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Linguistic analogies applied to architecture are currently not popular, but the conference theme evokes language and this paper uses the linguistic analogy in the hope that it might yield some insights into the difficult question of the relation between Western architecture and the indigenous.

A fundamental analytic tool used by linguists is the separation of meaning from structure. For example so-called pidgin languages are usually regarded as crude, primitive and hardly worth calling languages. The speakers on the other hand point out that they have consistent and logical grammatical structures, which derive from the indigenous language, but use adopted and modified European words. That is to say that the syntax is indigenous but the semantic overlay is Western. The language trees constructed by linguists are based on the observation that the syntactic dimension of languages persists over time, while the semantic dimension changes much more rapidly. This paper attempts to look at cross-cultural architecture using the language analogy.

The translation and use of indigenous motifs in western architecture is associated with various difficulties and problems. Indigenous builders on the other hand are endlessly adopting western architectural forms into their buildings. Translation is associated with notions of loss, but there are also gains in translation.

Some well known local buildings are discussed in an attempt to demonstrate the analogy while a question remains as to whether style can be translated.
The conference theme evokes the so-called ‘linguistic turn’, which has been adopted into the theory of several disciplines over the last half century:

“[T]he linguistic turn (like the term postmodernism) has become a catch-all phrase for divergent critiques of established historical paradigms, narratives, and chronologies, encompassing not only poststructuralist literary criticism, linguistic theory, and philosophy, but also cultural and symbolic anthropology, new historicism, and gender history.”¹

The usefulness of the linguistic turn has been accepted, but also challenged, so that Surkis claims that: “By the mid 1990s, the term had become routinized – oddly meaningful despite (or was it because of?) its ambiguousness.”²

In architectural theory Collins argued in the 1950s that the linguistic analogy had been popular since the middle of the 18th century and he challenged its usefulness.³ In the 1960s semiotics (the so-called ‘theory of signs’) became fashionable in the hope that it would elucidate architectural analysis, while obtaining theoretical leverage. This was in part because of its supposedly scientific basis and identification with structuralism. However Derrida challenged the assumptions behind the semiotic fundamentals of structuralism and the notion of a direct relationship between signifier and signified became no longer tenable. He pointed out that the signified always turns out to be another signifier, with infinite shifts in meaning relayed from one signifier to another.⁴ This relation was characterised by endless deferral, leading to the so-called ‘chain of signifiers’. As usual with paradigm shifts, the baby tends to get thrown out with the bathwater and semiotics is not much heard of in current architectural discussions. However, provoked by the language bias of the conference theme this paper applies aspects of linguistic theory to architecture in the hope that this might yield some insights to the thorny question of the relation between traditional and modern architecture – or more specifically the indigenous and the contemporary.

The translation of European architectural forms into indigenous buildings has problems for westerners, but not for the indigenous experts who are endlessly adopting western techniques and materials but making them their own. An architectural example where an indigenous group have adopted and modified western architecture is the Maori meeting house, which, as is well known, was a response to the introduced church. Sundt has written about the interesting crossovers between whare and church, and while his excellent research has identified the whare karakia as a unique category of buildings, he assumes that the church is the more significant building.⁵ Sundt

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² Surkis, “When Was the Linguistic Turn?,” 714.


claims that the English missionaries taught Maori converts English building techniques in order to build the first churches. But then he does not quite explain why it seems they reverted to the traditional construction for the later whare karakia. These used an existing grammar deriving from the whare - a syntax consisting of a single closed space, outside porch and central ridge pole, which interestingly led on at least one occasion (Manutuke church 1849–63) to the building being used laterally - as in the traditional whare. ̈6 Rangiatea (1848–51) is the famous example of a crossover between whare and church. This building is best known through its illustrations where it is usually described as a Maori church. It was not carved, although this is often not recognised by Pakeha. ̇7 However Maori presumably notice the absence of what is essentially a book without any words – or at least illustrations. The central ridge-pole supports obstructed the central aisle and were an endless frustration for the missionaries, but this was the syntax of a whare (and incidentally of all Pacific buildings.) According to legend Williams sawed the end off the ridge pole at night, for which there are several possible explanations, one being the phallic association, another the syntactic necessity to disallow the porch of the whare and replace it with an English entry lobby.

In 1885 Te Kooti Arikirangi Te Turuki renovated Tokanganui-a-noho, an existing house which became the canonical form for the meeting house. This single cell building with the tahuhu supported on a ridge post with one door and one window, opening onto a sheltering porch, was the syntax which has persisted since, regardless of size and resources. Te Kooti also innovated with polychrome and figurative painting, which was not adopted again until more recently. Possibly this and other meeting houses used traditional tie down construction which is tectonically quite different to English building techniques that are based on tension systems and built down from the top. ̈6 The sloping walls of the whare assist in this construction whereas they would be a structural weakness according to a conventional post and beam structure. Although a traditional form, there were no problems with adopting corrugated iron, weatherboards, timber joinery and even timber scroll-work for meeting houses. Yet the simple addition of a second door was, and is, always a problem illustrating the distinction between structure and meaning.

