

The Spirit of Gravity: Architecture and Externality

↗ David Kolb, 1996

Bates College

Hegel wrote that "Die Architektur ... ist die Kunst am \usserlichen" (A 14.271).¹ We might translate this as "Architecture is art in the external." But since all art is sensuous externalization, perhaps we should translate Hegel as saying "Architecture is the art of the external." Architecture is art at its most external. Let us ask what this 'externality' might be that is so important to architecture. There are more dimensions to the answer than may at first appear.

We might say that architecture is "external" because architecture constructs in physical space "out there" and uses external material such as wood and stone and steel. But other arts, for instance sculpture and painting, do the same. There are kinds of externality more specific to architecture. I will discuss first architecture's special relation to gravity, then the unorganic externality of architectural purpose, the outward architectonic act, and the externality of meaning in symbolic art. My conclusion will suggest going beyond Hegel on this topic by following his directions.

Gravity

First, then, to gravity: Hegel states that architecture "becomes an inorganic surrounding, a whole built and ordered according to the laws of gravity." (A 14.303)² That is, architecture produces works posited as explicitly subject to the external law of gravity.

Though I just read you Wallace's translation, Hegel's German could be read as "the law of weight." His phrase *Gesetz der Schwere* is the normal German for "law of gravity," and "gravity" is *Schwerkraft*. (what we call "center of gravity" is *Schwerpunkt*.) But it is particularly appropriate that Hegel will talk about what we could translate as "the law of weight" in connection with architecture since in what he considers the most authentic architecture it is weight and bearing and support whose expression will offer conceptual necessity to the built forms.

In the philosophy of nature Hegel distinguishes gravity as weight (*Schwere*) which is expressed in falling, as bodies seek a center outside themselves (treated in E 262–268), from the conceptually more complex and concrete notion of the system of gravity (*Gravitation*) which is expressed in the free motion of the planets of the solar system (treated in E 269–270). Both of these words are distinguished from that conceptually more primitive attraction (*Attraktion*) which is the negative unity of the being-for-self of matter in its being outside itself (*die negative Einheit dieses ausser-reinander-seienden Försichseins*) (E 262). Weight (*Schwere*) is the unity of that attraction and the equally primitive repulsion (*Repulsion*) that expresses the being-for-self of matter.

Hegel is here reworking and arguing with Kant's construction of matter out of two forces of attraction and repulsion, and refusing to separate the forces or to identify gravity or weight with the one force of attraction. Hegel is also working towards one of his polemics against Newton (see E 266 and 270). He also shows a curious hesitation about dealing with gravity in terms of the attraction of many different bodies for one another; later I will discuss briefly this lingering Aristotelianism in Hegel's notion of gravity.

For our architectural purposes we do not need to concentrate on these distinctions because though they are on different levels what they all express is a togetherness of matter in its very separateness. Externality is both posited and overcome in these attractions. Gravity, through its very externality, denies the seemingly immediate separation and next-to-each-other-ness of material objects. That external linkage is conceptually necessary in

order for bodies to be spread out at all.

Likewise, on all the levels of discussion, gravity and weight offer relation and attraction that ignore internal differentiation. Gravity disregards the details of a body's inner composition or inner structure. Gravity is the premier external relationship, dealing with items characterized by weight as one abstract totalizing characteristic. Such undifferentiated heaviness opposes spirit's inner self-differentiation, but also shows how spirit's motion of self-return has already begun in the pure external side-by-side-ness of matter.

Heaviness is an external prefiguring of spirit's turning to itself: "The concept of heaviness . . . contains both the moment of being-for-itself and the continuity that sublates that [isolated] being-for-itself."³ Gravity provides a unity within external relations and forces. This is already a first—external—overcoming of externality.

In the realm of art, architecture does much the same; it provides a first—external—overcoming of externality. It is the art of the external because it posits and proclaims its own externality as an—external—way of transcending that externality. The architect creates a structure that speaks its subservience to gravity. But the building's functional unity goes beyond what the physical law can demand or notice. In architecture gravity is shown as transcended within spirit's self-construction. Architecture displays the external as external in relation to other more inner unities.

External Nature

Hegel says that it is the special vocation of architecture, to be a pure enclosure . . . to show an unorganic nature built by human hands (A 14.294/2.653).⁴

What does it mean to say that this built surrounding is *unorganic*? It means more than that we build with non-living material. The architect builds in unorganic nature and produces unorganic unities. Introducing architecture, Hegel says that

The first task of art consists in giving shape to . . . the external environment of spirit, and so **to build into what has no interiority** (*dem Innerlichkeitslosen*) **a meaning and form which remain external** to it because this meaning and form are not immanent in the objective world itself. (A 14.267/2.631, my emphasis)⁵

The external environment has no inner life of its own, and the meaning and form we build remain external to that external nature.

