured connections are considered enduring legacies that are left through experience and importantly, hold the counterpoints from which the path forward is negotiated. *Tā-Vā*, as Māhina explains, allows experience and memory to influence the future by negotiating it in the present. He advocates, "People are thought to walk forward into the past and walk backward into the future, both taking place in the present, where the past and the future are constantly mediated in the ever-transforming present." [22]

As a tether to space and time the use of *teu le vā* as a form of respect is also considered essential to Froebel and the Bauhäusler. Evolving from Itten's *Vorkurs* faculty were seen not as instructors but as guides in a student's quest towards a unity of head, heart and hands. [23] Wendt also outlines *teu le vā* as Froebel and the Bauhäusler had, considering the nourishment, cherishing and caring of the connections between the head, heart and hands as imperative to the creative process. Froebel's practitioners were referred to as kindergarteners, the gardeners of children. Froebel also privileged an understanding of connectivity through group work in which shared responsibility for motivation, collaboration and aesthetic sensibilities was addressed. Simple geometric patterns were developed by and for the group from two dimensional designs on a gridded surface into three dimensional forms, "wherein, each individual is there on account of the whole and the whole on account of the individual." [24] By asking his students to see, analyze, connect, disconnect, interlock, weave, abstract, construct, and deconstruct simple forms, Froebel challenged the manipulation and juxtaposition of multiple entities. The tasks although quite manifold, acknowledge that change and development are progressions; "the last one; therefore was brought about and prepared by the former." [25] Following on from this Grasset asserted; "to innovate is to preserve by modifying." [26] Expanding from a predominantly Pasifika comparison to European constructs, Amiria Henare explains that within Māori ideology *taonga*, also contrasts the Western (excluding the Bauhaus) concept of space as separation. Henare stated that, "in the Māori world people and things have close relations that collapse spatial and temporal boundaries." [27] Both Indigenous strategies and the tenets of Itten and Moholy-Nagy aim to ensure the relationships formed between entities, teacher and learner, artefact and artist or

object and environment are; reflected upon, respected and communicated appropriately. By acknowledging the space, the relationship in-between, the two entities can be expressed for example, as a dependence, independence, tension, ease, balance, imbalance, symmetry or asymmetry.

The nexus between Froebel, Itten, Moholy-Nagy and current design thinking to concepts such as *Tā-Vā* and *teu le vā* is the appreciation of what space offers both physically, emotionally and perceptively. By addressing the diversity that characterizes the space between current design pedagogical practice and the vehicles of meaning embedded in Indigenous cultures, new agency can emerge and ensure, that future uses of aesthetic language do not become constricted. In order to augment the value diversity offers within design there is a need for a more engagement with Indigenous culture. Again, with a focus on the cultural agency of the Pacific Islands, I reference Pasifika poet Albert Wendt; "I belong to Oceania- or at least I am rooted in a fertile portion of it. So vast, so fabulously varied a scatter of islands, nations, cultures, mythologies and myths, so dazzling a creature, Oceania deserves more than an attempt at mundane fact; only the imagination in free flight can hope, if not to contain her, to grasp some of her shape, plumage and pain." [28]

In response to the diversity present in New Zealand design education I have developed project work for students to gain both an understanding and an appreciation for culturally inspired visual-spatial languages. Using Bauhaus, Wendt and Māhina's understanding that the immaterial space between living and/or inanimate forms holds a tangible connection, the design challenge asks students to think critically about their individual and collective connections to culture, spirituality and creativity. This project encourages students to consider what they intend to visually express or reveal about themselves and their individual connection to a cultural collective. Using *Tā-Vā* and *teu le vā* the students identify and visually express both tangible and intangible connections to the past, present and the future. The student actively investigates the historic or traditional meanings and methods attached to the symbolism or strategies they have identified in order to find relevant methods of expression in a contemporary context. As Moholy-Nagy, Wendt and Māhina have all asserted the space in-between holds connections and encourages relationships. Using simple elements and forms of the reductive aesthetic codes that I have asserted bind Indigenous visual spatial languages to the modernist aesthetic, the students are asked



Fig 6. *Modern Tribes Moana/Maori Plate 4*, 2015, Nan O'Sullivan, printed poster.

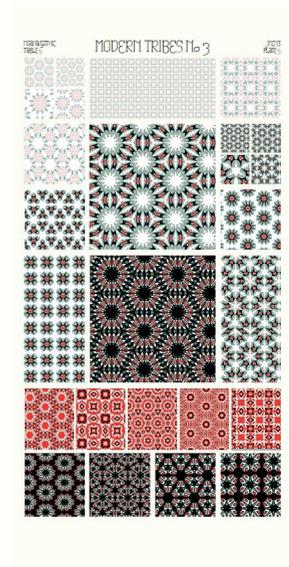


Fig 7. *Modern Tribes Moana/Gothic Plate 5*, 2015, Nan O'Sullivan, printed poster.

