# Lars Spuybroek

## the ges of beauty: revisiting hartshorne's diagram of aesthetic values

*In the following chapter, Lars Spuybroek investigates the diagram of aesthetic values developed by Charles Hartshorne and originating in his studies of Alfred North Whitehead and Max Dessoir. Expanding on theories from his most recent book,* The Sympathy of Things: Ruskin and the Ecology of Design *(2011), Spuybroek relates time, age and process to the structural and formal qualities of things by merging them in the aesthetic experience. Lars Spuybroek is Professor of Architectural Design at the Georgia Institute of Technology in Atlanta. He is the author of* NOX: Machining Architecture *(2004),* The Architecture of Continuity *(2008), and two books in the Research & Design series:* The Architecture of Variation *(2009) and* Textile Tectonics *(2011).*

## THE AGES OF BEAUTY: REVISITING HARTSHORNE'S DIAGRAM OF AESTHETIC VALUES

In the final chapter of his 1970 *Creative Synthesis and Philosophic Method*,[1] the process theologist Charles Hartshorne published a diagram of aesthetics one can only characterize as tremendously bold. It classifies the qualitative values in the aesthetic realm of every object, every spoken word, painting, person, song, table, mountain: everything. Small, large, infinite, disgusting, ephemeral, old, natural or artificial, no matter what, all things fit in. It is nothing short of a diagram for a panaesthetics. Things are not satisfied with being mere facts; they are the product of values, and they are in turn experienced as values, which is another way of saying that they are aesthetic. Nothing escapes this universal law: things are experienced by us, and they experience each other. A thing cannot retreat, stand in reserve, or stand aside, and simply wait to enter a situation as a naked fact; no, a thing is charged, and its goal is to charge others. But, as is immediately clear, such a line of thought involves both a past and a future, a means and an end.

It's difficult not to be intrigued by the diagram, especially by its overwhelming ambition, which, if correct, would have far-reaching consequences. What immediately jumps to the fore is the presumed continuity of all aesthetic experience, which contains the oppositions we express in daily life, such as that between beauty and ugliness or tragedy and comedy, yet is not constructed by these. One could follow any route in this landscape of beauty and never en-

counter an obstacle; all experiences are modulations of each other. In addition, it creates continuity in an aesthetic realm containing disciplines that are nevertheless highly distinct from one another. At the top of the diagram, we find aspects of the more structure-oriented arts, such as architecture – magnificent, neat and commonplace – and at the bottom, those of the event-oriented arts, such as drama and film – tragic, ugly and comic. But clearly, the most ambitious implication is that all experience is aesthetic experience, and moreover, that experience is declared the pure stuff that all things are made of.[2] If things aren't simply "out there" to be absorbed by our experience "in here" but are themselves constructed by aesthetic experience, by values, then dualisms quickly start to falter, not just those between us and the world but, more disturbingly, those between ethics and aesthetics. When things are aesthetically created just as much as they are aesthetically experienced, this symmetry no longer applies just to works of art but to peace treaties, mathematical formulas[3] and management strategies as well. From here on, as Hartshorne states in his opening paragraphs, the beautiful precedes the good and the true.

On the other hand, what have these far-reaching consequences been? Outside process theology,[4] the diagram does not seem to have raised any interest at all. No artist seems ever to have been bothered with it – it's not a diagram you would hang in your studio – nor has any art historian, which is strange, when you think about it. Since process theology is a subcategory of Whitehead's process philosophy, Hartshorne's diagram should be able to deal with the creative process in one way or another. And the fact that the diagram doesn't is particularly strange, because he was an expert on birdsong, which is experienced as it is being created. Where does the bird get it from? Surely the bird is not mentally picturing the diagram in order to choose the aesthetically correct coordinates for its song. The diagram seems to be one of products, not of production. And though it rightly replaces facts with values, it still views values as matters of fact, that is, as things that have happened or that have been created. When the creation occurs between things, must creativity itself not be included in things, and therefore be part of the diagram? The diagram seems to act like an outdoor table collecting raindrops falling from above: things sud-denly appear on it, but the space where things are produced is not part of it. And why not? If, say, a cooked dish can be beautiful, then the cooking can be as well, and so can the recipe, and the techniques used, as can the dinner itself – as I will argue later in this essay, this is what we call grace.

Grace is not the moment when process overrules product, nor the reverse, but the point when we cannot keep them apart. When we picture the top-bottom distinction of structure and event within the diagram, and beauty placed in between, grace must be in the middle of that middle. It is the point where activity and structure keep adding value to one another. Yes, beauty is the art of stopping, but stopping is an act, not a suspension of action. Things do not "stand from below," as the etymology of substance denotes; the standing itself is activity, as Botticelli – the grandmaster of grace – demonstrated by making Venus stand on her shell of foam, moving forward while holding her posture. Mind you, her posture is not a freeze-frame of an act under way, as is Bernini's *David*, but the structural product of acting parts. Nor does she stand with legs apart like a sailor on his boat; no, it is that magical internal weakening, the bending of her right leg, the hair sculpted out of wind, the opening of the fingers of the right hand, her eyes looking to the side of us. We tend to understand things as the antithesis of vertical standing and horizontal streaming, but aesthetically we can be completely satisfied by their mergence. When we look carefully, we see that her standing is a result of a large set of individual diagonals collaborating, all contributing their rotations via the joints, and all extremities referring back to one another. According to the principle of grace, the transitive is not what transits substance but what actually brings it forth. If it were not, we wouldn't call it graceful.

Far too often, we see movement as something that deconstructs form, yet in reality it constructs form. And far too often, we view change as something moving away from form instead of towards it. One way or the other, an aesthetic thing is a product, and for that we need production; we need parts to come together and to undergo certain transformations or variations while they do so. Consequently, the type of form, and therefore the type of aesthetic experience, is highly dependent on how movement determines

structure. But such a middle ground between stability and movement is not easily held. Structures that contain events – architecture – tend, as I have said, toward the top of the diagram, and conversely, events that contain structures tend toward the bottom of it. And this is often only because they occur in each other's conditions. These are merely a few introductory examples given to sketchily trace out the main issues, and in this essay I will try to show that we can use Hartshorne's aesthetic diagram to start to re-think one-dimensional, linear production – i.e., production always leading to product – in its two-dimensional realm, and even to think about how we might add a third dimension.

In the chapter in question, "The Aesthetic Matrix of Value," Charles Hartshorne titles his diagram "The Dessoir-Davis Circle," (Fig. 1) a name that sounds rather prosaic but is not without motive. Leaving his own name out, he defined his function as that of an intermediary between Max Dessoir, the German theorist of aesthetics,[5] and Kay Davis Leclerc, his former student at Emory University. As we will soon learn, there is more to that circle, and later, Hartshorne would give it the more appropriate title "Diagram of Aesthetic Values" (Fig. 2).

The best idea in the diagram is obviously the positioning of beauty in the middle, designated by a separate circle. In his last book, *The Zero Fallacy*, Hartshorne (by then a hundred years old) explains that this was the particular insight of Kay Davis,[6] "the lady artist," who noticed that Dessoir and Hartshorne had made the mistake of placing it at the top. Between the 1970 and 1997 versions, we can observe some small differences. The earlier one has the terms "magnificent," "sublime" and "tragic" behind a large bracket on the left side and "commonplace," "pretty" and "ridiculous" on the right. For Hartshorne, it seems that the six terms divide into two distinct groups, one "profound," the other "superficial," though he does not fully explain what the notion of depth entails, or why he plots depth horizontally while one would expect such terminology on a vertical axis. I think the aim of beauty – a wording so often used by Whitehead – is the depth of beauty itself, but I will return to that later. Whatever the exact reasons, in the 1970 version, clearly things have not completely settled, while in the 1997 version, all the terms except beauty share the continuum of the large circle and are properly stationed inside its circumference. Additionally, the terms have been slightly altered: "magnificent" has become "superb," and "ridiculous" has become "comic" – the latter, in particular, is a clear improvement.

