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Somaesthetics and Beauty

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Preface
Somaesthetics and Beauty

Beauty is a cornerstone of philosophical aesthetics, perhaps *the* fundamental one. However, if beauty performs a long-living philosophical role, ever since Plato connected it to the truth, it encounters serious problems from Modernism onwards. Some of the most visionary intellectual sensibilities from the end of the 19th century noticed the changes that turn beauty into an antiquated concept. For example, Paul Valéry, who in 1928 asked whether "the Moderns still make any use of it," concluded that "the Beautiful is no longer in vogue." Increasingly seen as a phenomena in entertainment, beauty never recovers to regain its former philosophical glory. On the other hand, the ambiguous decline of true beauty and the parallel rise of pleasure or sensation-seeking beauty continues to pose a concern to aesthetic thought. To be sure, the aestheticization of everyday life blends economy and aesthetics, industry and style, mode and art, consumpation and creation, mass culture and elitist culture. But how does this aestheticization of the contemporary world affect the very experience of beauty?

The lack of borders within the aesthetic field rebounds on a corresponding unlimitedness in our ability to perceive. Similarily, the question is: Has the beautiful become too broad and thus too superficial a concept, or does the sentiment of beauty help us to differentiate our perceptions? Mapping the conceptual potential of beauty points not only to a revaluation of modern and contemporary art and artistic ways of challenging traditional beauty, but it simultaneously emphasizes the need for focusing on the sensible, perceptive, and bodily experience. The primary question remains, how, despite trivialization, beauty may still (or again) refer to an aesthetic experience that manifests itself in the sensing body, both as originating from the body and as appearing in a meaningful embodied experience.

In this issue of the *Journal of Somaesthetics*, we collected contributions from various fields exploring experiences of beauty vis-à-vis aestheticized phenomena in everyday life, design, art, urbanity, and elsewhere. We did not want to limit contributions to specific fields or methods of inquiry but included contributions from various relevant fields and their epistemological perspectives (aesthetics, arts, health studies, sports, and natural sciences).

The issue starts with Stefano Marino's interview "Beauty from a Pragmatist and Somaesthetic Perspective: A Conversation with Richard Shusterman," which presents Shusterman's approach toward the significance of the notion and experience of beauty for somaesthetics.

The first section of articles that focus on existing theories on beauty. Anne Elisabeth Sejten's "Beauty Trouble" provides an introductory analysis that traces the concept of beauty as an epistemic turn toward sensibility in which beauty seems to have disturbed rather than stabilized the autonomy of aesthetics. These discussions about beauty allow her to identity conflicting features in four shifting concepts of beauty from the foundational century of the Enlightenment until today and, thus, to argue that the concept of beauty has had a persistently dynamic and vital role in aesthetics.

Tanehisa Otabe's article seeks to establish a counterweight to Kant's transcendental theory of beauty by bringing to the fore Herder's almost forgotten work *Calligone*. Herden counters Kant's dualism with a kind of monism that does not accept Kant's distinctions between, for example, nature and art, nor the distinction between the beautiful, the agreeable, and the good. Herder's ambition is an integration of aesthetic experience and beauty as the fine art of living.

Finally, in "The Beauty of Mathematical Order," Esther Oluffa Pedersen presents a study of the role of mathematics in beauty. Drawing extensively on Greek philosophy, she discusses how mathematical beauty connects not only to the aesthetic theory of Kant but also to creative works in modern design and poetry. Mathematics appears to be a key to understanding the Platonic and Aristotelian notions of natural order and creation, which again prove to be relevant to the understanding of somaesthetics.

The second section comprises articles that deal with the human subject's own bodily aesthetic experiences as a participant of a participatory work of art, or as the somaesthetic relationship between dancers, audiences, and sites, or as the aesthetic experience of the athlete. In his article "Can There be Beauty in Participatory Art?", Falk Heinrich characterizes beautiful experiences as the lived intensity that appropriates the participant by positioning him or her as one constituent of a situation that consists of a multiplicity of other constituents such as the site, the conceptual framework, and other people.