This phenomenon illustrates another interesting aspect of the linguist’s separation of syntax from semantics. The syntactic dimension of languages persists over time while the semantic dimension changes much more rapidly. This is used by linguists in constructing language trees which have been helpful in analysing and dating connections and movements between cultures. In Oceania these language trees have confirmed the work of the archaeologists and historians in tracing the migration of populations out of Asia and into the Pacific.

6 Deidre Brown, Maori Architecture: from fale to wharenui and beyond (Auckland: Raupo Books/Penguin Group (NZ), 2009).
In the 1998 Auckland University meeting house Tane-nui-a Rangi at Waipapa marae the carver Paki Harrison innovated with reconstituted timber and multi-colour rafter designs. This Pakeha designed house is a copy of the form (for instance with inward sloping walls) but not the construction of an historic house. In this and other modern meeting houses, the building is constructed with steel portal frames, using the carvings as cladding – which means they do no structural work. One interpretation of this is that this is European architecture downplaying its role to being simply a scaffolding or support to the carvings, another is that this can be seen as superficial attachment of the carvings to a Pakeha construction. Construction can be identified with syntax and so the common Western practice of constructing the form but not the technique of the indigenous. This is the postmodern and a Disney problem – adopting the form but not the syntax.

At Te Noho Kotahitanga at Unitec the carver, Lyonel Grant, wanted to counteract this trend and make the carvings do structural work – albeit in the end with assistance of some steel structure. Thus he carved a canoe for the ridge (referring to a traditional usage). He also extends the rafters out beyond the walls, which was not seen in traditional construction. This can be seen as altering and innovating syntactically, which it is suggested indigenous architects are able to do, as they are aware of the syntactic rules even as they are breaking them. This explanation uses the analogy of another interesting linguistic phenomenon, namely that it is very difficult for a native speaker to pronounce an ungrammatical sentence – but all too easy for others. That is to say indigenous speakers are able to innovate and play with grammatical structures (poetically), whereas others only do so accidentally or clumsily. Grant also innovates semantically with European imports in his carvings, with LED lighting, and casting the poutokomanawa (ridge support post) in bronze.

Futuna Chapel in Karori (1958–60) has had a considerable amount of architectural and critical comment and is claimed by Russell Walden to be the first bi-cultural building in New Zealand. One reviewer proposed that Walden’s photographs showed “nothing surprising to my European eyes”, and that Futuna appeared to “owe more to the European models of the age than to local traditions”. However it seems that Scott started with the whare form for the church, disintegrating and splitting it, slicing it and then pulling it apart. He did the same with the congregation dividing them in two. He kept the poutokomanawa, Walden arguing that the central pole is “the heart pole of Maori mythology”. The diagonal strutting is reminiscent of Rangiatea, but these might be considered a semantic motif.

With the Maori Battalion building Scott designed a brutalist building and decorated it with Maori panels. This is clearly a semantic overlay on a Western building but then Scott was in possession of cultural information - such as the number and names of the origin canoes. The weaving of carvings across the Maori Battalion Memorial Building’s glass façade with equivalent sized windows

11 John Scott (personal communication).
and carvings, simultaneously entertains contrary conditions of Maori and European. Bicultural ambivalence can be argued to being played out in this façade.

Te Papa Museum is always claimed to be a bi-cultural building, but looking at it syntactically, while there is some acknowledgement of Maori marae organisation, it is otherwise very European. Nevertheless the potential for semantic innovation has been seized in the meeting house where reconstituted wood is cut into innovative patterns and decorative colours. Unfortunately this radicalism never makes it to the exterior of the building. Te Papa like other museums has a tradition of enclosing the buildings of the other. Entombed within it are an historic whare (Te Hau ki Turanga), a new whare (Te Hono ki Hawaiki), half a fale, and even the marae. Thomas has pointed out that these entombed buildings have somehow survived European architectural changes intact and might be resurrected to emerge again in their own terms.\(^\text{12}\)

At All Saints Church in Auckland (1958), Richard Toy explicitly took the syntax of the one cell space with sheltering porch of the house. He did this because of the then Polynesian population in Ponsonby – a suburb that has since been gentrified.\(^\text{13}\) The intended meaning disappears but the syntax remains. The marae was explicitly the model in Toy’s design for the courtyard of the Auckland Cathedral (1973).\(^\text{14}\)