Before moving ahead to discuss the circle and its consequences, we need to quickly clarify exactly when the circle was drawn up. Contrary to what published accounts suggest, the three protagonists actually never sat down together to draw up a diagram of aesthetic values. Max Dessoir was thirty years Hartshorne's senior and died in 1947, while Kay Davis was Hartshorne's student in the late 1950s, and the first time the diagram was published as the Dessoir-Davis Circle was in 1970.[7] It seems Hartshorne never actually met Dessoir. I think he arrived at his first sketch mainly by combining two sources; one, as is well known, was Alfred North Whitehead's concepts of beauty, developed mostly in his *Adventures of Ideas*, and the other was Dessoir's *Aesthetics and Theory of Art*, which he must have known from the original German text of 1906. In that book, Dessoir lays out a broad theory of art, in which he proposes a classification of "primary aesthetic forms." In one of the early chapters, Dessoir discusses the beautiful, accompanying
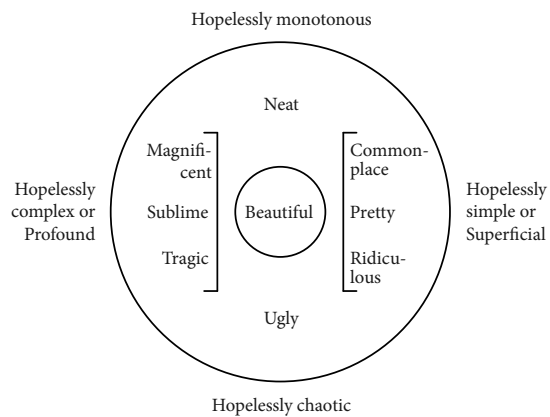


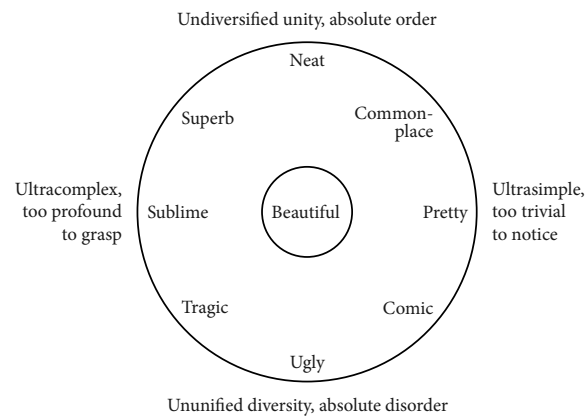Fig. 1. The Dessoir-Davis Circle (from: Charles Hartshorne, *Creative Synthesis and Philosophic Method*, 1970)



Fig. 2. Diagram of Aesthetic Values (from: Charles Hartshorne, *The Zero Fallacy*, 1997)

his text with a diagram entitled "From the Beautiful to the Ugly" (Fig. 3),[8] which, in all likelihood, is the precursor to Hartshorne's diagram.

Dessoir clearly had a color wheel in mind when he created this diagram, consciously taking beauty out of the center and placing it on an equal footing with other experiences, in which "the whole fabric of aesthetic feelings can take on various tints."[9] But we quickly sense, as did Hartshorne, that this circle has as many weaknesses as it has strengths. Certainly, the sublime and the tragic are close, but not in the same way that the sublime and beautiful are close, nor in the way that beauty and prettiness are. And even though the circle is meant to be read along its periphery, it is no accident that we find beauty at the top and ugliness at the bottom – the title of the diagram says enough. At several points in the book, Dessoir speaks of ugliness as existing at the lowest level and beauty at the highest, though he omits to clarify the levels of what exactly. How do we marry such a hierarchy with the intended neutrality of the circle? From Hartshorne's successive corrections of Dessoir's circle, we can see that he specifically agreed with Dessoir's pairing of the sublime with the tragic and the ugly with the comic,[10] since he never made changes to their order. On the other hand, he felt that the diagram needed important adjustments, though he never directly discusses these as such, nor does he at any point bring up Dessoir's original. What probably happened is that, while the circular diagram included specific qualities that stuck in his mind, over the years Hartshorne lost track of Dessoir's original, while using what he had memorized of it in discussions with his students. In any case, we should first briefly look at the topics on which Hartshorne agreed with Dessoir, before moving on to his criticisms and seeing how he used Whitehead's notion of beauty to correct the circle.

Of the sublime, we know that it is without form, as Kant stated,[11] since it is the aesthetic of immeasurable forces and contin-



Fig. 3. From the Beautiful to the Ugly (from: Max Dessoir, *Aesthetics and Theory of Art*, 1970 orig. 1906)

uous dynamics, large enough to shape the universe, or, somewhat more modestly, the earth itself. However, when such massive forces concentrate themselves on a smaller human subject, the sublime will necessarily annihilate that person. Such a death is not like being swept away in a storm or drowned in a flood; those forces are blind to what they destroy, and aesthetically speaking, there is no tragedy in that. Such events are undeniably sad, but they are not tragic. Tragedy bears all the hallmarks of a mechanical succession of events, in which forces start to gather and inevitably lead to the hero's destruction. I think it is important to realize that, in general, tragic heroes are beautiful people. It is not a direct relationship with the sublime that makes them perish but circumstances that cannot cope with their beauty. Such conditions are always those of power. All objects – that is, all aesthetic objects – exist in power relations, relations that are in themselves not the cause of the objects' beauty. Tragic figures are those overpowered by the effects of their beauty.

According to an inverse logic, those people who desperately want to be – or stay – beautiful easily become the subjects of tragedy. In this way, Michael Jackson is just as tragic as Cyrano de Bergerac, who could not be directly loved because of his extremely elongated nose. When Jackson finally obtained the perfect chin, the perfect skin, the smallest possible nose and the smoothest possible hair, he transformed what generally would be mere circumstances or situations into a set of forces gathering to obliterate him. It was as if events began to line up and move in circles around him, circles that grew steadily smaller and smaller. What we call drama in art suddenly converged with real life, and the ensuing events seemed to be entirely written out in advance. Jackson's own beauty conspired against him. In a similar vein, the ugly Cyrano was not so much the subject of tragedy as were the beautiful poems he wrote night after night for Roxane, since it was these that propelled the situation into an impossible love. Were it not for the poems, *Cyrano de Bergerac* would have been a comedy, and the long nose would have taken the story in a completely different direction. It is not the protagonist's actual beauty or ugliness that drives events towards tragedy but *the mismatch of the events and their object*. As Dessoir puts it: "Whoever has a real sense of sub-
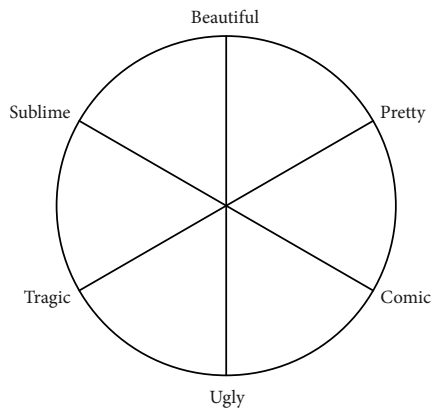
limity cannot feel himself as a harmonious being in a harmonious world."[12] Tragedy is truly the unsuccessful transformation of the sublime into the beautiful.

