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Gottfried Semper and the Global Turn


Architectural History and Globalized Knowledge
Gottfried Semper in London

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All the world going to see the great exhibition of 1851.

Designed & etched by George Cruikshank.
It is a well-established fact that Gottfried Semper used other disciplines to develop his vision of architecture in *Der Stil* (1860–63) and earlier writings. Indeed, much attention has been paid to his sources and their transformation at his hands. However, rather than look at these sources as they affected his thought, in this chapter I would like to explore what it meant epistemologically that so many sources were brought together under the one ‘roof’ of his treatise and, furthermore, whether and what the reciprocal effect of such translational activity on the other disciplines might have been, if any at all. What I would like to posit therefore is that Semper’s work provides us with a unique opportunity to recover the traces of a process whereby a number of epistemic impulses were received, transformed, and passed on, at a particular moment – the 1850s, on either side of the Great Exhibition in London – that marked what one might call ‘the globalization of knowledge’. Secondly, what interests me here is a further and contemporary phenomenon of globalization of which, I contend, Semper may be seen likewise as an index and trace: the advent of the first global art history and the sites of its ‘birth’ in the World Exhibitions and the museum of the mid-nineteenth century. ‘Global knowledge’ and ‘global art history’ may trigger resistance qua terms, contaminated as ‘global’ is nowadays with the language of political and economic exploitation and contestation. Yet ‘global’ stands here for ‘worldwide’ and therefore is consonant with a profoundly positive term in the 1850s – an actors’ term – that signified the world and its recent connectivity in the wake of improved means of transport and communication. To be sure, it all happened on the crest of the wave of colonialism and its industrial, social, economic, and cultural underpinnings – one facilitating the other(s) in a chicken and egg(s) relationship. Perhaps then, for this chapter, the term ‘interconnectedness of art and knowledge’ might have been preferable. But ‘global’ retains the flawed meanings and hopes – both equally present – that the first realization of an interconnected world available to be known in its entirety (not as marvellous encounters but as real-time events connected reliably by devices) gave its actors.
Semper and the globalization of knowledge

When Vitruvius wrote *De architectura* in the first century CE, he claimed architecture as a meta-science and argued that architects needed to know mathematics, history, philosophy, medicine (*climata*), law, and astronomy, as well as drafting and the various crafts. And such remained the claims of architecture – to draw on many disparate areas of knowledge – from Leon Battista Alberti to Palladio, from Perrault to Quatremère de Quincy. Thus, the fact that Gottfried Semper should look beyond the professional boundaries of architecture to other disciplines need not have come as a surprise. Yet, his referents were no longer those of Vitruvius and his early modern predecessors but had shifted significantly and embraced newly rising domains of inquiry. Thus, over the years Semper turned to archaeology (especially to the debate on polychromy), anthropology (to Gustav Klemm, among others), botany and biology (Carl Linnaeus and Goethe), art history (he read von Rumohr), natural history and palaeontology (Georges Cuvier, Alexandre Brongniart, and Charles Darwin), philology (Gottfried Herder), and early psychology. Yet whereas in Vitruvius’s time architecture as a learned discipline was the new arrival vis-à-vis philosophy, astronomy, rhetoric, and the like, in the mid-nineteenth century Semper’s choices of cognate disciplines were not yet established as such. Indeed, when in the 1830s he began his writing career, they were not what they would be in the 1850s and even less what they would become by the 1880s.

Let us look at anthropology. To be sure, Wilhelm and Alexander von Humboldt mark the beginning of modern anthropology. But this embryonic field went through various formulations and searches for identity before it became an established academic discipline, with a methodology all its own and a set of problems, definitions, and vocabulary that distinguished it from other social sciences. To take
only one example, in Austria a formal professional Verein (association) of anthropologists under Carl Rokitansky (who was an anatomist) was formed only in 1870; the first anthropology museum in Vienna was established in 1876 (as part of the Natural History museum, since in Austria it evolved out of natural history, as the natural history of man); and finally, the first university chair in anthropology was established only in 1913.5

The same is true of the other disciplines Semper drew on. And it is precisely because they were not established and their methodologies were still in flux at the time of his writing that he could absorb them into his own somewhat bizarre architectural history-cum-architectural treatise, in which he scarcely dealt with architecture at all. Indeed, he created an alternative history of architecture and a very revolutionary one at that, as he upended many cherished myths (and, for example, argued for textiles and thatching as the origin of monumental architecture, the Urform of the wall, deriving from Bekleidung [dressing] and the deep-seated need to cover the body). Instead, Semper proposed a metabolism theory in which materials and instruments, hand movements and body parts blended with religious myths and carried the memories of earlier materials into later ones as ornament and ultimately into monumental art, from textiles through clay, wood, and metals to stone.6

