Material, Motif and Memory

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Gottfried Semper's contribution to modern (and contemporary) architecture has been inadequately explored. This is unfortunate, because Semper's ideas on materiality and 'artistic appearance' (Semper 1989: 190) provide – or so it will be argued – a concept that moves between material 'honesty' (that is associated with Modernism), and the arbitrary application of styles and symbols (that is associated with Post-modernism). Unfortunately, the somewhat detailed, and at times fragmented, nature of Semper's though thas lent itself to the misinterpretation that he was, tectonically speaking, a 'materialist' – which is not the case. This paper presents a theoretical reconstruction of Semper's primary thesis regarding the role of artistic motifs in the process of material transformation (*stoffwechsel*), through which materials are linked to metaphor and to tectonic memory. The paper extends these ideas via a conversation with Richard Wollheim (1987) and Arthur Danto (1981), and finally returns to the question of Modern versus Post-modern representation. The paper concludes that *material metaphor* (as derived from Semper) is cogent for architecture in that it supports a liberal imagination, and a mode of representation that is mediated by histories of material/tectonic culture. **Key Words:** Gottfried Semper, material, motif, tectonic memory

Izonto zokwakha, Umsebenzi kaGottfried Semper, Ushintjo Olukhulu Alwenza

Sekusobala ukuthi umsebenzi waGottfiried Semper awenzele umphakathi webadwebi bezindlu awukavezwa ngendlela efanele. Ngaloku kwabaningi uSemper ungumuntu othatheleka phansi yize efake igalelo ngekusebenzisa izitayela nemfanekiso ejulile ekwakheni izindlu. Ngenca yokuthi ungumuntu obengazichayisi ekuhlanganisebi izinto zekwakha kanye nemfanikiso, abaningi ababhali bamazi njengomuntu obesebenza ngezinto zokwakha kuphela. Leliphepha libheka umsebenti ka Semper, inhloso yawo, kanye nendlela abekasebenzisa ngayo izitayela nemfanekiso kuze izakhiwo zakhe zivele zinobuchwephesha. Leliphepha lihlahla indlela yokubona umsebenzi ka Semper kabusha, liphinde libukeze loku mayelana nemisebenti ka Richard Wollheim (1987) no Arthur Danto (1981) abebagcule ezindleleni zokwakha zesimanjemaje kanye nalezo ezifaka izinhlanga ezihlukahlukene. Leliphepha libhalwe kuze libeke ebaleni ukuthi ukusebenzisa izitayela zika Semper kanye nemifanekiso yakhe kuvula izindlela eziningi nezinobuchwephesha ekwakheni izindlu. **Amagama Amucoka:** uGottfried Semper, Izonto zokwakha, Umsebenzi wakhe,

Ushintjo Olukhulu Alwenza

[E]ven the question of material is secondary" - Gottfried Semper (Podro 1982: 54)

ottfried Semper's (1803-1879) (figure 1) influence on the history of modern architecture is somewhat difficult to ascertain. Born in Germany (most likely in Hamburg) in November 1803, Semper was a child of the "revolutionary age" (Mallgrave 1996).¹ The philosopher Friedrich Nietzsche and composer Richard Wagner were amongst his personal friends and artistic peers (Mallgrave 1996: Semper 1989). Influential in his own day, Semper made a significant contribution to 19th century design and aesthetics, and especially so for theorising the significance of tectonics in the historical development of architecture. In his celebrated book, *The Critical Historians of Art*, Podro insightfully situates Semper's work within the trajectory of German historicist aesthetics: Kant, Schiller, Hegel, Rumohr, Schnaase, Semper, Goller, Riegl, Wollffin, Springer, Warburg and Panofsky (Podro 1982). In his account, Semper is shown to have a complex and interesting relation within this tradition, as Podro explains.

Semper provided the basis of a systematic treatment of art history [...] He explored the way visual artists, in particular architects, took structural features like the plaited twigs of primitive buildings or the woven threads of textiles, and exploited their potential for pattern making, and how they transformed such motifs to different materials, in this way generating architectural metaphors (Podro 1982: xxiii).