The comic relies on a mechanics as well, as we know from Bergson,[13] not in events but in the object itself. It is the moment when a gracefully living and moving being turns into a faltering, robotic piece of machinery:

> A man, running along the street, stumbles and falls; the passers-by burst out laughing. They would not laugh at him, I imagine, could they suppose that the whim had suddenly seized him to sit down on the ground. They laugh because his sitting down is involuntary.[14]

As Bergson states, such "lack of tension," "inelasticity" or "rigidity," is what makes the body unattractive, though in a different way than the hunchback or the ugly mugs of Jerry Lewis, Marty Feldman (who allegedly had his bulging eyes insured) and Mr. Bean. Whereas beauty is the subject in the tragic, the subject in the comic is ugliness. Events start to go wrong at the moment when they focus on the protagonist's ugliness. Obviously, Mr. Bean's face is nothing but elastic, and it's this seemingly endless flexibility that turns the ugly into the comic. It came as a shock to the early Romantics that all things and beings shared the same variable flexibility, that epigenetically they could all develop into either beautiful creatures or two-headed monsters. Romanticism is really the discovery that there is no innate division between beauty and ugliness, and no fundamental difference between showing our teeth when we are confronted with a horrific monster and when we see an amusing dwarf. Humor is not at all that funny; in fact, it is close to horror. The difference is that it is a smaller sublime we are confronted with, a mini-tragedy like somebody stumbling in the street, as opposed to seeing them crushed by the forces of fate. Horror, of course, is where the sublime itself takes on form, which by definition it cannot, since, according to Kant, it is rooted in formlessness, and therefore it must turn into a form that is amorphous, tentacled, slimy and drooling. Nevertheless, the tentacles of Cthulhu are topologically continuous with the extra-large noses we

find in caricatures, though the latter is an over-formation, in contrast with the under-formation of the first. To caricature, Bergson says, is to extrapolate and exaggerate latent ugly traits in the object so we can laugh at it by making it manifestly ugly. In that sense, horror forms the hinge between both the sublime-tragic pair and the ugly-comic pair. While in tragedy the sublime finds its subject, in horror the sublime finds its object. And while in humor ugliness is answered by the grimace of laughter, in horror ugliness is answered by the grimace of fear. They are all continuous, and, in a way, all positive.

Let us take a look at Dessoir's and Hartshorne's diagrams again. We observe two major changes. One is the repositioning of "beauty" from the top of the diagram to the middle, and the other is that the lower two thirds of Dessoir's diagram, ranging from "sublime" to "pretty," are compressed in Hartshorne's into a lower half, chiefly through the introduction of a second axis. Hartshorne keeps the vertical axis – though he changes the poles – and adds a horizontal one. It has been extensively discussed by various authors[15] that both the moving of beauty and the introduction of a second dimension to aesthetics are consequences of Hartshorne's deep appreciation of Alfred North Whitehead's philosophy. Though Whitehead often referred to "patterned contrasts" and mutual feelings in his earlier books, such as *Process and Reality*, he did not arrive at his aesthetics until fairly late in his career. In *Modes of Thought* (1938), and most of all in *Adventures of Ideas* (1933), Whitehead gathers all the threads he has thus far developed into what I will provisionally call a panaesthetics. It's not so much that we or things experience everything – as David Ray Griffin suggests in using the term "panexperientialism" to describe Whitehead's philosophy – but more that all things experience one another in an ongoing effort to collaborate, to form (aesthetic) wholes. Whitehead's pluralism – he always states that he is an atomist – is grounded in what one would almost term a kind of future monism. Generally, monism means that all things have a monist *past*, in which we all stem from the One or from the same primordial ocean of the undifferentiated. Whitehead seems to put wholes in the immediate future of things, not as linear or nonlinear attractors, mind

you, but as a continuous striving of things for beauty. Events are neither contingent, since their parts do not accidentally meet up, nor necessary, since the whole is not there yet.

Whitehead is very clear that beauty cannot be understood as a product only but must be understood as a teleological effort. The most famous quote is:

> The teleology of the Universe is directed towards the production of Beauty.[16]

We would tend to understand this remark as explaining the final product as beautiful, and it does attempt to do so, certainly, but it also explains beauty as an ongoing effort and teleology as a concerted act. We tend to think that after the process, the product follows; that after the product is made, the workers turn off the lights behind them and go home. But this cannot be if the workers themselves are the parts. Whitehead shows that when the parts collaborate to make a beautiful whole, such activity is continued: the effort is always actual. *Being is always still being made*, and such a constructivism solves all false oppositions between becoming and being, but, let us be clear, *only via aesthetics*: the being-made runs wholly parallel to the experience of a beautiful (or ugly, or magnificent) being. Therefore, although Whitehead is a Christian, his teleology does not imply the final cause of products has a First Cause – God – behind them; rather, it is things themselves that *aim* to cooperate, to coalesce:

> Beauty is the mutual adaptation of the several factors in an occasion of experience ... Adaptation implies an end. Thus Beauty is only defined when the aim of the adaptation has been defined.[17]

"Factors," in Whitehead's language, means parts. And the parts adapt and conform to one another and are thus able to form a smooth whole without internal frictions or imperfections. However, Whitehead terms this form of beauty a "minor beauty," the mere "absence of a painful clash."[18] Things' striving for beauty is in good hands with Whitehead, since he does not confuse it with a

mere striving for harmony. Harmony can only lead to minor beauty, to what Hartshorne calls "neatness," or neat order. The major form of beauty, however,

> ... presupposes the first form, and adds to it the condition that the conjunction in one synthesis of the various prehensions introduces new contrasts of objective content with objective content.[19]

The absence of conflict does not need to lead to a thing without contrasts. Two dimensions of beauty now appear; at first, this seems to be similar to the classical distinction between unity and diversity, but the latter pair forms only one dimension, since less harmony means more diversity and vice versa. Whitehead's system – he always calls it a "doctrine" – evokes two dimensions: one of harmony, yes, but the other of intensity:

> These contrasts introduce new conformal intensities of feelings natural to each of them, and by doing so raise the intensities of conformal feeling in the primitive component feelings. Thus the parts contribute to the massive feeling of the whole, and the whole contributes to the intensity of the feeling of parts.[20]

In short, one axis measures the effect of the effort, the other the effort itself: massiveness and intensity, respectively. At first, the whole ostensible battle between substance and transience seems to be reinforced with these terms. How is what the whole feels related to what the parts feel? A whole doesn't feel itself, at least not *qua* whole; it only feels in relation to others, in new encounters. Does a pack of wolves experience packness, and does the concerted effort of bricks turn into a wall's experience of wallness? No; the wolves feel each other, as do the bricks, and the ones at the top of the wall feel quite differently from those at the bottom. On the other hand, if I drive my car into the wall, the car (and I) will certainly experience the wall as a single thing. And though I know the bathroom floor is made up of hundreds of neatly fitted white tiles, and I know that each tile contributes its own conceding effort, my feet

simply walk across a floor. My eyes do not; my eyes experience the neatness and conformation. When I walk over the wooden floor in my living room, with each of its planks slightly differently grained and shaded, though they are all identically shaped and grooved, my eyes enjoy the textural differences more than the formal sameness. Could it be that internally, things are what Whitehead calls "societies," and externally, when we or other things experience them, they simply exist as wholes, as single entities? Would such duality correspond with the distinction between intensity and massiveness? William James said that we never taste the lemon and the sugar but only the lemonade.[21]

