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ART AND THE HUMANITIES

TEXTS & DOCUMENTS

EMPATHY, FORM, AND SPACE

PROBLEMS IN GERMAN AESTHETICS,

1873-1893

Robert Vischer
1873

Conrad Fiedler
1878

Heinrich Wölfflin
1886

Adolf Göller
1887

Adolf Hildebrand
1893

August Schmarsow
1893

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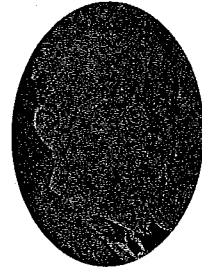
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INTRODUCTION AND TRANSLATION
BY HARRY FRANCIS MALLGRAVE AND ELEFTHERIOS IKONOMOU

1994

THE ESSENCE OF ARCHITECTURAL CREATION

August Schmarsow
(1893)



Introduction

Whoever is given the task of teaching medieval and modern art history at one of the greatest universities in Germany certainly has good cause to reassess the established viewpoints that will determine his treatment of so broad a historical field.

After his lengthy teaching career at other universities, Anton Springer¹ was in a position to ask himself whether any law could be found to apply to the evolution of art over the vast expanse of time that he commanded and whether the tangible recurrence of the analogous changes permitted a consistent form of presentation. Or the question of the essence of the fine arts might be answered, at least for a specific historical period, in the words of such a thinker and poet as Dante—as Hubert Janitschek attempted to do for Giotto, although not without seeking a connection to the present. Otherwise, the broad compass of art history makes it clear that the essence of art would be far too difficult to sketch in brief outline; and the historian, confronted as he is by a vast wealth of phenomena, is most unlikely to have a ready answer.

Even limiting himself to the narrower context of the *fine arts*, and to the first art that is generally understood under this rubric, the historian at once faces an objection from the philosopher. The former has always regarded *architecture* as the basis for all development, but today's aesthetician objects to this. "It does not belong to the fine arts but is a building art," he says, and he even adds the harsh rebuff, "architecture is not a free art at all. It is an unfree art, and there is absolutely no theoretical justification for distinguishing it from tectonics and the other

Kunstwissenschaft

Kant

Art Historian
Philosopher
Architect

applied arts as a free or fine art."* We fare no better when we ask thoughtful architects; they call architecture an "art of dressing" [*Bekleidungskunst*] and view their activity as little more than superficial composition of a purely technical and decorative kind, the pasting up of inherited styles on the framework of a functional construction, during which process even the best of them is at a loss to summon up any creative enthusiasm.**

Schliepmann
"Semper"

proportion
intention
Beaux Arts

To the historian who has respectfully and admiringly surveyed the majestic progress of architecture over millennia, it will appear that in our zealous striving to emulate the individual forms, styles, and goals of the past the spiritual link that binds the parts to the whole and the means to the end may temporarily have been lost. The very term "art of dressing," even if it springs from a paradoxical remark of so gifted and learned an artist as Gottfried Semper, can in a practical sense only lead to superficiality. And Eduard von Hartmann's claim that "architecture is tectonics" is simply a contradiction in terms in that we have to ask ourselves with astonishment whether the Greeks were acting in ignorance when they distinguished the building art as ἀρχιτεκτονική [*architecture*]—that is, as a basic, original, we might say, "primordial and pure creation"^{architektoniko}—from the technical achievements of craftsmanship. Indeed, today it seems as if nobody knows what constitutes architecture. Notwithstanding all our historical erudition, we have everywhere a vague feeling of alienation; we feel no inner, human warmth in its works; it is an art to which we lack a natural relation. nature as link and transcendence - body

idi not the
not of
dressing
building
a) much
the art of
dressing
the body

Is it not time to inquire into the origin and innermost essence of architecture? The genetic approach, long accepted in the historical disciplines and now (the genetic approach?)

*Eduard von Hartmann ("Gehört die Baukunst zu den freien Künsten?" *Gegenwart*, 1887: 391ff.) replies that there is no scientific justification whatsoever for distinguishing architecture from the tectonic arts and the other craft industries. See also the same author's *Asthetik* (Berlin: C. Duncker, 1886-1887), 1: 461ff., 600. [Wilhelm] Wundt, on the other hand, precisely places architecture together with music as one of the "liberal arts."

filming Semper

**Hans Schliepmann, *Betrachtungen über Baukunst* (Berlin: Seydel, 1891), 22. He also complains (p. 31): "Owing to a truly amazing dullness in artistic sensitivity, over the past four hundred years architecture, in contrast to all other arts, has mostly developed from the outside inward, instead of the other way around. Instead of giving an appropriate form to an idea, we have forced the idea into the fixed form. Like a fashionable tailor, the architect has used every kind of cloth for every kind of body" [*Durch eine eigentlich ganz erstaunliche Stumpfsinnigkeit der Kunstempfindung hat die Architektur seit etwa 400 Jahren im Gegensatz zu allen übrigen Künsten meist eine Entwicklung von außen nach innen, statt von innen nach außen eingeschlagen. Statt der Idee die entsprechende Form zu geben, hat man die Idee in die fertige Form eingezwängt. Wie ein modischer Schneider hat der Architekt für allerlei Körper allerlei Tuch verwertet*].