Everything in any part of the knowledge spectrum was grist to his mill, and he achieved a glorious synthesis of most of the then-emerging academic disciplines that he had avidly followed. I will not go into detail with respect to each discipline, but as a group, embedded and reshuffled inside his treatise, they turned it into an up-to-the-minute compendium of scientific knowledge of which architecture was the climax, even if paradoxically
it was not very much discussed as such. As a result, Semper’s treatise became a
grand box of ideas, rather in the way that the Great Exhibition was a grand box
containing the world: a ‘global’ treatise that matched and entered into dialogue
with a ‘global’ exhibition.

But what is equally important to stress here is the consequence of Semper’s
interweaving of disciplines: having drawn from many disciplinary academic pools,
he also returned his powerful insights back into the disciplinary melting pot from
which he had drawn his own inspiration. Thus, not only did he create a synthesis
of knowledge for use in architecture; he in turn also affected the individual areas
of knowledge that he drew into his orbit as well. And since – whatever else he had
posited – ornament and style were two fundamental categories that he showcased,
these too traversed into the cognate disciplines he had involved in his thinking.

Of course, and not surprisingly, most of Semper’s impact was therefore on dis-
ciplines in which style and ornament could be useful, or rather, on those disciplines
that could appropriate both style and ornament as key instruments. These were
predominantly the display-and-object-focused disciplines – that is, those disciplines
with a museum dimension. And they were surprisingly many: anthropology, art his-
tory, archaeology, and folk studies (of high visibility in the era of nationalism). In
many ways they were related, although their objects of study were quite different –
and the reason they seem related to us now is precisely because they share method-
ologies. In short, having put ornament on the map as a fundamental diagnostic site
for culture, and style as the means of reading it, Semper offered significant bridges
to any discipline focused on understanding, reconstructing, and exhibiting culture.

**Anthropology**

Once again, anthropology is a good example. Speaking its language, Semper was eas-
ily reabsorbed and reprocessed, and, indeed, most of the early anthropologists had
read Semper and had taken his theories to heart. Thus, it became the norm for anthrop-
ologists such as Hjalmar Stolpe (who inaugurated the practice within his discipline)
to use ornament as a means to identify style and to establish the provenance of objects
on this basis. In his 1892 essay on *Entwicklungserscheinungen in der Ornamentik der
Naturvölker* (which, incidentally, was read and footnoted by Alois Riegl in his *Stil-
fragen*, thus returning the argument back to an art historian), Stolpe argued that the
comparative study of ornament (“das vergleichende Studium der Ornamentik”) was
the most valuable aid in developing a classification system of objects for both museum
display and research purposes. Likewise, Henry Colley March, an early British an-
thropologist and polymath, in his article *The Meaning of Ornament, or Its Archaeology
and Its Psychology* of 1889, also sounded very Semperian: “As soon as man began to
make things, to fasten a handle to a stone implement, to construct a wattled roof,
to weave a mat, skeuomorphs [structure-form] became an inseparable part of his
existence, grew, as it were, with the growth of his brain, and ultimately occasioned a
mental craving or expectancy”.

Writing only three years later, Henry Balfour, curator of the ethnographic mu-
seum at Oxford, stressed the importance of the decorative arts for the development
of Oxford’s museum, which was essentially the collection of General Pitt Rivers. The latter’s work in the 1870s provided stimulus and interest in the “absolute origins” of man, and Balfour described it in these terms in his *Evolution of Decorative Art* of 1893: “The illustration of the gradual growth of Decorative Art from simple beginnings was a part of his scheme for establishing series of objects with a view to tracing the stages in the evolution of all the material arts of mankind”. Indeed, in many ways Pitt Rivers’s method and findings were of one piece with Semper’s: his series, intended to show the origin, growth “step by step”, and variations of certain patterns, identified “degradation” of designs, successive copying, and derivations such as on gourds and pottery “from the strings by which once vessels were carried”. And in a prophetic conclusion that anticipates Riegl’s exactly contemporary *Stilfragen* (1893) with his concentration on the arabesque and palmette as key ornaments in ancient and Middle Eastern art, Balfour added, “whole chapters might easily be written upon the history and variations of single designs or patterns”.10