In contrast, I once joined a knowledgeable friend in tasting a malt whisky that had been untouched for more than a century, and he waxed ecstatic about the hints of pear, apple crumble and freshly cut pineapple on a strong background of northeastern oak; one nuance after the other leapt to his mind. Analyzing, not synthesizing, he could point out each factor as it joined in during the gathering of this "society" called malt whisky. His excitement allowed him to detect even more subtleties, and he could name them all, as if they had been hiding behind one another. Obviously, this is exactly the point: it would be silly to analyze lemonade with the same attention as we do a vintage whisky; that is the reason we have whisky – and why we have soft drinks, by the way. One wants to be analyzed and to share its details as pure nuances; the other absolutely refuses to be analyzed, since there is so much of one effect that it obliterates all the others. To be honest, I am not that convinced by the concept of massiveness, at least not in the way it suggests that a thing's compactness or spatial extension as such can be experienced. The aesthetic experience does not occur in either space or time, i.e., not as a linkage of process to process, nor of product to product. In aesthetics we get the process as a product, which again is experienced during a process, certainly, but not as the uninterrupted extension of the first. It is not continuous. Things are contracted in order to expand, and during that switch things become light and radiant. Massivity is more a temporal order mirrored, or even literally reversed, in the aesthetic experience than an encounter with a spatial, formal entity as such – even when it is at its shallowest. That doesn't mean I don't see

room for substance or things; on the contrary, *I see only room for things*, but as substances that need no extra foundation to stand on or hidden essences to hold them together. Aesthetics makes things luminous and generous, not secretive and dark – it is nothing else but *experiencing the parts experiencing*, i.e., we partake in their participation *in our own way*, not in theirs. We take our own time to appreciate depth or shallowness. When we drink James's lemonade, we don't experience shallowness but immediacy, which is completely fine if you swallow it in the same instant and not over a longer stretch of time, which would lead to boredom. If parts all yield, we get bored; if they subtly differ, we get excited; if one sticks out unchecked – like Cyrano's nose – we call it ugly.

In this sense, Hartshorne's diagram seems closer to a graph, indexing outcomes in a field constructed by two different aspects, say, time on the horizontal X-axis and value on the vertical Y-axis. The field of outcomes is continuous; however, time is not continuous with value. Objects in a graph are not the ontological products of two aspects; often the aspects are related through some other property. For the argument to be ontological, both aspects – massiveness and intensity – would need to be internal. Of course, things emerge in external conditions, but such conditions don't actually fabricate a thing; they do influence it by raising difficulties or creating opportunities but don't produce it as such. The production is all the result of internal effort. Then, one aspect – intensity – could be termed the *magnitude* of the efforts, and the other – massiveness – the *coordination* of those efforts (Fig. 4). To be sure, viewed from this angle, the vertical axis still indexes a higher, though not more fundamental, order than that of pure magnitude, but nonetheless a coordination between parts only, not between the whole and possible other wholes. According to Whitehead, intensity can be equated with "magnitude without reference to qualitative variety," and in that case, massiveness implies an order of variety itself. And to have a concept like variety turn up
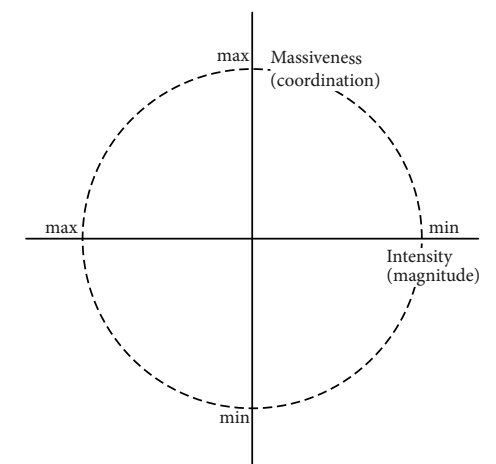


Fig. 4. Hartshorne's Aesthetic Diagram in Whitehead's terms of 1933

in a discussion of beauty could hardly be called a surprise. For Hartshorne, "variability is the ultimate conception."[22]

Aesthetic formulas such as "uniformity amidst variety"[23] and "multëity in unity"[24] are not simply paradigms; they have been intensely fought over and are precisely differentiated. The concept of variation – long before it became one of the three pillars of evolutionary theory (along with heredity and natural selection) – has been at the root of aesthetic philosophy for ages, and it is not the same as simple diversity, though they are often confused. Variation is a measure of parts acting towards unity and agreement. If you take at random, say, seventeen different things from your house and line them up in a row, we will see mere difference or diversity; the objects share nothing except being in a row (and from your house). If you select seventeen more objects – say, books, magazines, a few boxes, perhaps a vase – with the purpose of stacking them in a pile, these objects will need to vary, i.e., they will need to share certain formal traits allowing them to be stacked. They will all share the abstract quality of a double-sided flatness, but within this constellation of geometric points, they will be allowed to take any shape. All the shapes therefore will contribute their own sets of points by varying; therefore, varying will be the effort they contribute in the creation of the stack. The fact that you select the objects and do the actual stacking is completely meaningless in the stack's aesthetic ontology; you have merely sensed the necessary variation in things allowing them to coalesce. The things work together intensively to create a (not so very) massive stack.

Now, in aesthetics we make the distinction between two types of variation, smooth (or gradual) and rough (or sudden). In terms of Hartshorne's diagram, both are members of the inner circle of beauty, though the smooth version occurs on the side of prettiness and the rough one on that of the sublime. This directly implies that variation does not necessarily position itself on the vertical axis, as is suggested by Hartshorne and Whitehead, but on the horizontal axis of intensity. We can't really say that as we move back and forth over the horizontal axis variation remains constant and only magnitude changes; it is clear that magnitude affects variability, in degree and in kind. Even the type of variation occurring between beauty and prettiness, i.e., smooth variation, we also know in two

conditions: a tight one, in which smoothness overrides the expression of parts – a smoothness we find in classic idealized beauty – and a loose condition we recognize from Hogarth's *The Analysis of Beauty*, in which the lines of smoothness – the serpentine lines – are articulated more strongly than the body. In Hogarth's notion of beauty, the whole is often like a "bulk," an "intricate"[25] bunch of these curves, which are themselves smooth, while their connections are not. The parts are smooth; the whole is not. Hogarth actually calls this form of beauty – as he found it in the looser hairstyles of the women of his day – picturesque. Generally, in art history, the picturesque is placed at the rougher end of variability, for instance by one of its major theoreticians, Uvedale Price:

> ... sudden protuberances, and lines that cross each other in a sudden and broken manner, are among the most fruitful causes of intricacy. I am therefore persuaded, that the two opposite qualities of roughness, and of sudden variation, joined to that of irregularity, are the most efficient causes of the picturesque.[26]

Price still adheres to Hogarth's categories of variation and intricacy, but he adds irregularity, allowing things to suddenly shift and internally break instead and therefore exhibit internal contrasts between parts that are intricate rather than being perfectly smooth. Hogarth's smooth curves also show a certain roughness, since they do not smoothly connect up. The curves do not necessarily fully align but incidentally link up or merely intersect, creating a whole that consists of smooth elements but also exhibits suddenness, though not on the same scale as Price's picturesque. Again, we have variation driving a magnitude positioned on the horizontal rather than the vertical dimension. Variation is the main protagonist in both versions of the picturesque; it is the reason why it moves along the spectrum between sublimity and prettiness without either shedding variation upward to become sameness or downward to become diversity. Variation is always a property of beauty; it is what every attempt at beauty starts out with. But I am afraid that Hartshorne's circle does not allow us to fully grasp the relation between variation and the sublime.