Schlegel
"Sempur"

It is not the
act of
dressing
building
a) much
the act of
dressing
the body

longer

human
organism

increasingly being used in the natural sciences, would be no less fruitful in the science of art, which lies between the two. This would simply mean replacing aesthetic "from above" and "from below," which since [Gustav] Fechner have been opposed to one another, with aesthetic "from within"; and we might begin this process of moving "from within" with architecture, which for so long has been externalized by an aesthetic imposed "from without." The aesthetic contemplation of our simplest forms—the psychological explanation of their immediate impression or play of associative factors—already takes as its starting point the creative and appreciative subject.* To complement this analysis of the individual details or parts, which so easily loses sight of the steady connection with the whole, we approach the problem from the opposite angle—namely, by seeking out the kernel of the organism that justifies all the individual details and parts. It is important in a basic study to give due weight to the psychological origin of the creative act and to test the belief that in this art, as in all others, what is truly essential can only start in the mind of the artist and end in the mind of the observer. → whole → transcendence...

Admittedly, the historian who inquires into the essence of architectural creation will say to himself in advance that the answer cannot possibly contain anything new. The germinating seed for which we search must necessarily be present in the most imperfect beginnings, which the history of true art can barely acknowledge as its own, as well as in the masterpieces of a fully mature golden age, which show this seed as a highly structured organism. And this timeless element, which has always been consciously or unconsciously present, can also only be something simple and natural because it has always been implicitly or explicitly active, flourishing and yielding satisfaction in its modest beginnings no less than in the impressive achievements of a perfected monumental art. Far from all the conceptual analyses and dialectical constructions with which speculative aesthetics struggles, this element has to present itself as self-evident to our common sense, as self-referential. Thus we want nothing more than to illuminate once more a darkened side, to retrieve something that has been forgotten, and to recall an old story because it has inalienable value. In science, as elsewhere, it is sometimes a matter of just lightly flipping a spinning top that has become blunt at one end over onto its other end. Of course, the nimble hand that playfully threatens to turn a small world upside down will all too readily be denounced by the peaceful inhabitants of that micro-

*Theodor Lipps, "Aesthetische Faktoren der Raumschauung," in Arthur Peter König, ed., *Beiträge zur Psychologie und Physiologie der Sinnesorgane*, Festgruß für Hermann von Helmholtz (Hamburg: Leopold Voss, 1891). See also idem, "Aesthetischer Literatur Bericht," *Philosophische Monatshefte* 26 (1890), part 1: 17–24; part 2: 169–201; part 3: 323–46.

Kunstwissenschaft

Fechner (empiricism
Schlegel)

Semper already
took him
like that

idealism

speculative a-
opposed to
practical or
experimental

a matter of
flipping

Schmarsow is a historian
that bridges to theory.

Prüfung

(Hauptarbeit)

ethologist
anthropologist
out of
history.
essence of
man -
and man
in society.

cosm and will have many opponents. Yet what matters is that precisely the man who wants to change the point the top spins on may be the man of destiny.

Anyone who looks back at the origin of any lengthy historical development soon encounters prehistoric elements whose origin and growth are inaccessible to historical scholarship. For this reason, the historian must initially work hand in hand with the ethnologist and the anthropologist and together with them seek a psychological understanding of *Homo sapiens*. Yet for these neighbors to understand what the historian actually wants and seeks, the latter must first dare to state his case—and he must do so partly in their own language.

The historian well knows that only the genetic explanation derived from the innermost organization of human nature can provide the clue that we need to understand the fickle nature of historical change; and only an approach that necessarily arises from the whole nature of our psychic constitution will be truly satisfying, even if we long remain unaware of the scope and evolutionary potential of our first "instinctive" acts. Confronted by the highly developed architecture that we see in the large number of existing monuments, we find it difficult to think back to their origins and to extract from this architectural wealth of phenomena → (almost all works derivative and traditional and hardly ever in an original state) the simple kernel from which the activity of the human mind began or to find in our own consciousness a solid point of departure for the investigation.

Space as invariant in Arch.

comparative
knowledge.

Question

limitation
internally,
relation.

What does this university auditorium in which we are gathered have in common with the study of a scholar who lives hermitlike with his own thoughts? What does the Supreme Court building across the way have in common with the concert hall or library next to it, with the Pantheon in Rome or the Cologne cathedral, with the Eskimo's igloo or with the nomad's tent? What is the common denominator in the creative process from which they have all arisen and continue to arise?