It is suggested that linguistic insights could articulate some of the dilemmas of cross-cultural translation. An example of the application of the linguistic analogy is that of pidgin languages which are usually regarded as cute, crude or primitive and not worth being called languages. Along with linguists, the speakers of pidgin, on the other hand, are insulted by this and point out that they certainly are legitimate languages with a consistent and logical grammatical structure. These structures derive from the indigenous language, but use adopted and modified words from the dominant culture. In other words – to invoke semiotic theory – the syntax is indigenous but the semantic overlay is foreign. Pidgin is associated with the colonial situation where there is a clear dominant and subservient relation, but (again as Derrida pointed out) this is the case in all oppositions. It seems that it is utterly acceptable for subordinate cultures to incorporate semantic items into the indigenous structures but not the other way around.

On Polynesian islands the fale is endlessly modified with the adoption of Western materials and forms but it seems the syntax is retained in these indigenous hybrids. At Auckland University on the other hand the fale has been argued to have lost the open spirit of the indigenous fale, with the materials and lashings are used in a decorative and not structural manner. By contrast the fale at Unitec is traditional (down to the use of thatch) and uses the traditional syntax, but has several semantic innovations in materials and decoration.

\(^\text{12}\) Nicholas Thomas, Mark Adams, Jane Schuster and Lyonel Grant, Rauru (Dunedin: University of Otago Press, 2005).
\(^\text{13}\) Richard Toy (personal communication).
\(^\text{14}\) Richard Toy (personal communication).
One would think that it is only those fluent in the source and target languages who can assess what is a ‘good’ translation but this is not straightforward. For instance the assumption that poetic images are impossible to translate because they may become banal or incomprehensible cannot be sustained. Dante’s *Inferno* has been translated into English well over a hundred times – “six in the last decade”.  

Conventional wisdom ascribes losses to translation but there are also gains. To be translated is to increase status and importance. It would seem that indigenous architects have still not been accepted in the avant-garde worlds as readily as indigenous artists who have adopted the pragmatics and technology of aesthetic production of the West.

A recent book apparently experiments with translating stories from one language to another then back again into another language where the objective was to see if the style survives the migration from one language to another. The results are said to be not clear, the only conclusion again appears to be that there are losses and gains. These days style is not much talked about in architecture except as a categorization device. James Emes, in his “Lectures in Architecture” (1821), remarked that there were two methods by which a race could imitate the architecture of another country: one true, the other false. “The true mode is less an imitation than an adoption, and consists in receiving as an alphabet in their entire shape, the system, and the taste of a style of architecture.”

Samuel Hurst Seagar, dismissing the possibility that Pacific architecture offered anything for the future, said: “We have no style, no distinctive forms of (architectural) art … our cities are chiefly made up of architectural quotations.” In New Zealand the translation of a stone Gothic church into timber has been much discussed and it seems that style can be translated. After all the Parthenon, as we all know, was a translation from wood to stone.

While questions of style remain problematic it is suggested that analysis using the semantic – syntactic distinction may not yet have run its course. It is now 40 years since Gandelsonas used this difference in comparing the architecture of Eisenman and Graves and much has happened since, with the move away from structuralism to post-structuralism. Eisenman originally attempted to use Chomsky’s syntactic analysis to generate architectural compositions, a process he would no doubt now disavow. However in the arena of cross-cultural translation it is suggested that linguistic theory might be helpful, especially as the issue of intellectual property and copying prevails, which is so contentious.

This is the issue of appropriation, which has the interesting quality of having the same meaning as mis-appropriation – both mean stealing. Regarding his Tjibaou Centre (1993–98), Renzo Piano says quite explicitly: “from local culture we stole the dynamic elements”.

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16 Adam Thirlwell (ed.), *Multiples: 12 Stories in 18 Languages by 61 Authors*, Portobello, 201.
items of the indigenous culture is controversial in New Zealand in the art and performance area with attempts to copyright traditional practices. In the colonial situation it is quite common for the dominant (western) culture to ‘interpret’ indigenous architecture as Piano has claimed to have achieved at Tjibaou. Piano knew that stealing the indigenous semantic items by the dominant culture was not acceptable, saying: “It was not feasible to offer a standard product of Western architecture with a layer of camouflage over the top.” Instead he adopted the syntactic structure, taking the traditional Kanak ‘hut’ and the village organisation of buildings arranged along an open space dancing ground as the basis for his design. However he translated the structure by roofing over the dancing ground, and opening up his ‘huts’ to the sky. Doing so he completely altered the syntax, and the difference between his buildings and the indigenous ones that are on the site is quite overwhelming. That is not to say that the building is uninteresting but it is problematic and Piano himself has said that it is the most difficult project that he has ever undertaken.

23 Piano, Logbook.