Price is famous for stating that the picturesque "holds a station between beauty and sublimity"; he means a classical, overharmonized, all-too-smooth beauty, not Whitehead's type, which accommodates imperfections and contrasts. Price's picturesque is also full of contrasts. It's a smooth landscape riddled with rocks and crevices, or the opposite, a rough aggregate of smooth parts, like salami or marble. Price's notion of a midpoint is close to Whitehead's and Hartshorne's, though of another age and under different conditions. But what Price's paradigm explains us is that for things to become beautiful they need to be able to vary, and such variation can only originate in a relationship with the sublime.

I think the most important question is this: When things act, when things vary, where does their flexibility come from? Where do they find that internal weakening that is necessary for them to transform, to take shape? How do they bounce back from temporary indeterminacy and become determinate again? As Venus stands on her shell, how does she access that internal flexibility that allows her to stand? Yet, such elasticity need not be both internal and external, as in the case of Venus, it might be solely internal. For instance, to go back to my example of the stacked household objects, we could ask ourselves how the books, which are determined to be read, allow themselves to be taken from the shelf and be stacked in a pile so I can put my cup of coffee on it. Before being stacked the books must have experienced a moment of indeterminacy, a momentary fainting, while under way to being redetermined. Whatever things are, they enjoy the same basic freedoms as we do. The principle of process is, states Brian Henning, paraphrasing Whitehead, that "the determination of that which was indeterminate progressively constitutes what the entity is."[27] The shift from *that* to *what* is pure William James, though this is not so important at the moment. What is important is that the statement is a definition of creativity. As Hartshorne puts it:

> … creativity embraces all alternatives, and is indeed alternativeness itself …[28]

Or, as Whitehead put it before him:

> … No entity can be divorced from the notion of creativity.[29]

And, again, more precisely:

> Creativity is without a character of its own, exactly in the same sense in which the Aristotelian 'matter' is without a character of its own. It is that ultimate notion of the highest generality at the base of actuality. It cannot be characterized, because all characters are more special than itself. But creativity is always found under conditions, and described as conditioned.[30]

The last quote is no longer pure James but pure Schelling. The *Unbedingte* leads to a *Ding* under *Bedingungen*. In aesthetic terms, the sublime leads to the beautiful, but only in certain situations. Things are getting somewhat clearer now. If we look at the Aesthetic Circle, we quickly notice how it resembles a target, like a dartboard, in which we aim at a small circle within concentric spoked larger circles. Whitehead always speaks of beauty as an aim. Now, does the aiming occur in a third dimension, in the café of creativity, so to speak? That is, does the aiming itself occur outside the diagram? No, that cannot be; that would mean determinate things would access another realm, momentarily reach (or dive) into a state of indeterminacy, and then leap back onto the board in a new state of determinacy. Things would require the help of God to get back in. No, the aiming happens within the circle itself. And this aiming originates exactly at the place where Hartshorne and Dessoir position the sublime. Yes, beauty maybe the end, but the sublime is at the start. To be sure, things don't plunge back into an ocean of indifference, where all is one; they don't plunge back into a blobby state of full indeterminacy, but they do find some lava at their cores. Things are their own planets, and have their own geology.

I think grace is nothing but an oscillation back and forth between determinacy and indeterminacy. Look at the way dolphins leap in front of a ship. Is there anything more graceful? Transient, substantive, transient, substantive – there seems to be no end to their energy. And there seems to be no end to their happiness and generosity. It is pure joy, but there's nothing funny about it; in fact, Bergson places humor's inelasticity in direct opposition to

gracefulness. Let's keep in mind that Joy, Charm and Beauty make up the Three Graces; they cannot live without each other. With the dolphins, we seem to have entered the absolute middle of the Aesthetic Circle. It is mind-boggling to think that these graceful creatures are selected to help the most severely disabled children move their atrophied arms and legs. When a child, strapped in floaters, stretches out its sclerotic arms and fails to catch hold of the dorsal fin, the dolphin immediately swims back to allow the child another try. Such patience is that of a saint. Here, we encounter a pure state of grace lifting a body from its inertia, through the tiniest of movements. This is probably why Simone Weil so forcefully contrasts grace and gravity, the two terms in the title of her posthumous book. Really, massiveness is the last thing we would want. I am probably not the first to suggest that dolphins are angels, but no characterization seems more fitting.

Let us try for a moment to map some more aspects of the inner circle of beauty. We would encounter similar terms: incandescence, maybe; smoothness, fragility, opulence or redundancy, and even roughness. The inner circle accommodates objects that are utterly radiant and overflowing. Each of these aspects of beauty would correspond with a category in the outer circle of aesthetic values. An aspect such as incandescence – with magnificence as its partner in the outer circle – makes us choose gold and emeralds for jewelry; it also led Aldous Huxley to talk about the "glow" of things in *Heaven and Hell* and, needless to say, led Walter Benjamin to speculate on a work of art's aura.[31] Smoothness – with the commonplace as its partner in the outer circle – is what we appreciate in water-worn river stones, cars, the bodies of horses, hilly landscapes and glasswork. Fragility or delicacy – aligned with prettiness in the outer circle – makes us love flowers, dragonflies, lacework and filigree, while opulence – paired with the comic – made Andy Warhol stuff his house full of objects, made "facteur" Cheval build his own *Palais idéal* with the smallest possible parts, and drove John Ruskin to spend many wonderful pages describing St. Mark's in Venice.[32] Roughness – corresponding to the sublime – is another Ruskinian aspect, one he also called imperfection in a different context. Roughness is what we love in mountains, old wooden fences, irregular trees and old farmhouses.

To act, things need to be able to suddenly deform by accessing their own private entrance to the sublime, and take on a new form again. And this happens at *all* occasions, at *all* events and encounters. For instance, imagine people happily conversing around a dinner table, and someone suddenly cracking a joke, followed by an infinitesimal pause, after which everyone bursts out laughing – not an atypical situation. Why didn't that person tell the tragic story of the girl run over in the street, or speak of that beautiful painting he saw last week at the gallery? Or why did he not choose to say nothing at all? Why is it that in the Aesthetic Circle a dot suddenly flashes up at that specific position, close to the comic? Two paragraphs ago, I said beauty was not an arrow shot from outside but an aiming that starts at the sublime – which might be asymptotically far away – and is subsequently ejected over the board, curving its way over to that spot close to the comic. It takes the trajectory of a projectile, or a project. Beauty is a project, an aim. Why does it not always end in the middle, though? Why does the party guest not say something graceful? All because of the *Bedingungen*, which condition the trajectory. Every event of beauty occurs in a situation. Situations do not produce the novelty of the event – in this case, the joke – but they do define and enable it. The novelty sprouts purely from the internal weakening of the words, the fact that they can be mixed up, broken up, shifted, reassembled – or, as Freud would say, "treated as things."[33] Now, the joke will most likely be ugly or vulgar, a misformed set of words accompanied by momentarily deformed faces, but it will enhance the dinner and lift it, as a whole, to a state of beauty. Though a thing, it immediately acts as a part. I think the unconscious is a great invention, but it would be better applied to things than to humans. The sublime is no "abyss of freedom,"[34] though it is as vertical as an abyss; we would be better off conceiving it as the opposite: a volcanic shaft of freedom, eruptive and productive. According to Kant, both the abyss and the volcano are sublime objects,[35] but the latter points upward instead of downward, in the direction of positivity, not that of nonbeing or negation. A thing relies on its liquid core to shift gears, to transform, to act, to prompt new things – in a word, to create beauty. It is not concerned with its own death, though every act contains risk. To stare

down into its own abyss would only freeze it, disable it, make it impossible for it to act. Instead, things are generous and jovially contribute. They constantly exceed themselves. Unconscious lava erupts in things from within, cooling, forming crusts and emerging anew, placed at the right moment at the right spot in the diagram.