This paper argues that Semper's work opens fruitful avenues of enquiry that allow one to squeeze between contemporary re-appropriations of Modernism on the one hand, and Postmodern critiques of the early Modern Movement on the other – with unique insights into crucial questions of materiality and tectonics that form the central line of his enquiry. In this respect, Semper's legacy has a complex, and possible inadequately explained relation with Modern design. On the one hand, for example, we may note his firm disagreement with the 'materialists' of his day, theorists who wished to derive an architectural rationalism from the inherent logic of building materials and construction. The contemporaneous theories of Viollet-Le-Duc (1814-1879) offer, to be sure, the most advanced expression of this functionalist materialism, derived in this case from Viollet-Le-Duc's study of Gothic building structures (figure 2).² Viollet-Le-Duc's work is commonly understood to be a theoretical pre-cursor to the functionalism of the Modern Movement, and there is, arguably, but a small interval between Viollet-Le-Duc's structural rationalism and the functionalist minimalism of the Modern Movement. Mies van der Rohe's Farnsworth house (figure 3), for example, is an architecture derived from the 'honest' expression of materials, and the pure order of structure. Semper took exception to the rationalist tendency of his day, arguing that,

[t]he materialists can be criticized in general for having fettered the idea too much to the material, for falsely believing that the store of architectural forms is determined solely by the structural and material conditions, and that only these supply the means for further development [...] it is not absolutely necessary that the material as such becomes an additional factor in the artistic appearance (Semper 1989: 190).

It may on the other hand be argued that Semper's preoccupation with drapery, or what might be termed the dressing of space – as the leading principle of architectural expression, and how this ought to be distinguished from the load bearing requirement of structural support – provides a crucial step toward the duplicity of structure and skin that subsequently would became a *leitmotif* of Modernist design principles – a distinction to which we shall return in more detail. An important instance thereof is Le Corbusier whose sketches, that accompany his 'five points of the new architecture' (Le Corbusier 1937: 129), show the architectonic implication of grid frame construction, with walls conceived as skin that are emancipated from load bearing constraints – in other words a conception of the wall as pure, spatial envelope (figure 4). Relating Le Corbusier's Purist paintings to his early Villas (figure 5), demonstrates this elaboration of space via free envelope. Yet this connection with Modernism does not fully capture the spirit of Semper's thought, for Semper interprets the surface of walls in a more metaphorical sense: one that is enriched by the memory of tectonic content, rather than what was the case with Modernism where surfaces are rendered through somewhat naked abstraction, and with respect to the ideal of the machine.

Podro and Mallgrave alike have noted the influence that the French zoologist Georges Cuvier had on Semper's approach to the classification of craft and decorative motifs, although Semper orientates his system of classification toward a different end (Podro 1982, Mallgrave 1996). His book *Style in the Tectonic Arts of* 1860 (*Style*), possesses a somewhat fragmented and descriptive character, which has led some readers to misread the true orientation of Semper's thought (Semper 1989). *Style*, notes Mallgrave, is a "[...] difficult, if not an altogether obtuse text to penetrate." (Mallgrave 1996: 277). This fact has led to the, "[...] view widely attributed to him [... that] architecture is the product of material, function and technique" (Podro 1982: 44). As Podro makes clear, Semper never held this view. A 'materialist' misreading of Semper, Herrman observes (1984), emerges from the complex task Semper had set for himself in his book *Style*, where the techniques of the textile arts – namely knotting, stitching, plaiting, braiding, matting,

weaving, embroidery, dying, printing, draping, etc – are distinguished and studied in significant detail, and where decorative motifs are attributed to each. This approach was derived from the "[...] task he set himself [...] to trace the way back to the archetypes [i.e material processes and craft]" (Herrman 1984: 121), but this intention did not mean to say that the influence of craft was strictly deterministic for architecture, or that other more liberal aspects of architectural imagination should be ignored. Accordingly, in *Style*, Semper writes,

Every artistic production on the one side, and all enjoyment of art on the other, presupposes a certain temper of carnival, to express it in modern terms – the carnival half-light is the true atmosphere of art. The denial of reality is necessary where the form, as a symbol charged with significance, is to emerge as the self-contained human creation. (Podro 1982: 49)

In presenting Semper's account of materiality, it is necessary then to study his ideas in a synchronic (rather than diachronic) fashion, selecting and assembling his somewhat fragmented contributions into a single, coherent form, one that may be extended and developed through conversation with more contemporary theories on the role of metaphor and artistic representation – via Richard Wollheim (1987) and Arthur Danto (1982).

Materials used formatively

In section 61 of *Style*, headed *Materials Used Formatively* (Semper 1989), Semper provides a helpful, if not slightly cryptic, synopsis, of his primary thesis regarding the formative role of craft and materiality in architectural design. The passage shows a rare condensation of his argument, and is worth quoting in full.