Gottfried Semper, the architectural genius who built the Hochschule in Zurich and the Hoftheater in Dresden, simply rejects any connection between the meanest of buildings and the noblest.* The Caribbean hut, he thinks, has nothing in common with architecture as an art and can be of interest to us only because it combines the most elementary scheme of roof construction with mats, the most elementary form of vertical partitioning. In our opinion, to dismiss the question in this way is both unhistorical and unphilosophical, for the most primitive build-

regardless of
separation

regardless of
development

*Gottfried Semper, *Kleine Schriften* (Berlin: W. Spemann, 1884), 294.

12 w 3 11/11
(Do 11/11 11/11)

Hagel 11/11

regardless of
regarding V. 11/11

regardless
of
development

ing belongs just as much to the evolutionary history of architecture as does the Reichstag, in which we demand the supreme refinement of art. To deny the existence of any analogy is to throw the baby out with the bathwater. In its innermost essence, should the sultan's monumental palace really have nothing in common with the hastily pitched tent of his ancestors?

We must ask whether the provisional, makeshift structure does not contain the same kernel as the most durable building constructed of solid and precious materials? The logical consistency of the construction, the articulation of all the parts, and the development of the individual forms in the latter may yield a much richer aesthetic satisfaction, but the one element that is essential may also be present in the former. We must further ask how much of the original essence of a work of architecture is preserved in the various kinds of architectural drawings of plans, elevations, sections, and perspectives, those resources by which a specialist's eye and trained imagination can piece together the whole? Are they like the score of a musical work, whose effect the experienced conductor can anticipate simply by reading it? Finally we must ask—and this question is crucial for our deliberations—whether the technically perfect execution of a building, however monumental, has a more fundamental significance for the appreciation of the architectural work of art than has the technically perfect execution of a musical work of art by an accomplished orchestra? One major distinction, no doubt, is that the musical performance thunders forth and fades away almost in the same instant in which it comes to life, whereas the erection of a building persists and may indeed be permanent. But how important is this distinction to our present question? Do the massive pile of purposely hewn stone, the well-jointed beams, and the securely arched vaults constitute the architectural work of art, or does the work of art come into being only in that instant when human aesthetic reflection begins to transpose itself into the whole and to understand and appreciate all the parts with a pure and free vision?

The moment we see this visual appreciation as the truly essential element—a performance that, like the musical performance, can be repeated at will—then the technical structure and all the expenditure of massive material are reduced to secondary importance; they become means to an aesthetic end. And the costliness of the material and the glitter of polished columns and gilded capitals are on a level with the quality and character—the tone color—of the instruments that play together in the orchestra. The construction of the building then becomes little more than a means of production, just as we might look upon the dressing of the framework, its structural articulation, and the execution of the art-forms as a means of presentation. Thus the whole weight of the material, its welter of forms multiplied over many centuries, might be put aside for a moment at least. The architectural crea-

regardless
of degree
temporarily or
solidity.
regardless of
disproportion
space and
representation

music &
architecture

inaccurate
analogy
Sound
material
space x form
relationship
Schmanson
diminution of
materiality of
sound
and the
materiality
of architecture

tion would stand before the mental eye, still with its varied forms intact, yet pure and accessible to the question that we pose.

anti material
& idealist.

And in order to proceed further, we would only have to recall one principle of all human creation—namely, that nothing can ever be fashioned into an object comprehensible to the senses unless it has previously presented itself to the maker's imagination as an intimation of some desired achievement and thus supplied the mind with the impetus, at least, for the work of the creative faculties.

Let us now try to bring within a single historical perspective the varied phenomena that immediately suggest themselves when we first consider this theme. From the troglodyte's cave to the Arab's tent; from the long processional avenue of the Egyptian pilgrimage temple to the Greek god's glorious column-borne roof; from the Caribbean hut to the German Reichstag building—we can say in the most general terms that they are all without exception *spatial constructs* [*Raumgebilde*], whatever their material, duration, and construction, and whatever the configuration of their supporting and supported parts. "The one essential feature is the enclosure of space," says Eduard von Hartmann; but his qualification—"for a specific purpose"—overshoots the mark. The reference to the human need for protection against the hardships of the external world, or indeed any other reference to a specific purpose, is premature as long as we are pursuing an aesthetic investigation. External stimuli provide only the contingent cause, the occasion for the exercise of human skill. Yet even the smallest human attempt to make a spatial enclosure presupposes that the person has some notion of the intended spatial construct. Thus we come to the final precondition: the predisposition to the intuited form [*Anschauungsform*] that we call space.

Art History
on
Aesthetics

General structure of space — from intuitive creation

Psychologically, the intuited form of three-dimensional space arises through the experiences of our sense of sight, whether or not assisted by other physiological factors. All our visual perceptions and ideas are arranged, are ordered, and unfold in accordance with this intuited form; and this fact is the mother lode of the art whose origin and essence we seek.