I think the transformation of the sublime into the beautiful takes place in a vertical trajectory, not along a horizontal axis. Nor can I truly imagine Hartshorne's two axes being precisely the same length. Of course, it enables us to speak of a middle, even a radical middle,[36] but a thing doesn't enter the circle with all positions at hand to then ponder on which one would fit best; rather, it enters at high speed.[37] I think there is a main axis of magnitude, starting at the sublime, coming to a stop at a point that is heavily influenced by what occurs at the Earth's crust of things, their politics, their economies, their real conditions, but these are outside the circle. In my mind, to understand Hartshorne's circle properly, i.e., *generatively*, it should be conceived of as a map, rather than a graph. The creation of a thing (or event or occasion) follows a curved trajectory over the board, now turned ninety degrees counterclockwise, with the sublime at the bottom, beauty in the middle, and prettiness at the top. Slowly but surely, the path stops somewhere, at the terminus of comic, tragic, neat or magnificent, or in the middle, at grace. Heavily influenced by conditions that should in fact be viewed as a set of forces that fold and bulge the flat map into a three-dimensional landscape,[38] the river – of lava, probably, or some other raw Aristotelian matter – flows out from the sublime over the topography to reach its final destination (Fig. 5). The *Bedingungen* are on the Z-axis but are never frozen down to a fixed state. Every situation is completely different: some situations make beauty a mountain so steep that it is highly improbable we could climb its slopes; some make it a smooth, quiet lake in the middle, surrounded by mountains. Still other situations turn the map into a deeply grooved landscape, while others turn it indifferent and flatten it out like a salt lake.
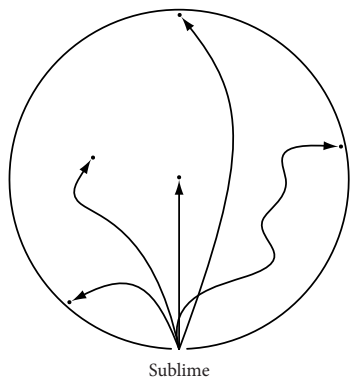


Sublime

Fig. 5. Aesthetic Landscape. Several possible trajectories ejecting from the Sublime ending at various positions in the Aesthetic Circle influenced by three-dimensional conditions.

As it appears now, the diagram is too idealized and static for us to appreciate the tensions among its coordinates. If Hartshorne's diagram is read in between the dynamism sprouting from the sublime and the dynamism of ever-changing conditions, it could turn out to be a more productive and generative model. It would keep all its qualities, but it would in every actuality be topologically severely distorted. Whichever model we use to grasp the meaning of the Aesthetic Circle, it is critical that we understand that it contains only experiential *Dinge*; *Bedingungen* are not mapped onto the circle as such (and the *Unbedingte* is merely a little hole at the sublime). In reality, a thing simply happens, pops up, dies down – that's it. Though things that need to persist longer tend to end up on the neat side of the landscape, while things that are short-lived, as most events are, usually end up at the ugly end of the spectrum.

When Hartshorne refers to prettiness, he always quotes Dessoir's German term as *hübsch*, but in fact the original German text uses *niedlich*, cute. At the top of our rotated diagram, we now replace prettiness with cuteness. Babies are born cute, and for good reason. As I have said, every production of novelty occurs in a situation, and every situation is pervaded by mechanical power relations. Aesthetics overrules power; ask any court jester or standup comedian. A baby is born into a situation of starkly unequal power relations. It depends totally on its parents to feed and care for it, even when it is crying loudly or distributing food in every direction except into its own mouth. The baby's lack of power is entirely compensated for by its cuteness. Cuteness is beauty overcompensating. Something remarkable is definitely going on here. The shallowness, the lack of depth, that Charles Hartshorne associates with prettiness turns out *to be literally one of age*. Lack of depth is a lack of age. And depth, the profundity of an aesthetic experience, increases linearly with the object's age. We could pick any type of object, but a human being's passage through time shows it exceptionally well: (1) *cuteness* for the newborn or toddler, (2) *coolness* for the teenager, (3) *spontaneity* for the adolescent and young adult, (4) *elegance* for the middle-aged and (5) *character* for the elderly. If we plot these categories on our map, one by one, and then connect the dots, surprisingly, we will see a straight line beginning at the top of the outer circle of aesthetics (cute) and

ending at the bottom of the inner circle of beauty (character). Is the whole Aesthetic Circle full of such configurations, as the sky is filled with the signs of the zodiac? It may well be. In the sign of Man, the relation between us and our elasticity changes with each step, with a flexibility that creates the complete aesthetic appearance. And the contrasts increase with each step, because

> … contrast elicits depth, and only shallow experience is possible when there is a lack of patterned contrast.[39]

If such depth is the depth of age – the depth of Schelling's *Ungrund*, no less[40] – we should be able to follow the trajectory of beauty precisely. And, as we know from Schelling's *Ages of the World*,[41] its path revolves around the continuous revaluation of determinism and indeterminacy, or freedom. Our freedom exists only in order as to contribute to the production of forms of beauty. To be sure, freedom is a way for things to retreat from the sheer causality that governs the realm of conditions and to retrieve an indeterminacy in themselves, a local sublime, so that they do not bounce about like billiard balls; however, the purpose is to produce beauty, not to wander off deconstructively and deterritorializingly. Cause and necessity are not simply traded for a radical contingency[42] but replaced by end and aim. Yes, there is an "out-of-jointedness," but it relates to the hinges of causality, not to beauty. When we are suddenly able to consider "matter as mere appearance,"[43] as Schelling says, it is the moment not to look back into our own emptiness, sensing either an alienation or castration,[44] but to recover what he calls "charm," and it is the same charm we encountered in the company of joy and beauty. Instead of being pushed forward by fate, we now find ourselves in a world of constant attractions. When we follow the ages of man chronologically, from birth to very old age, we should be able to see the same path proceeding through the landscape of aesthetic values, since as the object progresses through time – i.e., ages – it literally acquires *aesthetic*, not temporal, depth. Previously, I have called this the objectification of age.[45] Time is not real; *aesthetics is real*, an aesthetics that lets things be charmed by each other, relating to each other to create bonds and alliances. This must be what a panaesthetics

would be: not a grand, processive, temporal order, not a grand drive or *Trieb*, but almost the reverse of the evolutionary forking tree: a constant merging of trajectories. Let us now follow that of the ages of beauty, step by step.

*Cuteness*. Cute things do not have an internal structure; they are all jelly inside, malleable as dough, and on top of that, they are just as soft on the outside. Therefore, their shape is that of a pouch, a small bag or a purse. They prefer to sit, like little Buddhas, and when they try to walk, they stumble and fall. An object is never more passive than when it is cute. Though cute things are related to fragility, they in fact lack the tender, fibrous structure of fragile objects. They are lavalike and amorphous, without any intensity, because they lack the structure to process internal forces. Adult fatness is a faint echo of the baby's cuteness. But cuteness is an aesthetic category, and therefore it can be applied to any object – teddy bears, cars (e.g., the Ford Ka), big-eyed Japanese anime figures. Soft drinks are deeply related to cuteness because of their sweetness. People increasingly often call things "sweet" nowadays. Why are cute objects successful? Just as babies are born into such uneven power relationships, cute objects themselves seek and generate such conditions. We can observe a relentless weakening in the objects a cute thing encounters: all of them inevitably start to act like parents, caring for it, nourishing it, smiling at it (the reason why it is relatively close to the comic). In short, the power relationship is reversed.