In the wake of Semper’s interest in tattoos and the general admiration for Maori decorations (another anthropology-related interest of his), German-trained anthropologist Franz Boas went even further and used decorative typology to examine body painting among North American Indians. Finally, Alfred C. Haddon, in his *Decorative Art of British New Guinea: A Study in Papuan Ethnography* (1894) and the better known *Evolution in Art: As Illustrated by the Life-Histories of Design* (1895), argued that “Professor G. Semper was the first to show that the basket-maker, the weaver, and the potter originated those combinations of line and colour which the ornamentalist turned to his own use when he had to decorate walls, cornices, and ceilings”. A biologist, professor of zoology at Dublin, and anthropologist, Haddon focused on the decorative transformation and transference of artificial objects such as fastenings, textiles, and pottery (which he termed “skeuomorphs”) and on the decorative transformation of natural objects (which he termed “zoomorphs”, “phylomorphs”, “anthropomorphs”, etc., depending on their origins in the natural world). He was interested in classification and hence in style, but also (mainly) in meaning. “It will often be found that the more pure or the more homogeneous a people are, the more uniformity will be found in their art work, and that florescence of decorative art is a frequent result of race mixture”, he concluded.13
Art history and archaeology

Art history was another discipline in a ‘receiving’ mode that appropriated much from Semper, and by way of him from anthropology, in what thus became a three-way dialogue between these disciplines. In its early years, art history was not separate from architectural history (which was ostensibly Semper’s subject). Thus, Jacob Burckhardt wrote a history of architecture; so did Heinrich Wölfflin (whose *Renaissance und Barock* of 1888 is mostly on architecture and whose *Prolegomena zu einer Psychologie der Architektur* of 1886 is entirely on it); so did August Schmarsow; and so did Alois Riegl (his *Barockkunst in Rom*, conceived in 1901–2, is largely focused on architecture). Since Semper wrote as an architect/theorist and focused so much on style, which was normally the art historian’s province, both the architect and the art historian responded. Archaeology also provided a bridge between them, thus creating an even more complex intersection of disciplines. The style category emerged as a profoundly useful classification system and united everything and everyone.

For archaeologists, style was fundamental as well, as they needed a quick method to sort out the enormous amounts of excavated materials brought up on vast excavation sites and shipped in quantities to the museums of the world. And the architect’s and art historian’s style offered a perfect ‘sorting’ instrument. In addition, Semper’s focus on the impact of materials and their handling on the production of ornament encouraged a ‘materialist’ reading from archaeologists such as Alexander Conze (director of the Berlin sculpture museum and of the German Archaeological Institute in Rome) – although this reduction of Semper’s theory (which included a significant concern with symbol) was not overlooked by art historians, who sharply criticized it.

However, as I have shown, it is in art history that most of architecture’s categories identified by Semper were telescoped, worked out, and then imported back into architecture. Style, its history, and its evolution became staple topics both in teaching and publications; that is, both in the ‘strong’ academic discourse and through more popular treatments, such as Julius Langbehn’s *Rembrandt als Erzieher* of 1890. Indeed, art history became a melting pot of, or a funnel for, available theories about living, culture and civilization, art, society, economics, race and nationhood, daily life, etc. And Semper provided much persuasive support for these inquiries, having himself achieved a synthesis of disciplines with a strong idea uniting them. As an art historian, his history was wrong, as Riegl demonstrated eventually in *Stilfragen* (stone ornaments predated textile ones in the Middle East, rather than the opposite, as Semper had argued). But it is important to stress that Riegl had to write a major, long book in order to refute Semper and that he felt it was important to do so (all the while criticizing the followers of Semper rather than Semper himself) – which in itself confirms just how popular and important Semper had become for the field at that time. Most important across all disciplines, but especially for art history, was the concept of culture, its origins, where it is expressed and how. And of particular interest for architects was also the question of how culture can be defined and affected by artistic (architectural) intervention. The issue had been central for Semper and constituted the kernel around which much of his theory had revolved ever since the...
Great Exhibition, when he deplored the sorry state of contemporary art as presented there and sought to identify a means of rectifying it. In fact, in a revolutionary move, Semper had posited the decorative arts and the most basic objects of daily use as being the first to signal cultural shifts, as their ignition mechanism and as the origin of the language of the monumental arts, and it was to those ‘minor’ arts that he looked as the possible saviours of the contemporary morass. Ultimately, he proselytized for the architect’s agency, rather than historical research for its own sake – he wanted to intervene in modern culture, especially in the production of objects, and create the conditions for its reinvigoration, starting from this ground zero. In the process, he gave the study of the decorative arts an added theoretical weight, and art historians responded both in their writings and in their museums.