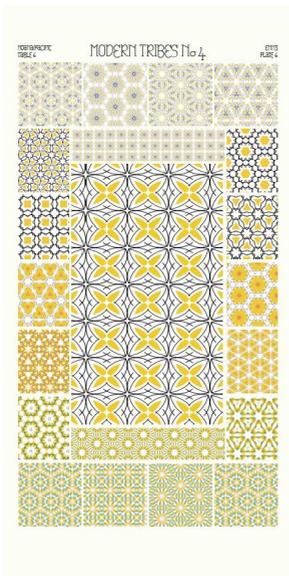


Fig 8. *Modern Tribes Moana/Pacifika Plate 6*, 2015, Nan O'Sullivan, printed poster.

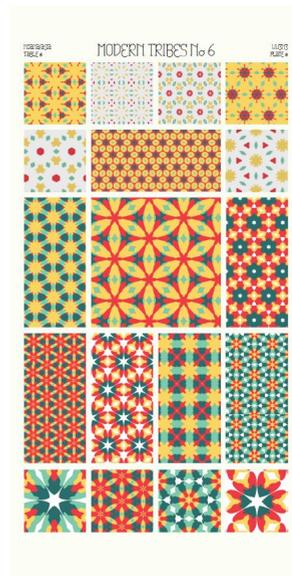


Fig 9. *Modern Tribes Moana/Asia Plate 8*, 2015, Nan O'Sullivan, printed poster.

to apply an understanding of *Ta- Vā* and *teu le vā* in order to visually characterise the connection they have to their cultural heritage. Using the family tree concept of structural formations inherent in family genealogies, the tethering extant in the design process of iteration is elucidated. Using visual narratives and specific visual strategies taken from Indigenous practices students iterate and integrate graphic representations of their cultural heritage and visually express their emotional connection to it.

Although the use of the term 'savage' suggests a certain hegemony, Owen Jones, as a fore-father to modernism, was one of the first to ratify culture within design when he stated, "The eye of the savage accustomed only to look upon Natures' harmonies, would readily enter into the perception of the true balance both of form and colour; in point of fact we find that it so, that in the savage ornament the true balance of both is always maintained." [29] With an appreciation that people and cultures arrange time and space in multiple and diverse ways students investigate Pasifika practices where time and space are marked in a symmetrical fashion using repetition and symmetry to give rise to beauty. The students, inspired by Indigenous or ethnic narratives design symbols that resonate with their understandings of their own cultural heritage. The symbols are designed referencing historic culture and represent Indigenous narratives that identify and reflect what ethnicity, culture, or cultures a student may feel tethered to. Using a combination of drawing, generic software and more complex custom tessellation and pattern generating software the students continue to grow their understanding of connections through iteration. [Fig 5] To develop the visual narratives further the students employ strategies of repetition, rotation, symmetry and asymmetry that are common to both the Pasifika regions and are fundamental to the software engaged with. The results have been collated in the collective format synonymous with Owen Jones' seminal tribal and societal depictions in the and are catalogued on plates that are representative of both Moana and the specific cultural strategies the student has used to develop their visual identity and subsequent pattern iterations from. Figures 6-9 are part of a series of works that graphically represent the cultural cacophony that makes up the first year cohort within our school.

As argued the connectivity between the Indigenous visual spatial strategies of *Ta-Vā* and *teu le vā* and the ideals of the Bauhäusler is extant and if not yet acknowledged as evident, a comparison of Māhina's proposal is mirrored in Raleigh's assertion of the Bauhaus' success. "Few have so successfully

drawn from their past, merged with their present, and anticipated the future. To scan the philosophic past that resulted in as significant an educational movement as that represented by the Bauhaus may possibly have a use now." [30] I would posit that over half a century after Raleigh's plea design is still in need of a pedagogy that engenders a design approach based on the quality and diversity of spatial relationships. I have further argued that the acknowledgement, inclusion and reflection of Indigenous culture should be considered as essential to initiate a shift away from the current homogeneity apparent with design expression. By identifying intersections between Indigenous spatial strategies and the holistic pedagogy intended by Froebel, Itten and Moholy-Nagy I have established a space to demonstrate compatibility. By engaging with graphic and ideological meanings embedded in Indigenous visual-spatial languages and strategies in combination with acknowledging their meaningful relevance and contribution the assimilation of Indigenous culture within contemporary design education can be realised. In doing so, the attrition of more diverse and globally proficient design graduates is affirmed but as importantly these graduates will not only value, they will be able to reveal, using an enriched visual-spatial vocabulary, the perpetual connectivity held in the space between humans and nature, humans and objects and humans with humans. As a Froebel alumni and a kindred spirit to Moholy-Nagy, and I would hope Māhina had they ever met, Buckminster Fuller asserted "Space is irrelevant. There is no space there are only relationships." [31]