*Coolness*. Cool things are as soft and unstructured inside as cute objects, but their exteriors have been hardened and smoothed out. Cool is for teenagers and technological objects. Though hard, they are not sharp-edged but rounded off. Cool wears sunglasses and prefers its body to be wholly reflective and polished. All Apple's designs are cool – rounded but hard as nails and minimalist. Coolness is military. Teenagers form highly coded and standardized groups, dress according to fixed codes, talk in slogans and lack personality. Cool things are so vulnerable inside, they armor their exteriors to protect themselves. In encounters, they know only defense and attack. This is why McLuhan made coolness the main quality of the electronic media. You can have cuteness and coolness on television, but not beauty. The electronic media simply

can't process it. Why? Because their *Bedingungen* are those of the masses. As McLuhan said, Kennedy won the 1960 election because of his smooth hairstyle and no-sweat attitude that fitted the low definition of the televised image;[46] anything in Hogarthian style would make one look like a bum on television. Just look at the hairstyles of US anchorwomen: absolutely overcoiffed (and continually nodding to emphasize every other syllable) – you wouldn't wear your hair that way for any real occasion.

*Spontaneity.* Spontaneous things do have structure – not a crystallized one, like posts and beams, but one of curves and arabesques, inside and out. At this point, we enter the middle circle of beauty. Spontaneous objects are fragile objects,[47] made up of soft fibers, serpentine lines that nest and entangle, giving them enough structure to be independent but also enormous flexibility, so that they can act in more complex ways than are possible for any other object in the circle. This is the beauty of running boys, of dancing girls, of flowers, loose hairstyles, jungles and large protein molecules. They are all structured by entanglement, or what Hogarth called intricacy. Spontaneity is also what Ruskin termed "vital beauty," the same "youth and freshness" we encounter with Uvedale Price,[48] a beauty that is vegetal and floral, the beauty of flourishing. *Jugendstil*, the German name for Art Nouveau, is not at all a bad one. Spontaneity is a beauty that is in contact with the sublime, just enough to make it a force of life rather than death. In *Adventures of Ideas*, Whitehead often mentions spontaneity as the engine of change and novelty, along with "freshness" and "zest." Spontaneity is adventure. It is the point at which the object becomes sexualized, but that is merely incidental, since sexuality is part of the *Bedingungen*, not something inherent. What the Aesthetic Circle shows us so powerfully is that aesthetic "satisfaction" (as Whitehead calls it) covers a far larger field than sexual satisfaction. Contrary to what the neo-Darwinists believe, sexuality relies completely on aesthetics, not the reverse. The aesthetics of spontaneity allows itself to be sexualized because at this point power relations are as equal as they can be. Even power relations that are slightly off balance can be resolved by beauty and do not need to resort to cool distance or cute infantilism.

*Elegance.* Elegant objects still have a curved structure externally, but the curves start to simplify and stiffen, to align and to group more uniformly. Internally, elegant objects are heavily structured, with a crystalline and skeletal nature that is stable but lacks movement. It is impossible for young people to be elegant. There is a lot of calm and maturity in this zone of aesthetics. With elegance, we are still in the middle circle of beauty, but aligned with neatness and sometimes magnificence in the outer circle. This is why middle-aged people, if they can afford it, drive luxury cars that seem strangely heavy, and why they still wear hats, gloves and overcoats. Elegance is also the aesthetics of sailboats and yachts, whose curves are all neatly organized into a single streamline. Of all the aesthetic terms, it is the only one that has a found a place in mathematics, which involves a certain economy of means, a directness and sparsity.

*Character.* Objects with character include old houses, old people and vintage wines and whiskies. They are wholly crystallized, worn and wrinkled, on the outside, and even more so on the inside. It is here that we find Price's rough variation of sudden shifts and cracks. Ruskin called it the high picturesque: an aesthetics of objects that, though worn, persist in their existence, or, in the words of this category, show character. Though transient, they still have substance. Old irregular walls and drystone walls have character. And patinas, weathering, and wear and tear add character. Still within the inner circle of beauty, character points in the direction of the sublime, to a mineral world even beyond crystallization and stratification. As in the realm of spontaneity, the parts are highly articulated, but not because they are so strongly involved in the construction of the object but rather because they are involved in its decay. Things are starting to loosen, to break away – *but they haven't just yet.* We can detect all the factors, all the contrasts, therefore the flavor is strong. A French cheese that ripens over years, acquiring the most elaborate nuances of acidity and even bitterness, compresses itself into sheer character, something that exceeds the object and radiates from it, waiting to be experienced. In a similar manner, all those traditions of breeding roses (is there a greater art of nuance?), horses and dogs are nothing but the

depths of a future: a future of possible mergings, of possible collaborations.

All that was process becomes the aesthetic horizon of the object; all that was aging becomes charm. The events that lie behind it become events that lie before it. The path is one of depth, i.e., a trail of aesthetic objects in increasingly strong relationships with the sublime, of which only a certain set can be called beautiful, namely, the ones that are constantly capable of switching between their freedom and their substance. Hence, the fatal chronology of time is replaced by *an aesthetic order*, in which things can be wholly contemporary, have encounters with each other, and share the same present, be they vintage, cute, fresh, or corny.

## NOTES

1. Charles Hartshorne, *Creative Synthesis and Philosophic Method* (London: SCM Press Ltd, 1970).
2. Which was developed by William James in *Essays in Radical Empiricism*, though without following the aesthetic consequences.
3. See G. H. Hardy, *A Mathematician's Apology* (Electronic Edition, 2005, 14): "Beauty is the first test: there is no permanent place in the world for ugly mathematics."
4. Especially philosophers Brian Henning, Frederick Ferré, Daniel Dombrowski, and process theologians William Dean and John Cobb.
5. Who Hartshorne calls "an émigré of Nazi Germany" (*Creative Synthesis*, 305), though I have found no proof Dessoir ever left Germany. Dessoir was prohibited from teaching and travelling by the Nazis in 1933 and died in Frankfurt in 1947 (See: Kaarle S. Laurila, "In Memory of Max Dessoir," *The Journal of Aesthetics and Art Criticism*, Vol. 6, no. 2, 1947, 106-8).
6. Charles Hartshorne, *The Zero Fallacy, and Other Essays in Neoclassical Philosophy* (Chicago: Open Court, 1997), 203-4.
7. In Santiago Sia's *Charles Hartshorne's Concept of God* (Springer, 1989) Harthorne writes in the critical response (258) that Dessoir had beauty on the top "according to [his] memory." It was Kay Davis who shifted beauty to the middle of the diagram, replacing the one at the top with neat. To make things even more complicated Hartshorne admits the influence on the diagram of aesthetic values of two female students, one he cannot recall, and the other "Kay," who we know as Kay Davis from *Creative Synthesis*.
8. Max Dessoir, *Aesthetics and Theory of Art*, transl. by Stephen Emery (Detroit: Wayne State University Press, 1970), Chart I on page 150. The diagram Hartshorne remembers, and later discusses with his students, is probably from the German edition titled *Ästhetik und Allgemeine Kunstwissenschaft* (Stuttgart: Ferdinand Enke, 1906), which shows a circle on page 196 (without the bisecting lines crossing in the middle as drawn in the English edition) with six words around the perimeter. These read clockwise: *schön* (at the top), *niedlich* (not *hübsch* as Hartshorne quotes more than once. *Niedlich* means cute, not pretty), *komisch*, *häßlich*, *tragisch* and *erhaben*.
9. Ibid., 149.