Finally, in developing its own methods, art history emphasized and theorized the detail (central to Semper) through the development of connoisseurship. While there is no recorded link to architecture here, this methodological turn to give prime importance to the detail (as the site of artistic essence and hence authorship) had received much early visibility from Semper and had been broadly disseminated. His diagnostic elements in architecture that display evolution were the details and the small gestures – be they forms or ornamental patterns – and it is these that, in his view, stood in direct communication with the crafts and the artisan’s hand. That “Gott ist im Detail” (God is in the detail) should become a commonplace of discourse not only for Aby Warburg but also for Mies van der Rohe conveys the

Figure 6.
Plate from A. Conze, Melischn Thongefässe, 1862 (Courtesy of the Harvard Libraries).
centrality it acquired over the next decades for both fields. Although, in a brilliant essay, Carlo Ginzburg credited detective fiction (Conan Doyle), early psychiatry, and forensic medicine for this turn towards the detail, it was an architect, Semper, who was actually the first (by a generation) to identify the significance of the detail. An obvious site of attention for architecture, it was only later transported to art history.

**Empathy theory: Psychology, art history, and architecture**

But more than style, ornament, and detail, one of the key imports from Semper into art history was his proto-empathy theory approach to the arts, which put the body as producer and recipient of art at its centre. And here the founders of the discipline – Heinrich Wölfflin, Alois Riegl, August Schmarsow, Aby Warburg – all drew from Semper because he was one of the first, if not the very first, to convert what was available in philosophy and proto-psychology into a full-blown theory. Indeed, the second printing of *Der Stil* in 1878–79, co-edited by Semper’s art historian son Hans, and likewise the publication of his *Kleine Schriften* in 1884, had brought Semper back to the attention of the generation working in the late 1880s and 1890s on empathy theory and had given him a second life in their works.

For Wölfflin, for example, the line of thinking he inaugurates in the *Prolegomena zu einer Psychologie der Architektur* (1886, his doctoral dissertation) would have been unthinkable without Semper and without early psychology writings. To be sure, Wölfflin does not credit Semper in his text with a determining role in shaping his thought, but he hardly credits any art historian or architectural historian, only a handful of psychologists. Yet in *Renaissance und Barock* (of 1888, his *Habilitationsschrift*), he states:

> Nor, in my opinion, is a style a uniformly accurate mirror of its time throughout its evolution. … when the style, having become hardened and exhausted by uncomprehending misuse, turns more and more into a lifeless scheme. When this happens the temper of a people must be gauged not in the heavy and ponderous forms of architecture, but in the less monumental decorative arts; it is in them that formal sensibility finds an immediate and unchecked outlet, in them that the renewal takes place. A new style, in fact, is always born within the sphere of the decorative arts.

And he proceeds to make the now famous argument on the Gothic shoe as the origin of the Gothic arch. This is a word-by-word repetition of a passage in the *Prolegomena zu einer Psychologie der Architektur*, although in 1888 the statement is footnoted to Semper (*Der Stil*, vol. 2, p. 5). Indeed, Semper’s presence among Wölfflin’s sources should not be surprising, since two of Wölfflin’s teachers, the philosopher Wilhelm Dilthey and archaeologist/art historian Heinrich von Brunn, were admirers of Semper and used his work.

I have already mentioned Alois Riegl, one of the founding fathers of the discipline of art history, and his engagement with Semper: refuting his historical findings did not mean that he did not use him, and he had many positive things to say about *Der Stil*. The main thrust of *Stilfragen* was to correct Semper’s claim that textile forms predated stone ones, but as for the importance of the decorative arts as cultural DNA, this also became a major theme for Riegl, who argued that there lay the
clearest signs of “Kunstwollen” (will to art) in any culture. And the two categories he introduces – “taktisch/haptisch” and “optisch” – to evaluate the evolution of art are deeply engaged with Semper’s proto-empathy aesthetics.  

Another figure influenced by Semper in the domain of empathy theory was Theodor Lipps. He was no art historian but a philosopher who taught aesthetics and psychology at the university in Munich (and was a very popular lecturer, just like Wölfflin). He had a significant impact on the development of empathy theory, which was profoundly Semperian in his hands. Like Wölfflin, he also included no footnotes and no acknowledgements in his writings, but when Lipps describes “das technische Kunstwerk” (the technical artwork), the term includes architecture alongside decorative and industrial arts, furniture (seating), pots, and carpets – and it sounds as if it were a straight quote from Semper. More important still, many of his examples were taken from architecture (the column, the capital), and he, too, turned to materiality as key category of artistic making.