The nature in and with which architecture builds does not itself have any organic principle that determines its form. Of course unorganic nature has its own structures that are studied by science and discussed in the first two divisions of Hegel's philosophy of nature, but such structures have no inner self-directed teleology. They have neither the self-contained purposiveness of the organism nor the external purposiveness of the tool. This lack of purpose is exactly unorganic nature's place in the system. We might say that the purpose and meaning of the unorganic is to lack purpose and meaning, to be the other, the surrounding for spirit's world.⁶ As part of the overall vocation of spirit to come to itself, this unorganic aspect of spirit's self-othering needs to be shown as itself, but this showing can only be to spirit, not to unorganic nature it-self, since unorganic nature has no self.

This positing of external nature as external means that in the overall career of spirit we need something like architecture. Architecture is the art that works in the outer world, with material things, and produces products whose purpose remains external to the objects produced. A piece of music or a poem, for Hegel the most spiritual of the arts, will transcend such externality. But then we might ask, why still have architecture as an art; why not let architecture be merely a collection of functionally built tools? The answer is that architecture does something artistic that a poem cannot do. It does not merely function; it

symbolizes and shows forth its own functioning.⁷ It symbolizes and enacts our relation to outer unorganic reality, to gravity, to bearing and covering and enclosing, and, in romantic architecture, it spatializes our movement beyond the spatially external. Poetry can talk about these but not enact them in this (albeit external and unique precisely because it is external) way. Architecture makes art—a self-showing of spirit—out of something that has only externality and lack of purpose to offer, and architecture shows that externality forth in its imposition of—external—purpose and internality.⁸

Architecture's self-display of externality will be our constant theme as we move through Hegel's discussions of outwardness in architecture, and I will try to push this positing the external as external beyond what Hegel would allow.

External Purposes and Art

Architecture deals with external unorganic nature as such, as still Other. It makes of that nature purposive structures. Their purpose, however, remains “outside” the material and the structure. We may speak metaphorically of this or that function as “the soul of the building” but in fact architectural structure as such has no true inner governing and limiting principle. This lack of immanent form and meaning is the key to architecture's vocation as an art.

[Architecture] vocation lies precisely in fashioning external nature as an enclosure shaped into beauty by art out of the resources of the spirit itself, and **fashioning it for the spirit already present**, for man, or for the divine images which he has framed and set up as objects. **This enclosure does not carry its meaning in itself but finds it in something else**, in man and his needs and aims in family life, the state, or religion, etc., and therefore the independence of the buildings is sacrificed. (A 14.270/2.633, my emphasis)⁹

When architecture acquires the place belonging to it in accordance with its own essential nature, **its productions are subservient to an end and a meaning not immanent in itself**. It becomes an inorganic surrounding, a whole built and ordered according to the laws of gravity. . . . **Architecture at this stage . . . corresponds with its authentic concept**, because it cannot entirely endow the spiritual with an adequate existence and therefore can only frame the external and spiritless into a reflection of the spiritual. (A 14.303/2.660, my emphasis)¹⁰

In line with what I have maintained more than once already, **the fundamental character of architecture proper consists in the fact that the spiritual meaning does not reside exclusively in the building** (for, if it did, the building would become an independent symbol of its inner meaning) but in the fact that this meaning has already attained its existence in freedom outside architecture. (A 14.303–4/2.661, my emphasis)¹¹

In order to pursue these ideas further, we need to know more precisely what it means to say that the purpose of architecture remains external to the building.

Hegel develops several concepts of purpose. The most external is the purpose of tools, which have the shape they do because that shape serves some end held by another being.