Every material conditions its own particular manner of formation by the properties that distinguish it from other materials and that demand a technical treatment appropriate to it. When an artistic motive has been subjected to any kind of material treatment, its primitive type will be modified, having acquired a definite tone as it were. The type no longer rests in its primary stage of development, but has passed through a more or less distinct metamorphosis. When from this secondary or, according to the circumstances, variously graduated modification the motive now comes into a new material transformation (*stoffwechsel*), the form emerging from it will be a mixed result, one that expresses its primordial type (*Urtypus*) and all stages of modification that preceded the last formation (Semper 1989: 258 -259).

In this passage Semper puts forward three distinct propositions that may be reformulated as follows.

First, that there is a logical, or 'rational' relation between the inherent character of specific materials, and the techniques that are suited to them, or at least historically connected to the formation of these materials. This means, in effect, that materials arrive pre-associated with techniques and types of formation, and that this fact constitutes a certain 'determinate' domain within the processes of creative formation.

Second, that the precise manner in which materials are historically related to techniques, allows for the emergence of patterns of formation, or types, or motifs. Once established, these motifs develop a life of their own, and a 'metamorphosis' now occurs, where materiality and technique give birth to figuration – that is the early emergence of artistic representation, in the form of decoration, patterns and arrangements. Building upon Semper's insights, we might argue that this metamorphosis is a pre-condition for achieving architectural representation in the fullest sense of the word. Note that Semper does not, here, explain the significance of the 'primitive type' and the 'primordial type (Urtypus)' he alludes to – and we shall have cause to speculate on this in due course.

Finally, and most significantly, Semper highlights the fact that these artistic motifs are later rendered via different building materials, and in so doing leave behind the former determinate relation of materiality with technique. The transformation that occurs when motifs jump from one material to another, highlights the status of the motif as motif (rather than the motif tied to material), and produces a mixed effect – something new, yet with a memory of what was before. Once again, building upon Semper's insight, we might argue that this motion brings to fullness the possibility of architectural representation, imagined here via the lens of a *metaphoric memory*.

Let's follow this three-stage process in more detail, by cross connecting and interpreting Semper's most important theoretical works, *The Four Elements of Architecture: A Comparative Study of Architecture* of 1851 (*Four Elements,* in Semper 1989), and *Style in the Tectonic Arts of* 1860 (*Style,* in Semper 1989).

Material and technique

In *Four Elements*, Semper famously designates what he deemed to be the four primary components of architecture, namely the hearth which is the 'moral' or central element, around which, "[...] were grouped the three other elements: the *roof*, the *enclosure*, and the *mound* [...] " (Semper 1989: 102) – he appears to mean center, roof, enclosure and floor. And it is well known that he links various technical crafts to the materials that were initially used in the construction of each, hence in early times:

[...] the different technical skills of man became organized according to these elements: *ceramics* and after metal works around the *hearth*, *water* and *masonry works* around the *mound*, *carpentry* around the *roof* and its accessories.

But what primitive technique evolved from the *enclosure*? None other than the art of the *wall fitter* (*Wandbereiter*), that is, the weaver of mats and carpets (Semper 1989: 103).

It matters little, for our purpose, as to whether this description is correct or not. Rather, what *is* important here is to note that Semper associates masonry with the hearth and not with the act of enclosure. What we ordinarily call the 'walling' of enclosure is associated with carpets – in terms of our 'common sense' understanding of the way architecture defines space, Semper has, in effect, substituted walls for carpets. Indeed, the simplest way to paraphrase Semper, is perhaps, to say that drapery both textures and folds space. Semperian aesthetics develops from this simple, yet I hope to show profound, imagination – what if one were to imagine spaces draped upon and clothed by textiles/carpets, surely such would differ from an architecture derived from the solidity of walls? But we are running ahead of ourselves.

The taxonomy of *Four Elements* is further developed in *Style*, where Semper provides a detailed discussion of the textile arts – materials such as yarn, straps, mats, wickerwork, felt, woven fabrics, embroidered cloth, carpets and clothes (figure 6), as well as the manufacturing techniques associated with each, twisting, knotting, stitching, plaiting, braiding, weaving, embroidering, dyeing and printing (figure 7). In each case Semper carefully describes how manufacturing techniques combine in the formation of various textiles, and how the nature of each is used to produce these. For example when discussing bobbin lace (figure 7, center bottom) Semper explains that the creative process requires, "[...] a mixture of weaving, twisting, and plaiting. The designs of most types are produced by an interlacing of threads, as is done in the weaving of linen cloth (Semper 1989: 222)."