For sui generis art historian Aby Warburg (who used empathy theory to propose “Pathosformeln”, recurrent deep-seated images that cut across cultures historically), Semper was also one of his principal sources. As Gertrude Bing, his lifelong assistant, put it, Semper was “a towering figure in the art theory of the late nine-
teenth century”, and together with Adolf von Hildebrand they both affected Warburg deeply.28 Most revealing is the fact that for Warburg “no sphere of existence must be considered too lowly, too obscure or too ephemeral to provide evidence”.29 This was precisely Semper’s approach, as he had blurred the edges between high and minor arts, effectively raising the significance of the latter above that of the monumental ones. Indeed, Kurt Forster has noted that both Warburg and Riegl, at about the same time, “shared a special feeling for the apparently inconsequential and marginal”, Riegl working on nomads and rug making and the migration of individual motifs (see, for example, his analysis of the Ionic capital volute), while Warburg looked at waxworks and votive sculptures in the Renaissance, rituals among North American Indians, anthropology (Franz Boas), etc.30 Without Semper’s lead, this orientation would have been inconceivable.
A noted architectural historian, Cornelius Gurlitt, also turned to Semper: in his numerous writings, he was very pro-Baroque, a staple topic for empathy theorists (he had written the first history of Baroque architecture) and very pro-Semper; and he was himself very active in the decorative arts movement, especially in Dresden, where he taught for many years and had a whole generation of architects as his students (notably including Hermann Muthesius, Hugo Häring, members of Die Brücke, and others). Moreover, in his book on the nineteenth century, he argued forcibly for the greater importance of Semper’s time in Britain and his leadership role in the conception of the South Kensington Museum (today the Victoria and Albert Museum), claiming that he had not been sufficiently credited in Britain for his innovations.31

Finally, Ernst Kapp, a scholar at the intersection between fields – part philosopher of technology, part member of the empathy theory sodality, part architecture/art theorist – was likewise indebted to Semper’s brand of architectural anthropology and empathy theory.32 Speaking to and drawing from several fields, like Semper, and bringing them into an unexpected conversation, Kapp argued that unconscious “Organprojection” (organ projection) was a fundamental feature of instruments and also of higher-level modern inventions such as the telegraph, which resulted from the projection of the human nervous system.33 Furthermore, he defined “Bekleidung” (dressing) as “eine portative Wohnung” (a portable habitation) and argued for the etymological connection between “Gewand” (garment) and “Wand” (wall) – the same argument Semper had made when he derived architecture from textiles.34

Figure 9. Die amerikanische Axt und der menschliche Arm (The American axe and the human arm), illustration from E. Kapp, Grundlinien einer Philosophie der Technik, 1877 (Courtesy of the Harvard Libraries).

Figure 10. Tiefsee-Kabel von 1865 (Deep-sea cable from 1865), illustration from E. Kapp, Grundlinien einer Philosophie der Technik, 1877 (Courtesy of the Harvard Libraries).
Global art and comparative aesthetics (*vergleichende Ästhetik*)

Following this review of Semper’s mediation between scientific fields and participation in the globalization of knowledge, there are two further important points to raise here. In the first place, it is essential to state that the Great Exhibition of 1851 had been the agent facilitating this melting pot of disciplines – from anthropology to economics – as no other event, library, or publication could have done. Whatever may have already been present in the culture to invite dialogue – and I do believe that no event occurs ex nihilo, but is prepared by countless previous gestures – the Great Exhibition mobilized and gave powerful impetus to this collision of discourses precisely because it had a visual – and therefore physical, that is, tangible – form and hence impact. People could see and touch ‘alien’ objects in a way that they had not been able to before and that no single journey or book permitted them to do. Assyrian and Chinese artefacts rubbed shoulders with steam engines and machine-produced wares, as well as with Maori and Canadian Indian canoes. This global aspect could not be missed, and moreover the entire publicity for the event underscored this dimension. Inevitably, it caused methodological dislocations, and Semper responded to these in such a way that his ideas before 1851 and after 1851, although seemingly similar, are on two sides of a deep chasm.

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*Figure 11. Perspective of the Crystal Palace at London’s Great Exhibition, plate from Dickinsons’ Comprehensive Pictures of The Great Exhibition of 1851, 1854 (Courtesy of the Harvard Libraries).*
Indeed, beyond the intersection of disciplines it invited, the realization of a
global and connected art (and its history) was the other major contribution of the
Great Exhibition to Semper’s work. This then is my second main argument here –
that what had entered discourse decisively at this moment was the possibility of
what we now call global art. At the conceptual level, the Great Exhibition caused
a **mise-en-abyme** of all that was known before. This enormous **Handelsraum** (mer-
cantile space) charged and dramatized everything by unexpected adjacencies, con-
trasts, and connections. Semper described it as Babel. One could also describe it as
a Humboldtian playground of cultural simultaneities and comparisons. For Renais-
sance scholars, this resembles an Industrial Revolution version of the sixteenth-cen-
tury **paragone** (comparison) between the arts at a grandiose level – materials, tech-
niques, nationality, ethnicity, scale were on display, clashing and bouncing off each
other.35 Comparison was the very mode of the Great Exhibition.