A house, a clock, may appear as ends in relation to the tools employed for their production; **but the stones and beams, or wheels and axles, and so on, which constitute the actuality of the end fulfil that end only through the pressure that they suffer**, through the chemical processes with air, light, and water to which they are exposed and that deprive man of them by their friction and so forth. Accordingly, **they fulfil their destiny only by being used and worn away** and they correspond to what they are supposed to be only through their negation. **They are not positively united with the end, because they possess self-determination only externally** and are only relative ends, or

essentially nothing but means. (L 402/750, my emphasis)¹²

Deeper than such external purpose is the inner teleology of an organism, which is ~~the~~ ideal unity which has found itself and is for itself (E 252). An organism contains a unity that “as its own goal, possesses its means in the objectivity and posits the latter as its means, yet is immanent in this means and is therein the realized end that is identical with itself” (L 412/760).¹³ In an organism

objectivity is . . . taken up into the subjective unity, . . . Since the concept is immanent in it, **the purposiveness of the living being is to be grasped as inner; the concept is in it as determinate concept, distinct from its externality, and in its distinguishing, pervading the externality and remaining identical with itself.** . . . the concept constitutes its substance; but for that very reason **this means and instrument is itself the realized end.** . . . In respect of its externality **the organism is a manifold, not of parts but of members.** (L 420/766, my emphasis)¹⁴

This is the kind of realized unity that architecture can never achieve. Buildings are at least tools, and their purpose is to be found in the activities of some other being. Hegel says that:

Organic products, as they are portrayed by sculpture in the shape of animals and men, have their beginning and end in their own free outlines, because it is **the rational organism itself which settles the boundaries of its shape from within outwards.** For the [architectural] column and its shape, however, **architecture has nothing but the mechanical determinant** of load-bearing and the spatial distance from the ground to the point where the load to be carried terminates the column.

However, buildings are also works of art, self-showings of spirit, so they are more than tools. Their externally-derived purposes result in shapes that should be given an appearance of inner inevitability. Hegel continues:

But the particular moments implicit in this determining [of their proportions] belong to the column, and **art must** bring them out and **give shape** to them. Consequently **the column** **specific length**, its two boundaries above and below, and its carrying power **should not appear to be only accidental and introduced into it by something else but must be displayed as also immanent in itself.** (A 14.311f/2.668, my emphasis)¹⁵

Architecture must perform its art and bring the external as external into an appearance of indwelling unity, even as the purpose of the building remains external rather than a true organic form. But it does so by external means.

Externality is most extreme in the stage Hegel calls symbolic architecture. Although no architectural work can have organic unity in the strong sense in which an animal body possesses such unity, symbolic architecture is particularly unorganic. Symbolic architecture is more paratactic than syntactic. According to Hegel, Egyptian temples combine sculptures, columns, rooms, and other elements, but their mode of combination is an uncontrolled one-thing-next-to-another, not guided by the more complex internal relations typical of classical architecture.

This adjoined-ness or next-to-ness is not only characteristic of symbolic art; it is what is specifically architectural. Hegel argues that the use of sculpture in Egyptian temples remains “more . . . architectonic than sculptural” (A 14.282/2.643).¹⁶ What is it that distinguishes the architectonic from the sculptural? The Egyptian sculptures are ordered in rows, and “in this ordering in rows acquire their architectural character” (A 14.284/2.644).¹⁷

It is in classical architecture that the external putting things next to other things becomes permeated by an inner logic (deriving from the structural actions of the building parts) that supplements their external purpose and gives the building a sense of inevitability. Hegel even speaks of classical architecture as "organic." But even in classical architecture externality wins the day. Concerning the parts of classical columns, Hegel says the

the differences . . . must come into appearance as differences; on the other hand it is equally necessary for them to be united into a whole. . . **this unification, which in architecture cannot be more than a juxtaposition**, and an association, and a thorough-going eurhythmy of proportion. (A 14.318/2.674, my emphasis)¹⁸

Even in classical architecture, then, the architectonic deals in next-to-each-other-ness and stuck-together-ness rather than true inner development.

External Meanings

There is a further dimension of externality to architecture. The mode of signification found in all architecture is the symbolic, where there are no inner links between form and meaning, nor among the various meanings presented.

Hegel says that in symbolic art and symbolic modes of signification we find an abstract mode of thought where general representations, concepts, and philosophical categories are adjoined, treated (by the understanding, not reason) as separable and permutable without necessary orders or links.

The meanings taken as content here, as in symbolic art generally, are as it were vague and general representations, elemental, variously confused and sundered abstractions of the life of nature, intermingled with thoughts of the actuality of spirit, **without being ideally collected together** as moments within a single subjectivity. (A 14.274/2.637, my emphasis)¹⁹

These many meanings are not themselves united in an inner articulated unity; they remain external to one another. Symbolic thought does with ideas and images what architecture does with blocks and beams: puts one next to another.