The intuited form of space, which surrounds us wherever we may be and which we then always erect around ourselves and consider more necessary than the form of our own body, consists of the residues of sensory experience to which the muscular sensations of our body, the sensitivity of our skin, and the structure of our body all contribute. As soon as we have learned to experience ourselves and ourselves alone as the center of this space, whose coordinates intersect in us, we have found the precious kernel, the initial capital investment so to speak, on which

space is
core
horizon
field
relation

Art
Raumgestalt

architectural creation is based—even if for the moment it seems no more impressive than a lucky penny. Once the ever-active imagination takes hold of this germ and develops it according to the laws of the directional axes inherent in even the smallest nucleus of every spatial idea, the grain of mustard seed grows into a tree and an entire world surrounds us. Our sense of space [Raumgefühl] and spatial imagination [Raumphantasie] press toward spatial creation [Raumgestaltung]; they seek their satisfaction in art. We call this art architecture; in plain words, it is the ^{creator} creatress of space [Raumgestalterin].

Its roots lie at the very place where the origin of our mathematical thinking, the psychological basis of the science of space, is to be sought. Art is different only in that it immediately strives to translate the inner intuition into an actual phenomenon—the visible indication, designation, and enclosure of a spatial area within a general space; science, by contrast, thinks, calculates, and draws conclusions with purely abstract forms but makes nothing. The two are sisters as we can see in their general behavior.

The first attempts to translate a spatial idea into reality further demonstrate the organization of the human intellect. The few visible signs that the eye receives in glancing at the surroundings are sufficient for the imagination to recognize its projection in the external world and to assess it as an accomplished fact. This demarcation of a space easily taken in at a glance hardly surpasses the capacities of a child, yet the imagination has only to speak, and lines become walls; faith is rewarded, no matter how skeptically and scornfully the adult may regard this symbolic process. Traces of footprints in the sand or a shallow groove drawn with a stick are further stages in the representation of continuous boundaries. Only when the wind and rain have blown or washed these away are they replaced by more permanent demarcations: a row of fieldstones, a hedge, or a fence. Growing manual skill and progress in fashioning materials bring further designs: the suggested boundaries more and more approach a straight line, the intervals between the fieldstones or other markers reveal a tendency toward regularity, and the intended enclosure in its entirety assumes the outline of a regular figure. The more apparent the outline of this bounded area is, the more surely will the sides be drawn parallel and equal in length, as local obstacles are overcome by the rule of man. Our natural tendency toward organization unconsciously and necessarily operates here, as it does in all the works of our hand: in the way we decorate our tools or adorn our body with similar or alternating series, in symmetrical repetition, and in the regular forms of rectangles, circles, and so on. The wide basin of a valley or the narrow mountain ravine, the accidentally formed cave or the fissure in the rock are all spatial impressions that nature offers us; they are stimuli to our spatial imagination. But in imi-

already
abstraction

experimenting
imagining
belonging

Raumgefühl
Raumphantasie
Raumgestalt

Raumgestaltend
- given
- created

Wortwortschöpf

order
before
making

abstraction
& regularity

His argument
is above
Warringer's,
or at least
less dialectical
or
less polar.

tating them in our own works we regularize all their lines and simplify all forms to bring them into accord with the laws that govern the organization of our mind. In the historical evolution with which we are familiar, architecture and mathematics have unquestionably gone hand in hand. The ideal in the mind is always pure form as it should be, whose laws the science of space explores, whereas the art of space, which executes form in a real material, also has to come to terms with the natural environment and the physical laws of reality. Both realms, however, are ruled by the basic law of the human mind whereby we see and seek to promote order in the external world. In everything we do, it is evident that we are truly pleased by the clarity of obedience to law, by the distinctness of recurrence, by regularity, and by purity. From the earliest times, we preferred straight tree trunks to crooked ones and deliberately removed the traces of accidental growth and the effects of the changing environment by peeling off the bark and smoothing or planing the wood. Thus in the walls that we built, in the post and pillars that supported them, as in all the individual forms of our later tectonic creation, we preferred the abstract regularity of lines, surfaces, and bodies as a characteristic architectural effect. Indeed, any deviation suggests that the maker has strayed into other artistic genres. Architecture, therefore, is the creatress of space, in accordance with the ideal forms of the human intuition of space.

mathematics
identical

random
abstract
regularity
vs
spatial
intuition
random

subtle

the axial system
of coordinates

not
the system of
axial coordinates.

The human hand exerts its ordering and creative effect on the real environment to satisfy a deeply rooted need. Yet we become aware of the necessity of this process only when we see how it arises out of our own innermost nature. Architectural creation begins with the tangible setting up—if I may call it so—of the backbone of our intuition of space. The axial system of coordinates compellingly predefines the natural law that regulates creation. That law necessarily and immediately manifests itself in the important fact that spatial creation never detaches itself from the subject but always implies a relationship with the observer and creator. Every spatial creation is first and foremost the enclosing of a subject and thus architecture as a human art differs fundamentally from all endeavors in the applied arts. At the outset, the creative and the appreciative subjects are one and the same; they therefore constitute the starting point for our genetic explanation.