In this global context, Semper proposed what amounts to a **vergleichende Äs-
sthetik** (comparative aesthetics) as an analytical tool, and this became another major
contribution he made to scholarship of many stripes.36 The Great Exhibition invited,
indeed presupposed, the museum and its aestheticizing mode: it was a visual display
of things compared to each other. And comparative aesthetics comes straight out
of it. Certainly, this method was already present in Semper’s work in Paris, and his
treatise **Die vier Elemente der Baukunst** (**The Four Elements of Architecture**; written
1850, published 1851) bears the subtitle **Ein Beitrag zur vergleichenden Baukunde**
(**A Contribution to the Comparative Study of Architecture**). This approach went back
further, to the anthropological atlas, which had gained its traction precisely from
such comparisons between peoples and cultures.37 But with the multitude of his-
torical times and geographic variation showcased by the exhibition, this tendency
in his thought was much enhanced and dramatically justified. Fabrication moving
decisively into the foreground at the London exhibition – after all, its principal aim
was to showcase Manufacture – also confirmed Semper’s interest in making as his
red thread.38 But appearance, hence style, remained the backbone of his system of
classification, and it gave his comparative aesthetics a focus that could be used to
compare and find commonalities between the heterogeneous objects gathered in
London’s Crystal Palace above and beyond their cultural diversities. In short, the
global aspect of the exhibition facilitated the development of his comparative aes-
thetics and sharpened it into a sophisticated tool.

This event, then, that collected the world inside one glass box on a lawn in
London also encouraged two essentially contradictory impulses: one global, the
other local. One cut across nations without differentiating between them and had
a universalist cast; the other recognized the specificity of each culture. Both were
present as lessons to take home from the Great Exhibition: on the one hand, the
study of man in general terms that encouraged finding and sometimes forcing com-
monalities across space and time and deeply marking the field of anthropology and
related disciplines to this day (the internationalist stream); on the other, the study of
manifold but specific cultures within their own local peculiarities, which remained
embedded in ethnographic work focused on the folk art of the European nations
primarily but evolved to include Asia (Japan, China, Central Asia, etc.) as well as
Africa. The two impulses did not intersect much, and their respective museums did
not either (and this continues to this day – folk museums are separate from anthropology museums).

Semper was much more taken with what the global view had to offer; for him, the world became his oyster. Indians and Inuit, Assyrians and Trinidadians, Chinese and Maoris, Celts and North Africans shared one (glass) roof with the Europeans and their wares. Faced with such variety, he did not attempt any nation-by-nation analysis of form-making, in the manner of Owen Jones’s *Grammar of Ornament* (1856), but tried to tease out an evolutionary sequence of stages in the development of monumental form, cutting across nations and the globe. In the process, he dignified not only the wares of daily life, the so-called *Kunsthandwerk*, putting it alongside the high arts, but also raised the issue of looking broadly geographically. One could say he was the first global art historian. Warburg certainly owed a great deal to the anthropologists – Boas, Tylor, etc. – but his impulse, as an art historian, to visit the Pueblo Indians as well as his turn towards a psychology of cultures may still be traced back to Semper. Indeed, as we have seen, Semper operated upon anthropology and may have penetrated Warburg’s thinking both directly and indirectly through the next generation of anthropologists (e.g. through Tylor’s *Primitive Culture* of 1871) and through August Schmarsow, with whom Warburg studied in Florence.\(^{39}\)
As I argued earlier, Semper was acting powerfully upon art history as a discipline, and it is therefore important to recall just how different his comparative universalist approach was from what Jacob Burckhardt, for example, was doing at exactly the same time – both in his 1855 *Der Cicerone* and his 1867 *Geschichte der Baukunst* (later called *Geschichte der Renaissance*). Both works drill deep into a single culture (Italian) and a focused historical period (the Renaissance) and explore its art, customs, politics, personalities, archives, and so on. In fact, the comparison of Semper with Burckhardt is very pertinent here, for they were completely contemporaneous in their publication dates and were also colleagues at the Eidgenössisches Polytechnikum (Swiss Federal Polytechnic, today the Eidgenössische Technische Hochschule/ETH) in Zurich, while they were in every other way so diametrically opposed in approach. To be sure, art history went the way of Burckhardt, not Semper, and Alois Riegl’s *Stilfragen* was written precisely to put to rest any historical claims that Semper may have had for his ‘global’ arguments (such as the derivation of stone ornament from textiles). But even if art history did not embrace a global perspective at the time, some of it lingered – most notably in Josef Stryzgowski’s work – and permitted the current return to this methodology to find reference points in the discipline’s past nevertheless.