Architecture remains low in the hierarchy of the arts because of this mutual externality of purpose and parts, and of meanings to one another and to their symbols. On the other hand, this low position is a necessary aspect of spirit's articulation of itself. Spirit could not make everything purely inner, or there would be no inner. Spirit's being and activity demand that externality be both real and expressed.

Positing Externality as Such

In discussing symbolic art in general, Hegel says that the externality of its meaning relations should itself be expressed within the art. "Since this externality is present in itself in the symbolic, it must also be posited" (A 13.486/1.378).²⁰

If spirit is to be, that is, if spirit is to come to itself, then all the dimensions and presuppositions of its being must be explicitly posited and incorporated as such. For Hegel, art is a mode in which spirit presents its reality to itself. So the externality characteristic of symbolic art should be itself thematically expressed in an artwork where the externality of the relation between the meanings involved becomes itself the action performed by the artwork.

Can this happen within symbolic art itself? It does, for Hegel, in those forms of symbolic **literary** art which make explicit external comparisons relating diverse areas of meaning as

external to one another. These are discussed under the headings of the self-conscious symbol (*bewusstste Symbol*) and the comparing art (*vergleichende Kunstform*), and include fables, parables, riddles, allegories, explicit metaphors and similes, and other verbal forms whose action is to bring about comparisons between diverse areas of meaning.

However, there is no stage in Hegel's treatment of **architecture** that functions as do those types of symbolic literary art. There is no self-conscious positing of architectural externality as such. Architecture is called to bring externality under at least the appearance of inner necessity. The externality of its material and purpose is never completely mastered by that inner necessity, for the inner necessity is itself an external imposition of loosely associated meanings. But there is no stage of architecture which **itself** posits, performs, or comments on this or the other dimensions of specifically architectural externality. The externality of symbolic art as such is shown within the stronger interiorization of literary art. Nowhere is architectural externality made the explicit theme or action of an artwork.

There is one seeming exception. During his general discussion of symbolic art Hegel discusses the Egyptian pyramid as a meta-symbol of the enigmatic quality of symbols in general (13.459f). Hegel discusses the pyramid's closed shape and hidden content to itself symbolize the more general relation of symbols to meaning.²¹ However, Hegel does not discuss the pyramid as showing forth a specifically architectural externality.

I said earlier that architecture "is the art of the external because it posits and proclaims its own externality as an—external—way of transcending that externality." Now we can see that that is not entirely true. Architecture does not make art that explicitly takes up all the dimensions of its own externality.

Need this be so? Might there be an architecture whose action was to present and thematize the dimensions of architectural externality in the self-performance of the building? Could or should there be an architecture that explicitly posited its symbolic, external, un-organic meaning and relation to meaning? That "did" its architectonic unity as external next-to-ness, or that presented its purpose as external to its form? Could there be an architecture that explicitly showed forth the externality of adjoined forms or elements or meanings to one another? Or, recalling our first dimension of externality, a building that presented itself as a presentation of the lack of intrinsic meaning in material objects?

Such buildings would not be traditional, if traditional means to sit neatly within a received set of meanings presented as organically united with one another. The meanings borne by the building would be shown as adjoined and uneasily in their relation. Such buildings would be not modern, if modern means to be permeated by function and rationality. Rather their forms would refuse to be controlled by function and rational unity. Such buildings would not be postmodern, if postmodern means to be infused with historical quotation or ironic sensibility, for that too manifests a form of interiorizing subjectivity, though one that finds its inwardness in its distance from the material it treats.²² The building might be postmodern in a more relaxed sense of the term, for having come after modernism, but it would not necessarily belong to some particular stylistic wave.

One thinks for example of some of Zaha Hadid's designs, or of Frank Gehry's own house and others of his early buildings where materials and functions and forms were separated and adjoined to one another. Some of the work of architects like Peter Eisenman and Bernard Tschumi may also attempt such moves, though unlike Gehry's works their buildings often stand more as illustrations to theories. Those buildings cannot be "understood" without reading certain texts, so their demonstrations of externality are compromised. Buildings that really "did" externality would have to resist being footnotes to theories. Even Hegel's theories.

How might such resistance come about? Like brute matter, the building would be held together by a law of gravity that kept its adjoined forms and functions and meanings together without inquiring into their inner structures or producing internal semiotic

relations. Such gravitational attraction would refuse the transparency of the building's parts to one another or to any overarching purpose or meaning or essence. Togetherness in exteriority.