The emergence of motif

At the next stage of elaboration, it is Semper's view that manufacturing techniques in turn allow for the emergence of various decorative motifs, or formal types, and the art of fabric design develops from these. When discussing the unique decorative quality of plaited covers, for example, Semper explains that,

[...] the cord elements out of which they are fashioned do not necessarily have to intersect at right angles, as is imposed by weaving, but cords running diagonally and in any direction can be interwoven into the texture. *This advantage of plaiting should be maintained in every way, made apparent, and be stressed by its characteristic feature* (Semper 1989: 224).

This act of stressing the 'characteristic feature' of plaiting brings the quality of the decorative and artistic motifs to life. For which reason, Podro maintains that, "[...] it is not with technique as such that Semper was concerned but with the way in which a technique could become part of a design, the way objects may become 'self-illuminating symbols'[...]" (Podro 1982: 46). Or to put this another way, the emergence of decorative style is initially advanced by motifs that "[...] draw attention to the procedure of their own construction." (Podro 1982: 46) In this, the emergence of tectonic design showcases what we might term a somewhat literal order of representation – where materiality is made to dramatize itself; a figure where representation is *folded-in* upon itself.

Semper also notes that, "[w]hen an artistic motive has been subjected to any kind of material treatment, its primitive type will be modified [...] ", to which he later adds '[...] expresses its primordial type (*Urtypus*)" (Semper 1989: 258). What are the 'primitive type' and 'primordial type (*Urtypus*)"? Semper does not explain, but perhaps we might interpret the primitive type to be the earlier formation – that is, the earliest decorative pattern, because, obviously, once a pattern or motif is established, it will be repeated and modified. The primordial type (*Urtypus*), however, might be interpreted as something more primary. Perhaps we might relate *Urtypus* to Semper's philosophical conception of artistic creation. In the Prolegomenon to *Style*, Semper provides a fascinating explanation for our (human) investment with the more playful and liberal properties of art:

Surrounded by a world of wonder and forces, whose law man may divine, may want to understand but never decipher, which reaches him only in a few fragmentary harmonies and which suspends his soul in a continuous state of unresolved tension, he himself conjures up the missing perfection in play. He makes himself a tiny world in which the cosmic law is evident within strict limits, yet complete in itself and perfect in this respect; in such play man satisfies his cosmogonic instinct (Semper 1989: 196).

Artistic expression is accordingly, founded upon a primary substitution – a small and finely crafted miniature that stands in for that which is lacking – for what is ultimately unattainable in the world. In Semper, therefore, we might interpret this to be the 'primordial type (*Urtypus*)', from which the manifold wonder of architectural creation unfolds. And hence, when discussing the simplest and most basic technique of joining yarn, Semper writes, "[t]he knot is perhaps the oldest technical symbol and, as I have shown, the expression of the earliest cosmogonic ideas that arose among nations" (Semper 1989: 217). Accordingly, fabrication, is, if you will, and in every case, a variation of the knot (figure 8).

Material transformation

Finally, and most crucially, Semper places emphasis upon the phenomenon of '*stoffwechsel*' – or material transformation – where motifs that were derived from a specific material and technique, are later transferred onto another material and hence are applied as decorative and spatial figures (Semper 1989: 258 -259). Semper notes this material substitution produces 'a mixed result' – a combination of old and new (Ibid.). In *Four Elements*, Semper develops this idea in relation to the fourth element of architecture – i.e. spatial enclosure – with his observation that walls are derived from carpets – "[...] what primitive technique evolved from the *enclosure*? None other than the art of the *wall fitter (Wandbereiter)*, that is, the weaver of mats and carpets [...] I assert that the carpet wall plays a most important role in the general history of art" (Semper 1989: 103). He continues, "[w]ickerwork, the original space divider, retained the full importance of its earlier meaning, actually or ideally, when later the light mat walls were transformed into clay tile, brick, or stone wall. Wickerwork was the *essence of the wall*" (Semper 1989: 103-4).³ And, "Hanging carpets remained the true walls, the visible boundaries of space. The often solid walls behind them were necessary for reasons that had nothing to do with the creation of space" (Semper 1989: 104).