It should be noted that Semper’s brand of vergleichende Ästhetik was particularly important for the developing museum display, especially in collections of anonymous objects (rather than those of major artists) – meaning anthropology museums and archaeology collections. The power of this model was so strong that it took a public debate for a movement in a different direction to be initiated. In 1887, German anthropologist Franz Boas fought against the classification and display, in the museum setting, of objects according to their physical resemblance, irrespective of their cultural origins and argued instead that they should be placed in the setting of their own culture, to allow their real meaning to be understood. It was he who pioneered the “vitrines” as a display strategy – as a re-enactment of a moment in time that displays objects in use. This approach was perceived as novel and radical at the time and caused a well-publicized debate between Boas and Otis T. Mason, curator at the U.S. National Museum in New York. Perhaps it is not surprising that Boas, educated in the German environment in which the history of culture was a prominent concern across disciplines, should have pioneered it for anthropology. His vitrines – so illustrative and visually appealing – spoke equally to the scientific concerns of the field and to the exhibition-as-show (or as panorama) mentality that was generated by the universal exhibitions and pervaded the world of scholarly museums. Indeed, Boas conceived his vitrines as panoramas in which sculpture and painting blended into each other to create lifeliness, figures and objects emerging from a chiaroscuro background that facilitated and enhanced the illusion of life. But if his display ran counter to Semper’s proto-structuralist model, it did nevertheless retain his focus on man as a maker of tools, objects, artefacts, and so on.

Which brings me back to where I started. The impact of Semper on the disciplines, especially of art history, also passed through the reconceptualization of the museum – and perhaps most deeply so. What Semper had done was to reinterpret the Great Exhibition, as a mentality-changing event, into a methodology for analysis – of art,
architecture, crafts, and the relation of man to the products of mind and hands, of labour and memory. He laid the foundations of a first global art history, as well as providing a site for the globalization of knowledge – meaning not only that he engaged with territorial geography but also with disciplinary territories, with a broad geography of disciplines. A powerful synthesis of available knowledge, Semper’s work offered endless points of contact with other fields – returning the insights of art-making to the growing number of disciplines focused on man. Equally important is the fact that Semper’s lens for analysis was twofold: on the one hand, the maker; on the other aesthetics as an analytical underpinning. Imperceptibly entwined, these both carried over the connection to other disciplines too.

Perhaps it might be useful to think alongside philosopher Gianni Vattimo, who has argued that art (and artists) rather than science (and scientists) may have generated the concept of progress. Although in this case Vattimo is thinking of Giorgio Vasari and his history of Renaissance art based on progress, Semper may be another, later example of leadership coming from the visual arts in the domain of the history of knowledge. With Semper, architecture effected a synthesis and led the way – a final, grand gesture before its demise as the Vitruvian meta-science.
1. By now the literature on Semper is vast. In addition to the chapters in this volume, for general bibliographies and discussions of Semper’s sources see H.F. Mallgrave, Gottfried Semper: Architect of the Nineteenth Century, Yale University Press, New Haven 1996; W. Nerdinger and W. Oechslin (eds.), Gottfried Semper 1803–1879: Architektur und Wissenschaft, Prestel and gta Verlag, Munich and Zurich 2003.

2. The term ‘global’ emerged in the 1670s to denote ‘spherical’: the meaning ‘universal, worldwide, pertaining to the whole globe of the earth’ is first found in French in the 1890s (Online Etymology Dictionary, www.etymonline.com).


4. See H.F. Mallgrave, Gottfried Semper, see note 1; and for a more specific focus on this issue, A. Payne, From Ornament to Object: Genealogies of Architectural Modernism, Yale University Press, New Haven 2012, Chapters 1 and 2.

5. See A. Payne, From Ornament to Object, see note 4, p. 99.

6. Ibid., Chapter 1.


10. Ibid., p. vii.


12. A.C. Haddon, Evolution in Art: As Illustrated by the Life-Histories of Design (1895), Scott, London 1902, p. 75. See also his Decorative Art of British New Guinea: A Study in Papuan Ethnography, Royal Irish Academy, Dublin 1894.