The points raised in these last several paragraphs offer challenging suggestions. However, we should remember that Frank Gehry's externalism was quickly recouped for narrative by being labeled with his name and region. In fact we should realize that it is impossible for **any** building to fulfill completely these requirements. Pure externality and otherness cannot be presented as such, since any "presentation" involves semiosis. The external singular presence of the building can not remain totally mute. No building can purely "do" pure externality.

Nor, in fact, is gravity totally indifferent to internal structure. We should not forget the tides. In physics it is not strictly true that an object is affected by gravity independently of its internal structure. While for many calculations gravitational forces can be summed up as if they acted at the single center of gravity, in fact each mass point in the one object is affected by each point in the others. This means that if an object is sufficiently large it can feel tidal forces when different parts of the object are closer and farther away from an attracting second object. This near part is attracted more than that farther away part, and the object is as a consequence subject to tidal forces. Depending on the internal structure of the object, tidal forces can move its parts (as with our oceans), warp its form and change its motion (as with our moon) or disrupt its unity and even tear it apart (as with Roche's Limit and the rings of Saturn).²³

So our building that is trying to posit externality will find that its juxtaposed parts and functions and meanings influence one another even while and because they stand apart. This influence is not a general indifferent attraction but a tidal influence that distorts and bends the shape effects, meanings and functions in ways depending on their specific constitutions. There is no pure juxtaposition.

But if this is so, then how could a building posit its externality as such? Presumably the building would return, as it were, to that silent nature of that first dimension of exteriority. It would have to foreground its external, physical presence in a way that emphasized both its put-together-ness and the physical muteness and singular otherness that everywhere underlie and resist transparency. A building might be designed in such a way as to show itself as resisting incorporation into narratives and meanings, even as those narratives and meanings could not be fully kept away.

This the examples cited earlier achieve, but it can happen to some degree with any building, in any style. Still some ways of building might make this resistance more prominent. Even though they cannot escape inclusion in meanings and narratives, they might help us become more aware both of our inevitable complicity in those narratives, and of our life as more than what those narratives comprehend.

But such a "more" and such resistance to categorization cannot be made the direct object of presentation. It can be shown as slipping aside, as it were, from the conceptual or narrative thrust. Art can enact this better than philosophy. Architecture can enact it better than poetry.

Conclusion

So we have arrived back where we began, with the need for the art of architecture in Hegel's story. But we have also put pressure on that story. For if we consider Hegel's notions about art showing the moments of spirit掇 becoming as such, and if we take Hegel掇 treatment of architectural externality even more seriously than he does, then architecture does play the role he assigns it, indeed even better than he realizes. But architecture also

resists Hegel's attempt to keep it on the first level of a hierarchical story that presents externalization self-consciously only in more interiorized literary art and philosophy.

There is a tension between the externality Hegel attributes to architecture (and to symbolic art generally) and the interiorizing narrative drive of his philosophy of art. This is something like a dialectical tension, because it is precisely the attempt to fulfill the demands of Hegel's narrative that reveals in buildings something 'in' their being that refuses to be incorporated into Hegel's narrative, and therefore refuses to be subject to those demands. In fulfilling the role Hegel assigns to it architecture resists its location in his story of the arts. This dialectic does not lead to full enfolding, but to the positing of externality as external even to the dialectical story. Following the prescriptive of the narrative to posit every condition we posit features that put the building outside the prescriptive power of the narrative. But not simply outside. Nor simply a dialectical relation.

The spiritual aspect of physical gravity is its positing of a necessary external togetherness that links things together and allows them to remain external to one another. It is the physical analogue of every being's sharing in that overall motion of what it means to be.

But there is a lingering Aristotelianism in Hegel's discussion of gravity. This can be seen when he makes falling the first concept of concrete motion. It can be seen when he claims that thrust and friction and pulling apply to an existence of matter other than the free god-like motion of the celestial bodies (E 269z). It shows in his curious reluctance to discuss gravity in terms of mutual attraction of every body for every other. In his discussion of falling he emphasizes the movement of bodies towards an ideal center rather than shared motion of mutually attracting other bodies.²⁴ In his discussion of the solar system Hegel speaks of a free motion of each body rather than mutual forces acting on each from each. In his insistence that Kepler is superior to Newton he emphasizes mathematical pattern and conceptual divisions rather than motion as resulting from a composition of empirical forces.

Hegel's discussion of gravity gives a privileged place to ideal and real centers, expressed finally by the sun as the posited embodiment of the unity of the gravitational system. We could insist on an account that dealt more with the mutual interaction of bodies external to one another, perhaps by bringing his astronomy up to date, perhaps by insisting on the conceptual priority of the notion of mass over that of weight, and perhaps also by pointing to dimensions of externality that resist Hegel's narrative.