Semper supports his assertion – namely, that the essence of the wall is derived from textiles, wickerwork and carpets – by demonstrating that the dressing of walls (i.e. be this via plastering, paneling, painting or cladding, etc.) and decorative patterns commonly applied to walls (be that via patterned tiles, mosaic, decorated stucco, decorative wood paneling, etc.) involve imitation of motifs derived from textiles (figure 9). A careful reading of Semper shows that the metamorphosis of textile to the architectonic expression of enclosure occurs on at least two levels, namely i) that of decoration, and ii) that of drapery. Where the former (decoration) involves the application of various decorative, surface patterns, the latter (drapery) treats the metaphoric concept of wall-as-drapery in a more abstracted and spatialised way.

Regarding i) Semper notes that "[t]he oldest ornaments either derived from entwining or knotting materials or were easily produced on the potter's wheel with the finger on the soft clay" (Semper 1989: 103). He then adds, "[t]he artists who created the painted and sculptured decorations on wood, stucco, fired clay, metal, or stone traditionally though not consciously imitated the colorful embroideries and trellis work of the age-old carpet walls" (Semper 1989: 104) – which is to say, textile patterns are the primary informant of architectural, surface decoration.

Regarding ii) Semper also argues the complimentary view that surface treatment – whether it be overtly 'decorative' or not – is a practice derived from the metaphoric idea of wall-as-carpet; wall-as-drapery. Semper writes, "the oldest substitute [for carpets] was offered by the mason's art, the stucco covering or bitumen plaster" (Semper 1989: 104). He continues, the last "substitute perhaps can be counted [as] the panels of standstone, granite, alabaster and marble that we find in widespread use in Assyria, Persia, Egypt, and even in Greece." (Ibid.)

Material metaphors

In putting our three points back together, we shall now consider an example of what Semper achieves for the interpretation of artistic form. In *Style*, the section titled *The stitch, embroidery* (Semper 1989: 227 - 234), Semper describes two types of stitch that are used in embroidery, these being the 'the flat stitch' and the 'the cross stitch'. A distinction, that leads him to observe that, "[...] a stylistic opposition automatically arises between the *ornamental* character of cross

stichwork and the inseparability of the method of the flat stitch from executing *illustrative* themes" (Semper 1989: 229). Semper hereby distinguishes decorative motifs that are derived from the inherent logic of these two types of stichwork – in particular relating Assyrian embroidery to the flat stitch and Egyptian embroidery to the cross stitch. Once established these decorative motifs develop a life of their own and soon cross-pollinate into other materials and methods of making, such that the motifs derived from the craft of embroidery lose their former logic (where form was tied to material and technique) to facilitate what we shall call a *metaphoric relation* to the former material from which they were derived. Semper summarizes his point as follows:

Egyptian sculpture and painting was an embroidery in cross stitch executed on the walls with all the attributes of the latter's style; the technique of painting and sculpture commonly practiced in Asia since primitive times, on the contrary, is entirely consistent with those styles that belong to flat embroidery" (Semper 1989: 230).

The metaphorical implications of Semper's theory is submitted by Podro (1982) – although not adequately elaborated upon by him – and it must be noted that Semper does not, himself, use the word metaphor, to designate the phenomena he had wished to define. This question of what we shall now term a *material metaphor* -i.e. a metaphoric relation of one material with another -i.e.therefore needs to be clarified. Accordingly, the possibility for a *material metaphor*, in Semper, we shall maintain, is facilitated by a precise structure. It is one that we have already outlined in principle, but which may now be restated in a more succinct and logical form. Returning to our three-part argument, it will be remembered that at the second stage where the motive developed independence as a "self-illuminating symbol" (Podro 1982: 46) we characterized such as 'a figure where representation is *folded-in* upon itself.' In the third and final stage where the motive is transferred to another medium, we might say that the motive is now *folded-out* from itself, losing its literal and determined relation to materiality and craft. Initially the motif is folded-in, then later it is folded-out from itself, with respect to the logic of tectonics and material. The folding-out of the motive brings it into the 'carnival half-life' which Semper, as we have seen, characterizes as the 'true atmosphere of art' (Podro 1982: 49). So the motive, as we have here depicted it, floats between two materials, one old, the other new. The motif mediates, historically, between subsequent materials, and since tied, logically, to the formation of the former, allows the former to be 'seen-in' the presence of the latter.