specific structure of space-coordinates like a snail always carrying its house w/ it

axial
coordinates

We all carry the dominant coordinate of the axial system within ourselves in the vertical line that runs from head to toe. This means that as long as we desire an enclosure for ourselves, the meridian of our body need not be visibly defined; we ourselves, in person, are its visual manifestation. As the creatress of space, archi-

architecture creates, in a way no other art can, enclosures for us in which the vertical middle axis is not physically present but remains empty. It operates only ideally and is defined as the place of the subject. For this reason, such interior spaces remain the principal element far into the evolution of architecture as an art. The spatial construct is, so to speak, an emanation of the human being present, a projection from within the subject, irrespective of whether we physically place ourselves inside the space or mentally project ourselves into it, and also irrespective of whether a human likeness such as a statue is substituted for that individual, or whether the shade of some departed person is imagined to be present. Indeed, on higher levels of hypothesis, art creates emanations of ideal entities: a juridical person, a corporation, a municipality, or even an abstract idea enjoined by the political, social, or religious community, or an important aspect of the civilization or dominant culture—any of these can take the place of the original human subject, as in the case of the courthouse, the Christian house of God, or the *universitas literarum*.

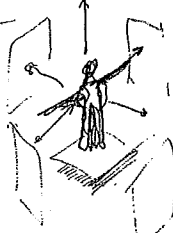
The principal concern is always the spatial enclosure of this subject, that is, the enclosure or walling in along the sides—not the roofing from above or even the designation and development of the vertical. For a long time this enclosing, this harboring, this walling may have taken place under open skies. Spatial constructs of this kind, such as the Greek hypaethral temple and the Egyptian pilgrimage temple, are no less a part of architecture than our own four walls, which we still regard as the epitome of enclosure.

Next to the vertical line, whose living bearers resolve space by our bodily orientation into above and below, front and back, left and right,* the most important direction for the actual spatial construct is the direction of free movement—that is, forward—and that of our vision, which, with the placement and positioning of the eyes, defines the dimension of depth. For the viewing subjects, this dimension is so necessary, for it represents the measure of our free movement in a given space since we are accustomed to looking and moving forward. Only when the axis of depth is fairly extensive will the shelter—the hideout—grow into a living space in which we do not feel trapped but freely choose to stay and live. We also satisfy a spiritual need by gaining enough "elbowroom." We can verify this by lying down, thereby shifting the axis from perpendicular to horizontal; the result is that the vertical axis of the spatial construct is immediately reduced. A tent erected solely for the protection of the sleeper can be lower, for the axis of depth, now

*That this orientation finds its physiological explanation in the internal and external organization of man needs no further elaboration here.



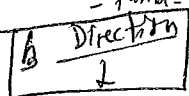
ground



- vertical defined by gravity and human posture in space.

- lateral - width of arms or vision

- front - eye direction with horizon



defined by the length of the body, emerges as the dominant axis of the spatial form. And wherever in buildings the dimension of depth dominates the interior space, this becomes the defining characteristic of the building, as we see in the basilica form of Western churches with their development of the perspective vista from the entrance to the high altar in the choir.

For the dimension of width, the span of our arms from left to right provides a minimal standard so long as the width of the viewing angle and the changing direction of our gaze do not also demand a greater distance from wall to wall in this axis. Thus the refuge again differs from the dwelling, the need of the sleeping person differs from that of the waking person, and sheltering in a dark cave differs from living in a bright room. Moreover, the contemplation of the two horizontal axes can alternate. When, at an appropriate distance, I survey a single long wall in its entire width, the dimensions to the right and left of me create a new central axis; but if I look down the entire length of both long walls in a room, I read and measure the two long sides in parallel perspective. The more similar the lengths of the two horizontal axes are (that is, the more the plan approaches a square or a circle), the more important does the predominance of the upward gaze become. Whereas symmetry prevails throughout the horizontal extension or on all sides, the law of proportion dominates in the vertical axis, always in relation to the subject and his optical standard.

Finally, where the two horizontal axes are reduced to the minimum, anyone who is awake soon perceives that staying in such a room would be a punishment, so much so that he literally wants to climb the walls. For anyone who is not spatially blind the punishment noticeably increases if the cell has a triangular shape or any other displacement of the walls. An upright character such as Lessing declared that he could not bear a room with oblique angles.

But if the vertical axis is placed on the floor along the directional axis, then the width gains in importance what the height loses. Usually, though, width remains distinctly subordinate so long as the direction of our glance and our movement in space remain predominantly forward.

This relationship, however, immediately reverses itself when we step outside the interior space and view the exterior of the spatial construct. With our meridian operating as a middle axis of extension looking both left and right, we now demand the satisfaction of the law of symmetry, and we see ourselves facing the vertical axis of the spatial construct with our demand that all relationships be in proportion. The entire spatial construct now appears to us as a body outside of ourselves in a general space; thus all principles in relation to the building's exterior

C
interdependence
of axis
direction

hierarchy.

↓
- vertical
- frontal
- lateral -

axiality
the most
natural
thing.
not
abstraction.

dk
outside the
spatial
construct
proto-empiric

a space emanating from that exterior body?
or a "space", sum of the spaces generated by different external bodies?
or an abstract space, mathematical?