References

1. Owen Jones, *The Grammar of Ornament* (Berkshire, England: Van Nostrand Reinhold Company Limited, 1856). 14.
2. C. B. N. M. M. J.-J. Y. B. S. McFall, "Design Thinking: Promoting Diversity Through Global Immersion.," *Family and Consumer Sciences Research Journal* 37, no. 3 (2009): 344-358.
3. *Ibid.*, 345.
4. Alain Findeli, "Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion," *Design Issues* 17, no. 1 (2001): 11.
5. Kent Bloomer, *The Nature of Ornament. Rhythm and Metamorphosis in Architecture* (New York: W.W. Norton & Company, Inc, 2000). 9.
6. Adolf Loos, *Ornament and Crime* (Riverside, California: Ariadne Press 1997).
7. Bloomer, *The Nature of Ornament. Rhythm and*

- Metamorphosis in Architecture: 11.
8. Norman Brosterman, *Inventing Kindergarten* (New York: Harry.N.Abrams, Inc, 1997). 119.
 9. Patrick Vinton Kirch, *The Lapita Peoples: Ancestors of the Oceanic World*. (Cambridge, Mass: Blackwell Publishers, 1997). 240.
 10. Eugene Grasset, *Methode de Composition Ornementale* par Eugene Grasset (Paris: Librairie Central des Beaux Arts 1905). 115.
 11. Brosterman, *Inventing Kindergarten*: 45.
 12. Albert Wendt, "Tatauing the Post-Colonial Body," *SPAN: Journal of the South Pacific Association for Commonwealth Literature and Language Studies* 42, no. 43 (1996): 245.
 13. *Ibid.*, 402.
 14. Frank Whitford, *Bauhaus* (London: Thames and Hudson, 1984). 119.
 15. Eva Badura-Triska, ed. *Diary no. 7*, 27 May 1918, Löcker Verlag, 1990 ed., vol. 2, Johannes Itten (Weisbaden: Löcker Verlag 1990), 278.
 16. Fern Lerner, "Liberating Foundations of Art and Design" *International Journal of Art and Design Education* 31, no. 2 (2012): 143.
 17. Herbert Bayer, Walter Gropius, and Ise Gropius, eds., *Bauhaus 1919 - 1928* (New York The Museum of Modern Art, 1938), 122.
 18. Alain Findeli and Charlotte Benton, "Design Education and Industry: The Laborious Beginnings of the Institute of Design in Chicago in 1944," *Journal of Design History* 4 no. 2 (1991): 102.
 19. Peder Anker, "Graphic Language: Herbert Bayer's Environmental Design," *Environmental History* 12, no. 2 (2007): 256.
 20. Hau'ofa Okusitino Māhina, "Tā, Vā and Moana: Temporality, Spatiality, and Indigeneity," *Pacific Studies* 33, no. 2/3 (2010): 171.
 21. Findeli, "Rethinking Design Education for the 21st Century: Theoretical, Methodological, and Ethical Discussion," 10.
 22. Hau'ofa Okusitino Māhina, "Our Sea of Islands.," *The Contemporary Pacific* 6, no. 1 (1994): 170.
 23. Henry P. Raleigh, "Johannes Itten and the Background of Modern Art Education," *Art Journal* 27, no. 3 (1968): 38.
 24. Brosterman, *Inventing Kindergarten*: 51.
 25. Maria Kraus-Boelte and John Kraus, *The Kindergarten Guide. An Illustrated Hand-Book Designed for the Self- Instruction of Kindergarteners, Mothers and Nurses*. (New York E. Steiger & Co, 1882). 419.
 26. Grasset, *Methode de Composition Ornementale* par Eugene Grasset 15.
 27. Amiria Henare, *Museums, Anthropology and Imperial Exchange* (Cambridge Cambridge University Press 2005). 3. 28. Albert Wendt, ed. *Towards Oceania*, *Writers in East-West Encounter: New Cultural Bearings* (Auckland Macmillian Press Ltd, 1982), 202.
 29. Owen Jones, *The Grammar of Ornament* (Berkshire, England: Van Nostrand Reinhold Company Limited, 1856). 14.
 30. Raleigh, "Johannes Itten and the Background of Modern Art Education," 285.
 31. R Buckminster Fuller, *Utopia or Oblivion: The Prospects for Humanity* ed. Jamie Snyder (Oslo: Lars Muller Publishers, 1969).