In his article "Challenging Urban Anesthetics: Beauty and Contradiction in Georg Simmel's Rome," Henrik Reeh addresses the experience of beauty in cities. Reconstructing the prevalent role of the blasé attitude in Simmel's view of the metropolis, he highlights how, surprisingly, Simmel elaborates on a contextual or even conflictual notion of beauty in Rome around 1900. One hundred and twenty years later, Reeh returns to a particular park in Simmel's Rome and demonstrates how somaesthetic qualities are decisive sources of beauty in the contemporary city as well. His article includes experiential and artistic materials that aim to strengthen somaesthetics in the realm of academic research.

In their article "Performative Somaesthetics: Interconnections of Dancers, Audiences, and Sites," Suparna Banerjee and Jessica Fiala discuss somaesthetic authorship and agency in dance, its audience, and "embodied encounters with sites." Through a discourse on two case studies, *TooMortal* (2012) by Shobana Jeyasings and *Dusk at Stonehenge* (2009) by Nina Rajarani, they explore what happens at the aforementioned intersection.

John Toner's and Barbara Montero's "The Value of Aesthetic Judgements in Skillful Action" inquires into the world of sport and the role that skill has in it. Toner and Montero claim that still, not much attention has "been devoted to an evaluation of the aesthetic dimension of sport from the performer's perspective." They address this issue by covering aesthetic experiences that athletes experience and analyzing their value and use in sports.

The third section deals with beauty and ecology. Else-Marie Bukdahl's article "Aesthetic Challenges in the Field of Sustainability: Art, Architectural Design, and Sustainability in the Projects of Michael Singer" insists that beauty is not merely a contemplative concept but is to be constructed. Singer's work is to be understood as an artistic action that regenerates nature and creates landscape and architectural projects in which artistic and ecological goals were integrated into the construction process.

In her article "The Aesthetic Enchantment Approach: From "Troubled" to "Engaged" Beauty," Sue Spaid introduces the *aesthetic enchantment approach*, which enhances the scientific cognitivism stance on beauty by adding a performative dimension to it. An example of this is the active commitment of citiens in citizen science approaches to ecologically degraded sites, which add a bodily aesthetic dimension that is pertinent for ameliorative aspects of the sentiment of beauty to the cognitive dimension.

Falk Heinrich, Max Ryynänen and Anne Elisabeth Sejten, Issue Editors

Beauty from a Pragmatist and Somaesthetic Perspective
A Conversation with Richard Shusterman

Stefano Marino

Richard Shusterman is an American pragmatist philosopher, currently Dorothy F. Schmidt Eminent Scholar in the Humanities, Professor of Philosophy and English, and Director of the "Center for Body, Mind, and Culture" at Florida Atlantic University (FAU). Shusterman is mostly known for his contributions in the field of pragmatist aesthetics and the emerging field of somaesthetics. Among the main topics of his original development of a pragmatist philosophical perspective one can mention experience (and aesthetic experience, in particular), the definition of art, the question of interpretation, the philosophical defense of the value and significance of popular art (in comparison to the frequent devaluation of the latter by many philosophers and intellectuals), the revaluation of the idea of philosophy as an art of living, and finally the strong emphasis of the role of the body in most (or perhaps all) human practices, activities and experiences. This deep concern for embodiment led to his proposing the field of somaesthetics, and eventually to the existence of *The Journal of Somaesthetics*, of which he is one of the founding editors. Since pragmatist aesthetics is one of the leading trends in contemporary aesthetics, and since beauty is one of the guiding concepts of all research in aesthetics since its foundation with Baumgarten and Kant until today, we thought it would be interesting to ask Shusterman about the role that beauty played in his philosophical thought and in his vision of somaesthetics.

1.

Together with taste, genius, the sublime and a few other concepts, beauty (or: the beautiful) surely represents one of the main questions in the whole history of aesthetics. And, as such, it has surely played a role also in the development of pragmatist aesthetics, from Dewey's groundbreaking 1934 work *Art as Experience* onwards. Now, the title of your most famous book, *Pragmatist Aesthetics* (1992; 2000; translated into 14 languages), explicitly refers to the concept of beauty, inasmuch as the subtitle reads: *Living Beauty, Rethinking Art*. So, what is the "living beauty" that pragmatist aesthetics deals with, or even that pragmatist aesthetics is fundamentally focused on?