Podro also submits that Semper relies upon a notion of "interpretive seeing" – the word he ascribes to Semper in this respect is "artistic appearance" (Podro 1982: 49) (Semper 1989: 190). We, surely, need to draw this out. What does it mean to say one can see the former material in the presence of the latter? Richard Wollheim, in his book *Painting as an Art* (1982), develops a notion of interpretive seeing with what he describes as *seeing-in*. Seeing-in is the imaginative ability, innate to all humans, of being able to see one thing in another – for example the ability to see a face in the clouds (figure 10). Wollheim maintains that "[s]eeing-in is a distinct kind of perception [... a] distinctive phenomenological feature I call 'twofoldness'" (1987: 46). He goes on to clarify the fact what is seen (namely the cloud) and what is seen-in (namely the face) are two side of the same perceptual experience – i.e. a double perception or 'twofoldness'. Literally speaking, there obviously is no face in the cloud. And when one sees the face in the cloud then one is in fact also seeing the cloud – there is no possibility of seeing a face in the cloud unless one is looking at the cloud. What one might term the real and imagined sides of the twofold perception are combined in one. As Wollheim maintains,

[t]hey are two aspects of a single experience, they are not two experiences. They are neither two separate simultaneous experiences, which I must somehow hold in mind at once, nor two separate alternating experiences, between which I oscillate [....] (Wollheim 1987: 46)

Wollheim also maintains that the ability to see-in is one that "[...] precedes representation" (Wollheim 1987: 47). To see a face in a cloud is not as yet to represent something. To paint the surface of a canvas, however, in such a way that one may see-into the paint, to see a face represented there, *this* involves the act of representation. Artistic representation is, therefore, premised upon imaginative perception, the ability to *see-in*.

This imagined relation of one thing with respect to another parallels what Arthur Danto (in *The transfiguration of the Commonplace*, 1981) has designated as the 'question of *aboutness'* – a question which for Danto, ultimately, defines the ontological status of art (Danto 1981: 52).⁴ For Danto, metaphor (which, 'roughly' put, places an idea or image in the light of another) dramatises the relation that is involved in the representation – that is the relation of *aboutness*, of one thing or image being about another – and thereby transfigures perception. Regarding visual metaphor, he explains,

When Napoleon is represented as a Roman emperor, the sculptor is not just representing Napoleon in an antiquated get-up [... but ...] Rather the sculptor is anxious to get the viewer to take toward the subject – Napolean – the attitudes appropriate to the more exalted Roman emperors [...] (*ibid:* 167).

In other words metaphors – verbal and visual alike – establish an expansion of meaning, whereby metaphoric association doubles-up on top of the literal significance of what is read or seen. The metaphoric structure that is involved, here, it may be argued, parallels what Wollheim has described as the phenomenological feature of 'twofoldness' (Wollheim 1987: 46).⁵

A metaphoric conception of art, or of architecture – after Wollheim and Danto – transcends Semper's more narrow, or specific concern with a transference between subsequent building materials, because the expressive content of metaphor derives from a highly relative relation between words, or images – that is any relation between any images or words may be constitutive of metaphoric expression – which is also to say that metaphoric expression need not be tied to material, or to expressive medium. The notion of metaphoric expression is useful, philosophically speaking because it is supremely flexible. In relating Semperian aesthetics to a more contemporary theory of metaphor, therefore, we can link and expand the theoretical density of Semper's argument, while we perhaps risk losing the specificity of his interest – namely, with meaning derived from materiality and craft, that is, with what we might call *material metaphors*.

Architectural representation

In developing this idea it is perhaps instructive to return to the start of this paper, where it was argued that the contemporary significance of Semper's thought follows from the way he allows us to squeeze between contemporary re-appropriations of Modernism on the one hand, and Post-modern critiques of the early Modern Movement on the other. Robert Venturi, for instance, famously promotes his concept of the decorated shed (figure 11, left) – that is a functionalist shed adorned with advertising. Architectural expression is reduced here to the order of applied image and text, as decorative and signifying content. In this model, expression is derived from the words and images that are applied – be they literal or metaphoric – whilst the material and architectonic disposition of the shed is rendered silent (figure 11, right). Moreover, the relation of architecture to metaphoric expression is somewhat arbitrary. Architectural representation is confined to the order of applied symbol.

On the other hand the notion of metaphoric expression allows us to interpret Modernism's 'pure' use of materials in a mediated sense. Le-Corbusier's "[t]he house is a machine for living in" (Le Corbusier 1931: 4), for example, establishes a metaphoric relation between the house

and the machine, through which the house, and the materials from which it is constructed, adopt the aesthetic properties of the 'idea' of a machine – rationalised, streamlined and functional. In this we see – at Villa Savoye for instance (figure 12) – how the building and its naked materiality is rendered metaphoric. The appeal to 'functionalism', in this case, is not literal as one might assume, but rather is evoked via metaphoric relation, one that is largely *ideational* in content and expression – i.e. what gets expressed is the *idea* of the machine. The use of materials at Villa Savoye, although 'honest' and 'literal' in a certain sense, is also intended to be qualified in relation to the *idea* of a machine – which, when interpreted in this fashion, represents a clear departure from Violett-Le-Duc. Depending on how you choose to see it, then, architectural representation is *either* rendered autonomous through naked materiality (in accordance with a line of thought that issues from Violett-Le-Duc), *or*, the representational motivation of materials is, largely, ideational.