? - formal logic

Lessing

shift in relation to those of the interior space, that is, to the enclosure of the subject, with which we started.

Empathy. (from interior to exterior space) movement, life.

Before we can speak of the exterior of a building, however, we must establish the further principle of detailed formation by which we relate ourselves to the enclosed interior space. The linguistic terms that we use for space, such as "extension," "expanse," and "direction," suggest continuous activity on our part as we transfer our own feeling of movement directly to the static spatial form. We cannot express its relation to ourselves in any way other than by imagining that we are in motion, measuring the length, width, and depth, or by attributing to the static lines, surfaces, and volumes the movement that our eyes and our kinesthetic sensations suggest to us, even though we survey the dimensions while standing still. The spatial construct is a human creation and cannot confront the creative or appreciative subject as if it were a cold, crystallized form.

In this we see the basic difference between the art of space and the science of space, even though we refer to the latter, with some justification, as a cosmic art. Mathematical thinking, abstracted from all the contingencies of the earthly scene, ascends with ever more compelling logic to the regions where the pure forms dwell. Secure in its methods, it computes the laws of the furthest reaches of the universe just as it does those of our own earthly realm, spanned by the horizon of the human eye. The art of space, by contrast, intent as it is on producing sensible manifestation of its activity, is bound to the earth as a solid base for man, and even in its most audacious creations it cannot dispense with the corporeal, sentient human being or his equal. True, it can far exceed the suggestions of the real world, but always in accordance with the binding laws of reality: the cohesion of its materials (statics, mechanics, gravitation, and the cosmic laws of the universe. This in itself endows the spatial art with the most varied relation to human experience and to human life on earth; these experiences assist in instilling new life into the work of art, which even in its highest accomplishment remains a human creation. A pure and rigid form would in the long run prove unbearably oppressive as the everyday setting for human life, even allowing for the marked human preference for regularity and rule.

Space must be filled with a life of its own if it is to satisfy us and make us happy. The projection of the three-dimensional spatial intuition that originates fully developed in the human mind thus acquires another dowry on its way into being—namely, a natural tendency to spring to life, the instinct to develop and isolate itself as a self-contained system. Hence we have opposing forces of supporting and

interior space
- interior to a subject?
or - exterior to a subject but
- interior to an enclosure.

space is a relation as that is intellectual.

organism

Art of space
VI.
Science of space

Cosmic Art
Mathematical
space
Science of space

Art of space
Earth bound

possibility

happen

body?

inferior
has to do
with
life..

dynamics
of
architecture
vs.
static

projection
into the
world

supported parts that endow the spatial enclosure (otherwise a mere expanse of walls) with an inward structure. These are the forces that make both the existence and the nature of the spatial construct comprehensible to us, thus presenting us with a new source of aesthetic enjoyment. Consequently, our philosophers of art have erred in thinking of architecture itself as the ideal representation of the laws of gravity that regulate the universe or as the emotional representation of the concepts of force and load—as if this apparently didactic task were its main purpose.* The truth is that this can at best be applied only to the structure of the building, that is, it belongs only to a later phase of the organism's growth.

This is the reason why these aestheticians of architecture insist that the roof construction of a building demonstrates the clear juxtaposition of force and load, of supporting and supported parts: that is, when the spatial construct appears as a fixed and immobile spatial body.** And it is for this reason that they prefer to articulate the structure and the exterior of the building, completely neglecting the invention of space as such—spatial development, perspective, and composition. They therefore lose sight of the inner aspect of architectural creation and of the perennial motive that supplies its psychological explanation.

Just as, in response to external events, shared emotional feelings intensify in their rise and fall into moods or press in their growth toward blissful delight or convulsive pain in order to move farther out and fill the immediate surroundings with the vibrations of the inner life and to influence those surroundings, if only through the fleeting sound of the human voice—so, too, the purely imagined impressions and their integration or combination into three-dimensional visual forms involuntarily project themselves into the world outside and develop further into a sensorially perceptible reality. Just as the art of music enriches us in a thousand ways, as a creative elaboration of auditory sensations and as the command of the world of sound in accordance with law and analogous to human kinesthetic sensations, so architecture as the creatress of space is based on a systematic command of the material of spatial imagination and constitutes a creative elaboration of the three-dimensional visual image for human satisfaction and pleasure. In music,

*Rudolf Adamy, *Architektonik auf historischer und aesthetischer Grundlage*, vol. 1, part 1, *Die Architektur als Kunst* (Hannover: Helwing, 1881), 74f: "In architecture we deal with the representation of the notions of force and load to our emotions" [*In der Architektur haben wir es mit der Darstellung der Begriffe Kraft und Last für das Gefühl zu tun*]. See also Carl Schnaase, *Geschichte der bildenden Künste* (Düsseldorf: Julius Buddeus, 1843), 1: 32f.