What I have just said makes a familiar deconstructive gesture. But it could be rather more Hegelian than the usual deconstructive scholasticism, for it would retain the spirit of gravity.

We might think of different buildings and art works as being external to one another in ways that cannot be totally encompassed or interiorized, but also as all affecting one another, not by a uniform indifferent attraction or central gravity but rather by tidal attractions that affect each differentially, reshaping and pulling each away from its self-enclosed roundness. This would also be true for social unities and discourses and practices. These would not be quite dialectical relationships. (Tidal effects take hold not directly on the central concept but on the extended bodies of moons, discourses, art objects, social practices. To use evolutionary language, they work on the phenotype, not the genotype.) Tidal influences move across conceptual borders, warping conceptual skeletons, bringing contaminations and denying the separation of levels.

In that case we might find ourselves within a polycentric system of mutual attractions. Yet this lack of a center would not result in a dramatic explosion of disunity, but rather in a complex skein of relations and tidal influences.

What would come of rethinking the externality of buildings and social practices and discourses in tidal terms? Could we think the influences of architectural context that way? Would dialectic be mimicked by a version of Roche's Limit for the approach to one another of buildings, or discourses or art works or practices? Would close approach put enough pressure on one another to warp or tear them apart?

In closing I remind you that our title phrase, "the spirit of gravity," has other more famous connotations. Nietzsche vigorously opposes a "spirit of gravity" that denies our Dionysian freedom to create our own values and dance with masks. There is no doubt that anything even vaguely Hegelian, even if polycentric, will maintain something of the seriousness that Nietzsche attacks. Hegel's dance of relations and transitions includes the work of the concept and the negative, and both of these require more constitutive connections than do Nietzsche's contending wills to power, for the spirit of gravity, in Hegel's sense, insists on mutual attractions and tensions precisely in externality.

¹Notes:

, Page references in the text refer to Hegel's works according to the following abbreviations:

A: *Vorlesungen über die Ästhetik*, edd. Eva Moldenhauer and Karl Markus Michel, *G.W.F. Hegel Werke in zwanzig Bänden*, vol. 13, 14, 15 (Frankfurt: Suhrkamp, 1970). English translation by T. M. Knox, *Aesthetics* (Oxford: Oxford University Press, 1975)

L: *Wissenschaft der Logik*, ed. Friedrich Lasson (Hamburg: Meiner, 1963)

E: *Enzyklopädie der philosophischen Wissenschaften* (1830), edd. Friedhelm Nicolin and Otto Pöggeler (Hamburg: Meiner, 1959).

I have occasionally modified the translations.

², Sie wird eine unorganische Umgebung, ein den Gesetzen der Schwere nach geordnetes und gebautes Ganzes. (A 14.303) This, like many of Hegel's general statements about architecture applies best to classical architecture.

³, Im Begriffe der Schwere sind, wie gezeigt, selbst die beiden Momente der Fürsichseins und der das Fürsichsein aufhebenden Kontinuität enthalten. (E 269z)

⁴, Die spezielle Bestimmung der Architektur, blosser Umschliessung zu sein . . . eine unorganische Natur zeige, von Menschenhänden da hingebaut (A 14.294/2.653).

⁵, Die erste Aufgabe der Kunst darin bestehe, das an sich selbst Objektive, den Boden der Natur, die äussere Umgebung des Geistes zu gestalten und somit dem Innerlichkeitslosen eine Bedeutung und Form einzubilden, welche demselben äusserlich bleibt, da sie nicht die dem Objektiven selber immanente Form und Bedeutung ist. (A 14.267/2.631)

⁶, The parallels here to Heidegger's notion of earth are not as close as they might seem to be.

⁷, I have discussed the relation of Hegel's three stages of architecture to the expression of function, and the several different kinds of function involved, especially in Hegel's ideas about classical architecture, together with some possible changes in Hegel's scheme, in "Before Beyond Function" (forthcoming in a volume based on a conference held at VPI on Hegel and architecture).