In marked contrast to the arbitrary application of symbols (as with Venturi) and the ideational motivation of materials (as with Le Corbusier), we may for instance cite Semper's interesting interpretation of the Greek *situla* vase (figure 13). As Mallgrave notes, "[t]he Egyptian *situla*, or pail, was formed for the purpose of drawing water from the Nile; its raindrop-form, it was presumed, evolved from leather prototypes. It was carried on a yoke, one pail in front and one behind the bearer" (1996: 282-283). Hence for Semper the *situla*, which is made of ceramic, is metaphoric of leather – the raindrop-form, a memory of the deflection of leather when used to carry water. In this case we might say the content of the metaphoric relation, so implied, is primarily material in nature – material rather than ideational⁶ – and derived from function and technique. When applied to architecture, the significance this has is that representational content is neither applied arbitrarily nor strictly invented in the ideational sense, but rather derives its referential content from histories of craft and materiality – that is, architecture supports a liberal imagination, and a mode of representation that is mediated by histories of material/tectonic culture.

In concluding, we may now note that Semper wished to proposes two distinct points: i) that material memory, whether intended or not, is a significant phenomenon in the history of architecture, and ii) derived from the first, being that this fact ought to be acknowledged and thereby used as a conscious principle in design - one that Semper thought could safeguard against willfulness and caprice. Our detour through theories of metaphoric expression allows us to concur with the usefulness of the first, but alerts us to the implausible nature of the second - because metaphor is relational, such that the choice of one's relation is what it is, principally a matter of choice. Clearly it is the case that the phenomenon of material memory does occur in the history of architecture - the enduring significance of which would remain open to interpretation. Yet to argue that this phenomenon 'should' inform ones approach to design, is ultimately without normative ground – an 'is' does not necessarily constitute an 'ought'. Having said that, it surely is the case that there are various, and rich instances, where the notion of material metaphor may be used to cogently imagine and to interpret design. The inner reference to a past that the presence of material metaphor/memory maintain, provide an interesting, and supremely architectural way, to create poetic significance. Semperian aesthetics, indeed, allows for the 'carnival half-light' where tradition, materiality, craft and function are artfully mediated.



Figure 1 Gottfried Semper, 1878 (Semper 1989: 264).

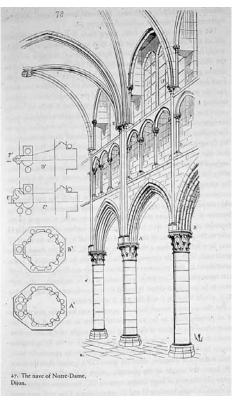


Figure 2 The nave of Notre-Dame, Viollete-Le-Duc (Hearn 1990: 99).



Figure 3 The Farnsworth House, 1951, by Mies van der Rohe (Tegethoff 1981: plate 21: 12).

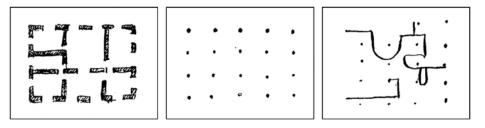


Figure 4

Sketches from 'Five points of a new architecture', *Oeuvre Complète 1910-1929* by Le Corbusier (Le Corbusier 1937: 129).



Figure 5

Left: Nature morte á la cruche blanche sur fond bleu, 1920, painting by Le Corbusier (Correr 1986: 49) Right: Villa Stein-De Monzie, 1926-1927, by Le Corbusier (Benton 2007: 175).



Figure 6 Left: Roman silk fabric, from *Style* by Semper, 1860 (Semper 1989: 227) Right: Tyrolean Feather Embroidery, from *Style* by Semper, 1860 (Semper 1989: 229).

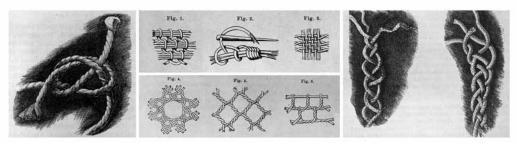


Figure 7 Left to right: knotting, stitching and plaiting, from *Style* by Semper, 1860 (Semper 1989: 218-222) Center bottom: Bobbin lace, from *Style* by Semper, 1860 (Semper 1989: 223).