**Hermann Lotze, *Grundzüge der Aesthetik* (Leipzig: S. Hirzel, 1884), 33f. Rudolf Redtenbacher, *Tektonik* (Vienna: R. v. Waldheim, 1881), 230f.

be careful extension or pre extension

which operates in time, movement in its various degrees and dynamic effects predominates; in architecture, which operates in space, the dominant qualities are constant extension and the quiet force of proportions. What is it but the poetics of space that governs the charm of perspectival vistas or spatial development in a real building, which has a serene and liberating effect on our soul, expanding and elevating it; and does not space still exert a part of its charm when we view it in painted architectural scenery?

but also movement

perspective & space

Building as Artform

Although we may look at an enclosed building from the outside, we can gain an understanding of the laws of its formation only by understanding its spatial formation from within. Here the creator and the appreciator, the deviser and the observer, part company.

Separation of observer and creator

It is an act of free aesthetic contemplation when, with the aid of our imagination, we transport ourselves from the exterior that we see before us into the center of the interior space; when, by inquiring into its axial system, we strive to open up a remote organism to the analogous feeling within ourselves. As long as we are unable to carry out this redoubling of our consciousness and are unable to complement the outside vantage point with an interior view, the building remains for us a mere crystallization—like a rocky outcrop that rises before us—whether we view it frontally or from the other side, or even from above.*

cutting through the building

See Bruner Architecture as crystallization

The autonomy of the form appears more convincing the more strongly the vertical has been developed as the dominant axis of the whole. Because of this feeling that a second meridian exists there—outside us—as a middle axis, we perceive the spatial construct as a body outside ourselves with its own organization. To contemplate the enclosed building as an entity outside ourselves, within a generalized space, already implies a considerable step toward the allied art of sculpture. As soon as the central, vertical axis or true spine of the other system of coordinates facing us gains a solid form, as soon as this axis absorbs the extension of the two horizontal axes, the interior space of the architectural construct shrinks, and its nature is completely changed so that we now perceive it as a solid body. It remains for the moment only a tectonic configuration of mass.**

*See Friedrich Schleiermacher's statement, "a building has to be viewed like a crystallization" [ein Gebäude ist wie eine Krystallisation zu betrachten], and so on.

**Such as, for example, the obelisk. This is still not a sculptural creation but a tectonic one, the symbol of another being outside ourselves, the upright landmark of an independent sphere of ideas, the dominant element of a world of its own.

It becomes clear at this point what a radical distinction we have gained by disregarding in our presentation of the architectural work of art its entire execution in durable material. In discussing a building's exterior and its essentially tectonic structure, we are able to abstract much less of the conditions of the constructional framework and the technical handling of the building materials, for these actual conditions have a much more direct effect on the play of forces. The more all articulated forms and tectonic parts deviate from abstract regularity in their basic form (as dictated by their function within the whole), and the more they approach sculptural form, the more they are animated and saturated with the human sensation of force.

Buildings in relation to other → City - field beyond horizon...

Yet as soon as several self-contained spatial bodies are placed together, architecture as the creatress of space comes back into its own by arranging these building elements into larger spatial enclosures and placing them in new organic relations—whether it be house facades along a street or groups of buildings around a square, perhaps with a central monument and vistas along the streets directed toward it. We consciously claim all of this, even the artistic layout of a city plan, explicitly for architecture as an art. Architecture, the art of building cities, stretches out its hand to road construction, agriculture, and gardening, all of which extend the signs of our cultural labor as far as the eye can see. All establish and expand the *regnum hominis* and supply the human spirit, as it becomes aware of the laws that govern its own nature, with a satisfaction that finally culminates in a belief in a moral world order. This is why ancient civilized peoples still steeped in the values of human civilization—in contrast to the condition of their less-advanced neighbors—loved only well-cultivated land, only gardens and fields with regular rows of trees and furrows but not mountains, forests, and heaths. Later generations, sated with civilization and exhausted by every kind of human labor, yearn to go back to a pristine nature untouched by human hand or foot—to the Alps, into the wilderness, or out on the infinite ocean.

In this sense we cannot accept that the history of architectural development should be limited to the establishment of permanent buildings and self-contained building systems. We must not forget the influence of the old Asian camps and fortifications, or of the Roman *castrum* or *castellum*, on the city planning and palace design of entire cultural periods nor how necessary it is, for the understanding of these traditions of spatial design, to study the furnishings of Christian monasteries in pagan lands, the vestibules of basilicas, cloisters and corridors, the pergolas of summer residences, the interior courtyard of an Italian villa, or the hypaethral *cella*

Architecture

✓ *the art of building cities*

Racial argument? part a different sense of individual

Horizon (wid) space ethnic

sublime

of a Greek temple. We should also not forget what these mean to us today—in the age of railway stations and market halls—as reference points in the historical development. If we are able thereby to widen the viewpoint of today's dominant theory, we shall liberate architecture as art from much of the limiting prejudice that surrounds it.*

But to return to the cone...