17. A. Payne, From Ornament to Object, see note 4, Chapter 3.

18. A. Riegl, Stilfragen, see note 16.


20. C. Ginzburg, Clues: Roots of an Evidential Paradigm, in C. Ginzburg, Clues, Myths and the Historical Method, trans. J. and A.C. Tedeschi, Johns Hopkins University Press, Baltimore 1992 (1st Italian ed. 1986). The sequence of publications all later than Semper’s Der Stil confirms Semper’s key role. Morelli published his Die Werke der italienischen Meister in 1880; Conan Doyle’s Sherlock Holmes appeared first in 1886 (Doyle was born in 1859, a year before the first volume of Semper’s Der Stil saw the light of print); and Freud’s work is also of a generation later than Semper’s (he obtained his doctorate in 1886, received his Habilitation degree in 1885 and set up his practice in 1886).


22. See, for example, his mention of J. Volkelt, Der Symbol-Begriff in der neuesten Ästhetik, Dufft, Jena 1876, p. 11 (ed. 1999).


24. See the dedication of his Habilitation thesis, Renaissance und Barock, to both von Brunn and Burckhardt. Wölfflin was a student of Dilthey’s and was close to Burckhardt throughout his life. Wölfflin’s mention of Semper regarding the Gothic in the Prolegomena is to an analogy with scholasticism only, not to the passage he now cites in detail in Renaissance und Barock.

25. On these concepts and Wölfflin’s critique, see A. Payne, From Ornament to Object, see note 4, p. 149; A. Payne, Beyond Kunstwollen: Alois Riegl and the Theoretization of the Baroque, in A. Riegl, The Origin of Baroque Art in Rome, Getty Institute, Los Angeles 2010, pp. 1–33.

26. “Unter technischen Kunstwerken verstehe...

... Der 'Sprechende' aber ist im technischen Kunstwerk letzten Endes jederzeit das Material". *Ibid.*, vol. 2, p. 520.


32. E. Kapp, *Grundlinien einer Philosophie der Technik: Zur Entstehungsgeschichte der Cultur aus neuen Geschäftspunkten*, Westermann, Braunschweig 1877. For an in-depth evaluation of Kapp and his intersection with architecture culture, see A. Payne, *From Ornament to Object*, see note 4, pp. 79–82.

33. A. Payne, *From Ornament to Object*, see note 4, pp. 139–42.


35. The comparison between the arts, in particular between sculpture and painting, became a critical debate in the Renaissance and has its locus classicus in the collected letters of several major artists canvassed by Benedetto Varchi to express an opinion on the subject and the ensuing (bitter) debate. The artists included Michelangelo, Bronzino, Vasari, and others. See B. Varchi, *Discorso su la maggioranza delle arti*, Florence 1545.

36. Semper titles his treatise "praktische Ästhetik", yet he also discusses the "vergleichende Stillehre", which he equates with his "praktische Ästhetik", bringing it full circle to a "vergleichende Ästhetik". He also turns to "vergleichende Sprachforschung" with approval – language is indeed a frequent analogue for him – indicating that the comparative method is central to his thinking. G. Semper, *Der Stil in den technischen und tektonischen Künsten, oder Praktische Ästhetik: Ein Handbuch für Techniker, Künstler und Kunstfreunde*, vol. 1, Verlag für Kunst und Wissenschaft, Frankfurt am Main 1860, p. 2.


support of his notion of “Kunstwollen”. Yet he stated that Semper had “exaggerated the status of textile arts over other media, something that we can no longer prudently accept”. *Ibid.*, p. 40.


_44._ Archaeology museums tended to exhibit the major works of art rather than objects of daily use, which were used for research and dating and were kept in the collections but not exhibited as such. I am grateful to Suzanne Marchand for discussing this aspect of museology with me. It should be noted that with the major find of Roman objects in Austria, which were famously catalogued and discussed by Alois Riegl in his *Spätrömische Kunstindustrie* (1901), simple objects began to receive validation as worthy of exhibiting (belt buckles, harness hardware, pots, etc.). Earlier, Alexandre Brongniart (director for many years of the Sévres manufactory and one of the authors read with interest by Semper) had created a museum at Sévres in which he showed materials, tools, and products brought from all over the world (Chinese, Japanese, African, from Iznik and the Indian Ocean, etc). This example, known to Semper during his years in Paris, may have found an echo in his own conception of the museum. I am grateful to Suzanne Marchand again for sharing her research on the porcelain industry with me. See T. Préaud, *Brongniart and the Art of Ceramics*, in D.E. Ostergard (ed.), *The Sévres Porcelain Manufactory: Alexandre Brongniart and the Triumph of Art and Industry, 1800–1847*, Bard Graduate Center, New York 1997, Chapter 5.


_46._ See A. Payne, *From Ornament to Object*, see note 4, p. 101.