⁸, The survival of older forms of art raises the same issues for Hegel as the survival of previous social forms within a modern society. They may be changed (slavery, duelling, feudal loyalty) or they may survive as a moment (family and clan), but in either case they are no longer able to make ultimate claims. Hegel says that certain stages of spirit expressed themselves in symbolic art, and architecture was the form most appropriate for symbolic art (because architecture's outer-ness and next-to-each-other-ness and its use of mixed items and symbolisms from/in nature are the way symbolic art signifies). Architecture still expresses our self-conception, though no longer adequately. It only did so adequately when that self-conception was unmediated enough to be adequately expressed through symbolic art. In our world the mode of expression that architecture is capable of is not the most adequate mode we have available. Architecture survives as a part of the modern self-presentation of spirit to itself but not as a dominant or leading part. It is qualified and reduced, but it is not replaced. Nothing replaces anything else in Hegel, though things lose their absoluteness.

⁹, Ihr Beruf liegt eben darin, dem für sich schon vorhandenen Geist, dem Menschen oder seinen objektiv von ihm herausgestalteten und aufgestellten Götterbildern, die äussere Natur als eine aus dem Geiste selbst durch die Kunst, zur Schönheit gestaltete Umschliessung heraufzubilden, die ihre Bedeutung nicht mehr in sich selbst trägt, sondern dieselbe in einem anderen, dem Menschen und dessen Bedürfnissen und Zwecken des Familienlebens, des Starchitecturets, Kultus, usf. findet und deshalb die Selbständigkeit der Bauwerke aufgibt. (A 14.270/2.633)

¹⁰, Die Baukunst, wenn sie ihre eigentümliche begriffsgemässe Stellung erhält, dient in ihrem Werke einem Zweck und einer Bedeutung, die sie nicht in sich selbst hat. Sie wird eine unorganische Umgebung, ein den Gesetzen der Schwere nach geordnetes und gebautes Ganzes. . . . Ihrem eigentlichen Begriff aber entspricht die Architektur auf dieser Stufe, weil sie an und für sich das Geistige zu seinem gemässen Dasein zu bringen nicht imstande ist und deshalb nur das Äusserliche und Geistlose zum Widerschein des Geistigen umzubilden vermag. (A 14.303/2.660)

¹¹, (Demgemäss, was ich mehrmals bereits angeführt habe, besteht der Grundbegriff der eigentlichen Baukunst darin, dass die geistige Bedeutung nicht ausschliesslich in das Bauwerk selbst hineingelegt ist, das dadurch zu einem selbstständigen Symbol des Innern wird, sondern dass diese Bedeutung umgekehrt ausserhalb der Architektur schon ihr freies Dasein gewonnen hat.) (A 14.303-4/2.661)

¹², Ein Haus, eine Uhr können als die Zwecke erscheinen gegen die zu ihrer Hervorbringung gebrauchten Werkzeuge; aber die Steine, Balken, oder Räder, Axen usf., welche die Wirklichkeit des Zweckes ausmachen, erfahren ihn nur durch den Druck, den sie erleiden, durch die chemischen Prozesse, denen sie mit Luft, Licht, Wasser preisgegeben sind und die sie dem Menschen abnehmen, durch ihre Reibung usf. Sie erfahren also ihre Bestimmung nur durch ihren Gebrauch und Abnutzung und entsprechen nur durch ihre Negation dem, was sie sein sollen. Sie sind nicht positiv mit dem Zwecke vereinigt, weil sie die Selbstbestimmung nur äusserlich an ihnen haben, und sind nur relative Zwecke, oder wesentlich auch nur Mittel. (L 402/750)

¹³, Als Selbstzweck an ihr sein Mittel hat und sie als sein Mittel setzt, aber in diesem Mittel immanent und darin der realisierte mit sich identische Zweck ist. (L 412/760)

¹⁴, Weil nun diese Objektivität Prädikat des Individuums und in die subjektive Einheit aufgenommen ist, so kommen ihr nicht die frühern Bestimmungen des Objekts, das mechanische oder chemische Verhältnis, noch weniger die abstrakten Reflexionsverhältnisse von Ganzem und Teilen u. dgl. zu. Als Äusserlichkeit ist sie solcher Verhältnisse zwar fähig, aber insofern ist sie nicht lebendiges Dasein; wenn das Lebendige als ein mechanische oder chemische Ursache einwirken, als mechanische oder chemisches Produkt, es sei bloß als solches oder auch durch ein äusserlichen Zweck Bestimmtes, genommen wird, so wirt der Begriff ihm als äußerlich, es wirt als ein Totes genommen. Da ihm der Begriff immanent ist, so ist die Zweckmäßigkeit des Lebendigen als innre zu fassen; er ist in ihm als bestimmter, von seiner Äusserlichkeit unterschiedener und in seinem Unterscheiden sie durchdringender und mit sich identischer Begriff. Diese Objektivität des Lebendigen ist Organismus; sie ist das Mittel und Werkzeug des Zwecks, vollkommen zweckmäßig, da der Begriff ihre Substanz ausbacht; aber eben deswegen ist dies Mittel und Werkzeug selbst der ausgeführte Zweck, in welchem der subjektive Zweck insofern unmittelbar mit sich selbst zusammengeschlossen ist. Nach der Äusserlichkeit des Organismus ist er ein Vielfaches nicht von Teilen, sondern von Gliedern. (L 420/766)