We do, however, still distinguish, within the broad compass of architectural activities, a more narrowly defined zone that is the locus of the transition to a strict and fully developed monumental art, and this may always claim to be the focal point and culmination of architecture. In those earliest times, it did not matter whether an enclosure was made with a green hedge, a wooden fence, or a palisade, with piles of fieldstones or well-fitted stonework, whether a hut of living branches was covered with fresh leaves, or whether a bamboo frame was dressed with mats and animal hides. Only later did art become aware that the wall must not be transparent if it is to enclose a self-contained interior space; that neither a nearly invisible glass window nor a row of columns with openings between them can do what a simple hung carpet can do. The same logic was applied to the permanent roof. The stretched cloth that protected against the sun, or at most against light rain, became a flat wooden ceiling, a flat stone slab, a solid wall above, or a vault still more closely connected with the supporting wall, or perhaps a cupola comparable to a miniature firmament. With the general consolidation of culture and the cultivation of a philosophy of life based on inherited traditions or a systematic theory, architecture also learned to regard itself and act as the creative basis and permanent setting, as the loyal ally and herald to human civilization. Architecture has since then adapted its materials of production and its means of presentation ever more consciously to the spirit that seeks expression through its works.

Architecture prepares a place for all that is lasting and established in the beliefs of a people and of an age; often, in a period of forceful change, when everything else threatens to sway, will the solemn language of its stones speak of support.

There still exist today those "fossilized receptacles of extinct social organizations,"² as someone has aptly characterized the monuments of the past. But we

*Thus Schliepmann, *Betrachtungen über Baukunst*, 31, also demands that one should renounce the idea of "treating all spaces alike." What basic laws of spatial composition result from our principle—the spatial enclosure of a real or ideal subject—is something that we reserve for later application. For the last ten years, in Göttingen and Breslau, I have fully developed this theory in my introductory lectures on the history of art.

the people of the nineteenth century, for all our historical education, find it difficult to judge the value that such spatial creations must once have had for the people who created and inhabited them. We can only imperfectly appreciate these works of art and bring to life their purely aesthetic content. This is because architecture is no more an embodiment of concrete ideas than is music; and in music, old or outmoded compositions likewise are not sufficiently accessible to our modern imagination for us to bridge with ease the gap between hearing and feeling.

But we too hear, from the mists of antiquity, the strains of the saga of Prometheus, the Titan whom Zeus, in order to impose peace on mankind, chained to a rock with adamantine bonds—the fettered giant, whom the waves mourned and sought to liberate in a foamy embrace. And when we think of the temples of the Olympians, we can understand why a poetic Greek vividly described the creator of buildings as ἀρχιτέκτων ἀνὴρ [architect man] and placed him alongside the poet and philosopher (who constructs his worldview for him); we can understand why the thinker, standing before the countenance of the creator of the world himself, could stammer no higher title of honor for him than *summus architectus*.

Should it really be so different with us today when before our eyes is raised a seat of jurisprudence, which the German people has erected as a sure stronghold of sound conviction against the sudden impulses and vacillations of the individual's sense of justice?

Raumgefühl.

Should not architecture also today, in turning back to the time-honored, inner aspect of its creations, once again find its way into the hearts of the general population by becoming the creatress of space? It is said that the spirit builds the body in its own image. *The history of architecture is the history of the sense of space*, and thus consciously or unconsciously it is a basic constituent in the history of worldviews.

Driftung, Weltanschauung

In our own day, as always, the true artistic expression of our particular sense of space will certainly be greeted with pleasure and enjoyed with gratitude in all those enduring places where the work of our civilization is carried on, right down to the domestic seclusion and cozy setting of our private lives.

Praxis? ?

It is right and proper for the historian to confine himself to certain knowledge, even if this is only a starting point along a future path.

He extends his hand once more to his old and venerable friend—architecture—whatever anyone may find to criticize in his choice of company!

Source Note: August Schmarsow, *Das Wesen der architektonischen Schöpfung* (Leipzig: Karl W. Hiersemann, 1894). Inaugural lecture given at the University of Leipzig on 8 November 1893.

Translator's Notes

1. Anton Heinrich Springer (1825–1891) was a writer, politician, and art historian specializing in early Christian and medieval art. Born and educated in Prague, then part of the Austro-Hungarian Empire, he started teaching art history at the Prague Academy in 1846, followed by appointments in Bonn and Strasbourg. From 1873 until his death he was professor of art history at the University of Leipzig. An inspired lecturer whose writings reached a wide audience of both professionals and laymen, Springer's lasting contribution to the world of learning is to have carved out a niche in the university for art history as a discipline in its own right by separating it from aesthetics and history. The influence he received early in his life from Friedrich Theodor Vischer and Georg Wilhelm Friedrich Hegel was thus developed into new ways of looking upon art. Schmarsow's appointment in Leipzig was to the chair Springer had held, which, after Springer's death, had briefly been occupied by Hubert Janitschek.

2. Gottfried Semper, *Ueber Baustyle: Ein Vortrag* (Zurich: Friedrich Schulthess, 1869), 10.