10. These connections were already well established in philosophy. Schelling made the sublime-tragic connection more than hundred years earlier and Bergson made the ugly-comic connection in his book on laughter.
11. Immanuel Kant, *The Critique of Judgment* (Indianapolis: Hackett, 1987), § 23, 98/244.
12. Max Dessoir, *Aesthetics and Theory of Art*, 162.
13. Henri Bergson, *Laughter: An Essay on the Meaning of the Comic* (Rockville: Arc Manor, 2008), passim.
14. Ibid., 12.
15. For instance in Brian Henning's *The Ethics of Creativity: Beauty, Morality, and Nature in a Processive Cosmos* (Pittsburgh: University of Pittsburgh Press, 2005) and Daniel Dombrowski's *Divine Beauty: The Aesthetics of Charles Hartshorne* (Nashville: Vanderbilt University Press, 2004).
16. Alfred North Whitehead, *Adventures of Ideas* (New York: The Free Press, 1967), 265.
17. Ibid., 252.
18. Ibid.
19. Ibid.
20. Ibid.
21. William James, *The Principles of Psychology*, Vol. I (New York: Dover, 1950), n158.
22. Charles Hartshorne, *Creative Synthesis*, 14.
23. Francis Hutcheson, *An Inquiry Concerning Beauty, Order, Harmony, Design*. Ed. Peter Kivy (The Hague: Nijhoff, 1973), Section II, art. xiv.
24. Samuel Taylor Coleridge, "The Principles of Genial Criticism." *Shorter Works and Fragments*. Ed. H. J. Jackson and J. R. de Jackson. *The Collected Works of Samuel Taylor Coleridge*. 23 vols. (Princeton: Princeton University Press).
25. William Hogarth, *The Analysis of Beauty* (New Haven: Yale University Press, 1997 orig. 1753), 35.
26. Uvedale Price, *An Essay on the Picturesque, As Compared with the Sublime and the Beautiful* (Otley: Woodstock Books, 2000 orig. 1796), 60-1.
27. Brian Henning, *The Ethics of Creativity*, 61.
28. Charles Hartshorne, *Creative Synthesis*, 14.
29. Alfred North Whitehead, *Process and Reality: An Essay in Cosmology*. Eds. David Ray Griffin and Donald Sherburne (New York: The Free Press, 1978), 213.
30. Ibid., 31.
31. See Tim Ingold, "Lines and the Weather," in this volume, 21.
32. John Ruskin, *The Works of John Ruskin*, Library Edition. Eds. E. T. Cook and Alexander Wedderburn, 39 vols. (London: George Allen, 1903–12), Vol. X, 82-3: "And then we forget them all; for between those pillars there opens a great light, and, in the midst of it, as we advance slowly, the vast tower of St. Mark seems to lift itself visibly forth from the level field of chequered stones; and, on each side, the countless arches prolong themselves into ranged symmetry, as if the rugged and irregular houses that pressed together above us in the dark alley had been struck back into sudden obedience and lovely order, and all their rude casements and broken walls had been transformed into arches charged with goodly sculpture, and fluted shafts of delicate stone. And well may they fall back, for beyond those troops of ordered arches there rises a vision out of the earth, and all the great square seems to have opened from it in a kind of awe, that we may see it far away; – a multitude of pillars and white domes, clustered into a long low pyramid of coloured light; a treasure-heap, it seems, partly of gold, and partly of opal and mother-of-pearl, hollowed beneath into five great vaulted porches, ceiled with fair mosaic, and beset with sculpture of alabaster, clear as amber and delicate as ivory, – sculpture fantastic and involved, of palm leaves and lilies, and grapes and pomegranates, and birds clinging and flutter-

ing among the branches, all twined together into an endless network of buds and plumes; and in the midst of it, the solemn forms of angels, sceptred, and robed to the feet, and leaning to each other across the gates, their figures indistinct among the gleaming of the golden ground through the leaves beside them, interrupted and dim, like the morning light as it faded back among the branches of Eden, when first its gates were angel-guarded long ago. And round the walls of the porches there are set pillars of variegated stones, jasper and porphyry, and deep-green serpentine spotted with flakes of snow, and marbles, that half refuse and half yield to the sunshine, Cleopatra-like, "their bluest veins to kiss" – the shadow, as it steals back from them, revealing line after line of azure undulation, as a receding tide leaves the waved sand; their capitals rich with interwoven tracery, rooted knots of herbage, and drifting leaves of acanthus and vine, and mystical signs, all beginning and ending in the Cross; and above them, in the broad archivolts, a continuous chain of language and of life – angels, and the signs of heaven, and the labours of men, each in its appointed season upon the earth; and above these, another range of glittering pinnacles, mixed with white arches edged with scarlet flowers, – a confusion of delight, amidst which the breasts of the Greek horses are seen blazing in their breadth of golden strength, and the St. Mark's lion, lifted on a blue field covered with stars, until at last, as if in ecstasy, the crests of the arches break into a marble foam, and toss themselves far into the blue sky in flashes and wreaths of sculptured spray, as if the breakers on the Lido shore had been frost-bound before they fell, and the sea-nymphs had inlaid them with coral and amethyst."

33. Sigmund Freud, *The Interpretation of Dreams*. Ed. and transl. by James Strachey (London: Penguin Books, 1980), 403.
34. Slavoj Žižek, "The Abyss of Freedom," introduction to F. W. J. Schelling, *Ages of the World*, transl. by Judith Norman (Ann Arbor: Michigan Press, 1997), 3-104.
35. Immanuel Kant, *The Critique of Judgment*, § 28, 120/261.
36. Lars Spuybroek, *The Sympathy of Things: Ruskin and the Ecology of Design* (Rotterdam: V2_Publishing, 2011), 49 and 215.
37. That is why in art and architecture we so often see a split between those who invent the new but can't find the clients to go with it and those who are politically and socially shrewd enough to find such clients but destined to copy the work of the first group.
38. Charles Hartshorne was good friends with Sewall Wright, the inventor of the fitness landscape, so the connection is not that far-fetched.
39. Alfred North Whitehead, *Process and Reality*, 114.
40. Like Kant's *Urbilde* and Goethe's *Urpflanze* Schelling spelled this concept first as *Urgrund* to radically replace it later with *Ungrund,* a concept where "the essence of the ground, as that of the existent, can be only that which precedes all ground." And: "What else can we call it but Urgrund, or better, Ungrund" (*Über das Wesen der menschlichen Freiheit*, 1809, I/7, 406).
41. F. W. J. Schelling, *Ages of the World*, introduced by Slavoj Žižek. Transl. by Judith Norman (Ann Arbor: Michigan Press, 1997).
42. Ibid., 41.
43. F. W. J. Schelling, *The Ages of the World*, trans. Jason Wirth (Albany: SUNY Press, 2000), 61.
44. Slavoj Žižek, 39–43.
45. Lars Spuybroek, *The Sympathy of Things*, 218.
46. Marshall McLuhan, U*nderstanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964), 361.
47. Pierre-Giles de Gennes and Jacques Bodoz, *Fragile Objects: Soft Matter, Hard Science, and the Thrill of Discovery*. Transl. by Axel Reisinger (New York: Springer Verlag, 1996).
48. Uvedale Price, *Essay on the Picturesque*, 83.