¹⁵, Organische Gebilde, wie die Skulptur sie in der tierischen und menschlichen Gestalt darstellt, haben ihren Anfang und ihr Ende in freien Konturen in sich selbst, indem es der vernünftige Organismus selber ist, der die Begrenzung der Gestalt von innen heraus macht; die Architektur dagegen hat für die Säule und deren Gestalt nichts anderes als die mechanische Bestimmung des Tragens und der räumlichen Entfernung vom Boden bis zu dem Punkt hin, wo die getragene Last die Säule endigt. Die besonderen Seiten aber, welche in dieser Bestimmung liegen, muss die Kunst, weil sie der Säule angehören, auch heraustreten lassen und gestalten. Ihre bestimmte Länge und deren zweifache Grenze nach unten und oben sowie ihr Tragen darf deshalb nicht als nur zufällig und durch anderes in sie hineinkommend

erscheinen, sondern muss auch als ihr selber immanent dargestellt sein. (A 14.311f/2.668)

¹⁶, [D]urch ihre Grandiosität und Massenhaftigkeit mehr unorganisch und architektonisch als skulpturartig (A 14.282/2.643)

¹⁷, [Z]u Reihen werden und eben ihrer dadurch architektonische Bestimmung nur in dieser Reihe und Ordnung erhalten. (A 14.284/2.644)

¹⁸, die Unterschiede . . . auch in ihrer Unterscheidung zum Vorschein kommen müssen, so ist es andererseits ebenso sehr notwendig, dass sie sich zu einem Ganzen vereinen. Auf diese Einigung, welche in der Architectur mehr nur ein Nebeneinandertreten und Zusammenfügen und eine durchgängige Eurhythmie des Masses sein kann. (A 14.318/2.674)

¹⁹, Die Bedeutungen nämlich, welche zum Inhalt genommen werden, bleiben, wie in Symbolischen überhaupt, gleichsam unformliche allgemeine Vorstellungen, elementarische, vielfach gesonderte und durcheinandergeworfene Abstraktionen des Naturlebens, mit Gedanken der geistigen Wirklichkeit gemischt, ohne als Momente eines Subjektes ideell zusammengefasst zu sein. (A 14.274/2.637)

²⁰, Diese Äusserlichkeit aber, da sie an sich im Symbolischen vorhanden, muß auch gesetzt werden. (A 13.486/1.378)

²¹, The relation of symbolic meaning to its external expression remains distant and approximate. Elsewhere Hegel asserts that "the symbol, strictly so called, is inherently enigmatical because the external existent by means of which a universal meaning is to be brought to our contemplation still remains different from the meaning that it has to represent, and it is therefore open to doubt in what sense the shape has to be taken." (Das eigentlich Symbol ist an sich rätselhaft, insofern die Äusserlichkeit, durch welche eine allgemeine Bedeutung zur Anschauung kommen soll, noch verschieden bleibt von der Bedeutung, die sie darzustellen hat, und es deshalb dem Zweifel unterworfen ist, in welchem Sinne die Gestalt genommen werden müsse.) (A 13.509/1.397)

²², See my *Postmodern Sophistications* (Chicago: University of Chicago Press, 1992) for a discussions of the relation of modern subjectivity and postmodern irony.

²³, Roche's Limit is that distance from the planet at which a moon will be pulled apart by tidal forces. Closer than the limit, the difference between the attractive force felt by the near side and that felt by the far side will be greater than the strength of rock to resist being torn apart. The rings around the large outer planets may have been caused by older moons being destroyed in this way, or by the inability of a stable moon to accrete from chunks of material located inside that limit.

²⁴, M. J. Petry equates the movement to an ideal center with movement about their common center of gravity, but this seems to ignore how Hegel discusses falling in terms of each body singly, and it seems to confuse Hegel's discussion of weight with his later discussion of gravity. (See M. Petry, *Hegel's Philosophy of Nature* (London: Allen and Unwin, 1970), vol. i, 322.)