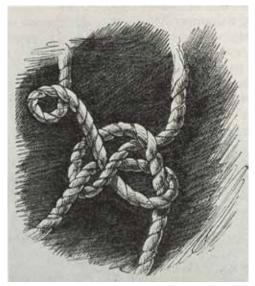


Figure 8 The knot, from *Style* by Semper, 1860 (Semper 1989: 219).

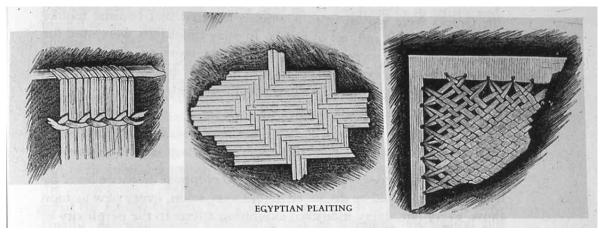


Figure 9 Egyptian wickerwork and decoration derived from plaiting, from *Style* by Semper, 1860 (Semper 1989: 225).



Figure 10 Ellery Lake, Sierra Nevada, photograph by Ansel Adams, 1934 (Wollheim 1987: 48).

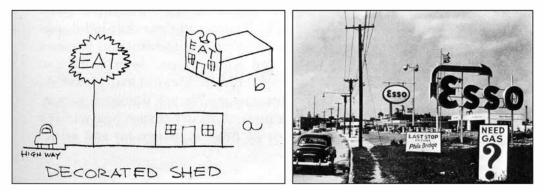


Figure 11 Left: Decorated Shed, Robert Venturi et al. (Venturi 1972: 76) Right: Road scene from God's Own Junkyard, Robert Venturi et al. (Venturi 1972: 76).

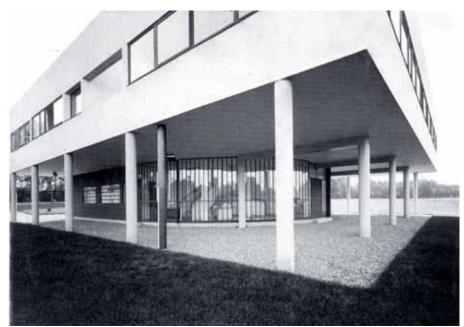


Figure 12 Villa Savoye, 1928, by Le Corbusier (Benton 2007: 196).



Egyptian situla, from *Style* by Semper, 1860 (Mallgrave 1996: 283).

Notes

- 1 In 1830 during the Paris revolution Semper writes, "I am so excited that it is difficult to do the slightest thing" (Mallgrave 1996: 11).
- 2 Regarding the correct use of building materials Viollet-Le-Duc states, "[w]e can give a special style, a distinction, to the simplest structure, if we know how to employ the materials exactly in accordance with their purpose." (Hearn 1990: 173)
- 3 Semper notes, in a footnote, the common origin of the German words wand (wall) and gewand (dress) (Semper 1989: 103-104).
- 4 Danto maintains that aboutness is a 'representational concept', one that is genuinely relational in that what is deemed to be represented does not have to be real, "[t]here need be nothing for an imitation to resemble. All, I think, that would be required is that it [i.e. the representation] resemble whatever it is about in case it is true" (Danto 1981: 69).

- 5 Wollheim in fact notes the similar structure that concurs between his description of artistic expression via projection (which is derived from seeing-in), and that of metaphor, but wishes to place emphasis on the perceptual, rather than conceptual, aspect of expression – "[...] we must insist that the predicates that double-up – or, if we don't think that doublingup is universal, whatever predicates are used in their place – not only are applied to the world metaphorically but guide or structure our experience of it" (Wollheim 1987: 85).
- 6 It may be noted that the distinction between an ideational and a material metaphor is

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Further references

Frampton, Kenneth. 1995. Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth relative rather than absolute, for clearly ideas do feature in our appreciation of materials, and materiality, in most cases, cannot be completely separated from ideas. The distinction is useful, nevertheless. One might, for example imagine a continuum of metaphoric content, where the physicality of 'materials' features more strongly at the one pole, and where the ideational attribute of 'concepts' feature more strongly at the other, and where a sliding scale of both merge between. In this case, what we have termed a material metaphor, would sit more toward the physical than and the conceptual side.

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