Yes, the subtitle of *Pragmatist Aesthetics* includes the gerundive term "living beauty", which I chose because of its semantic richness. This expression in English has at least two clear meanings. First, when "living" functions as an adjective, it suggests a beauty that is lively, vivid, or energetic (the sort of beauty that I wanted to defend in popular genres like rock music and hip hop). Secondly, when "living" functions as a verb, the expression "living beauty" refers to the

idea of living one's life as an aesthetic project, the idea of the art of living or of living a beautiful life or a life lived as a work of art. When I published the book in French and German in the early 1990s (before pragmatism and pragmatist aesthetics became widely known in Europe), the book's main title did not mention pragmatism at all but instead focused on the subtitle's idea of "living" beauty or living art. The French title (Minuit, 1992) was *L' art à l'etat vif* and the German translation (Fischer, 1994) bore the title *Kunst Leben*. The idea of pragmatism appeared only in the subtitles of these translations because, as I already noted, pragmatist aesthetics was not really recognized in Europe at that time. John Dewey's aesthetics, for example, was not translated into French until 2005. But to return to the expression "living beauty", my aim has been to highlight the vivid, lived or experienced dimension of art and the idea of the art of living: of appreciating beauty in art and life and therefore contributing to the experienced beauty of art and life in one's practices of living. One can contribute to enhancing the experienced beauty of art even if one is not a practicing artist; for example, through practices of interpretation, of teaching, of theorizing in ways that open people's eyes to forms of beauty that they did not previously appreciate. Of course, anyone alive can work on contributing to the beauty of living through his or her own practices – ethical as well as aesthetic, and in my vision of pragmatist aesthetics there is considerable overlap between the ethical and the aesthetic.

I am a pluralist rather than an essentialist about beauty. I think there are a great variety of forms of beauty and I am not convinced that they can be fully and properly reduced to a single common essence. I recognize that some traditional definitions of beauty can be useful as convenient hints for understanding the concept: for example, unity in variety. But there are forms of unity in variety that are not beautiful and some examples of beauty may not clearly exhibit a unified variety of parts. In terms of this familiar definition, I would insist that what is important to my idea of living beauty is that the unity would be an energetic or dynamic unity that is felt in lived experience rather than being some static dead sort of unity. My work in performance with the Man in Gold, a project you know from reviewing my book on his adventures, exemplifies this senese of dynamic, energetic beauty. The Man in Gold is not beautiful according to the conventional standards of beauty we know form the world of advertising and top models, but he radiates energy and light that express an aura of dynamic beauty. Besides the definition of beauty as unity in variety, other accounts of beauty relate it to pleasure. I recognize a strong hedonic dimension in my aesthetics. Though some criticize pleasure as superficial, I insist that it is a crucial element in life and one that promotes improved knowledge and performance. We would lose our taste for living if we had no hope of pleasure; and pragmatist aesthetics affirms pleasure as an important value that is perfectly consistent with knowledge. Much of my work on aesthetic experience involves highlighting the nexus between pleasure and knowledge.

2.

One of the distinctive features of *Pragmatist Aesthetics*, ever since its first edition in 1992, has always been its defense of popular art (and, in this context, especially popular music), with the claim that popular art actually "deserves serious aesthetic attention": according to *Pragmatist Aesthetics*, "popular art not only can satisfy the most important standards of our aesthetic tradition, but also has the power to enrich and refashion our traditional concept of the aesthetic"; popular art suggests "a radically revised aesthetic with a joyous return of the somatic dimension which philosophy has long repressed" (Shusterman 2000, pp. 173, 177, 184). In this context, I would like to ask you if, on the basis of your pragmatist background and perspective, you

conceive of any fundamental (or, say, essential) difference between the experience of beauty in the so-called high culture or highbrow art and the experience of beauty in popular culture and popular art.

With respect to this issue, it is helpful not to focus simply on the distinction you mention between highbrow art and popular art but to think more in terms of a distinction between highbrow and popular ways of appreciating art (whether that art is designated highbrow or popular). I think the same artwork (highbrow or popular) can be experienced or used in very different ways: some are very intellectual, refined, controlled, and comparatively unemotional; others are much simpler, unreflective, unrestrained, and more emotional and somatic. Popular art encourages this freer, more emotional, somatic reception. But it can also be appropriated in a very refined intellectual way. A popular genre like a superhero comic book, for example, can be enjoyed simply for its story and the sensory visual interest of its images, but it can also be analyzed intellectually for its form, its intertextual references, and its philosophical or social meanings. The same is true for rap music, which I have shown can convey sophisticated philosophical messages as well as exciting people to an unrestrained emotional reception that generates spontaneous and vigorous dancing. Beauty can be sensory and intellectual at the same time; and the best of popular and highbrow art exhibits both forms of beauty.

The distinction between popular art and high art, is not an essential one but a pragmatic, contextual, shifting distinction, because, as I've often noted in my discussions of the high/popular art distinction, the very same work of art can evolve from a popular work into a work of high culture. Classical Greek drama in ancient times was a form of popular art and entertainment where the audience behaved in ways resembling people at a rock concert, but these plays are now considered classics of high culture. The novels of Charles Dickens and Emily Bronte were initially regarded as popular art but now are high culture classics. Shakespeare was originally popular theatre and in nineteenth century American culture he was appreciated both in popular vaudeville form and as refined theatre. In a similar way, opera in nineteenth-century America could be enjoyed in a popular way (with the audience joining in with boisterous singing and commentary) or in a refined, highbrow way.

3.

Your original development of pragmatist aesthetics has finally resulted into the "coinage" of a new concept and a new discipline, namely somaesthetics – defined as "the critical, meliorative study of the experience and use of one's body as a locus of sensory-aesthetic appreciation (*aisthesis*) and creative self-fashioning" (Shusterman 2000, p. 267), and also as "a systematic framework" that has three fundamental branches: analytic, pragmatic and practical somaesthetics (Shusterman 2008, p. 19), and also "three dimensions", depending on "whether their major orientation is toward external appearance or inner experience": representational, experiential and performative somaesthetics" (Shusterman 2016, pp. 102-105). In your article *Thinking Through the Body, Educating for the Humanities: A Plea for Somaesthetics* you write: "somaesthetics, roughly defined, concerns the body as a locus of sensory-aesthetic appreciation (*aisthesis*) and creative self-fashioning. As an ameliorative discipline of both theory and practice, […] it seeks to enhance the meaning, understanding, efficacy, *and beauty* of our movements and of the environments to which our movements contribute and from which they also draw their energies and significance" (Shusterman 2006, p. 2). So, what is the meaning of beauty from the point of view of a philosophical discipline, like somaesthetics, specifically centered on the

body, on embodiment, on the embodied nature of our world-experience and life-experience in general, and of our aesthetic experience in particular?

One of the key motives that generated the project of somaesthetics and perhaps the most urgent reason for proposing it was my conviction that bodily beauty should not be limited to the conventional stereotypes of beautiful bodies that we know from the advertising, fashion, and movie industries and that it should, moreover, not be limited to the body's surface and external form. Somaesthetics is centrally concerned with sensory perception and appreciation, and in this sense it continues the original direction and concerns of aesthetics. Most people who do not specialize in aesthetics and do not know its history are not aware that the field was not originally conceived as the theory of art and beauty. Rather, its founder Alexander Baumgarten introduced it in the mid-eighteenth century as a field devoted to the study and cultivation of our sensory perception so that through better sensory perception we could improve our knowledge, our performance, and our experience. (I am happy to mention here for Italian readers that the translator of Baumgarten's aesthetics into Italian, Salvatore Tedesco, also translated my book on *Body Consciousness* (*Conscienza del Corpo*) and wrote an excellent introduction to his translation. Baumgarten did not include cultivation of the body and of improved consciousness of our somatic feelings in his aesthetic project, but I realized that this is necessary for the comprehensive improvement of our perception, performance, and pleasure. Moreover, through my experiences in the arts (notably music and dance) and in the practice of various somatic arts and disciplines (yoga, taijiquan, zazen, Feldenkrais Method), I learned to appreciate the beauty of certain inner bodily feelings: of breathing, of energy flow, of harmony and balance, of felt vigor and power, of dynamic release, and so on. For many of us, these feelings too often go unnoticed or fail to occur. A major aim of somaesthetics is thus to help us feel better in two senses of "feeling better": first to experience more enjoyable feelings or, we could say, more frequent and powerful feelings of inner beauty; but secondly, to gain more precision, clarity, and awareness of our inner feelings, so that we can cultivate these feelings and our somatic behavior to enjoy more beauty with greater appreciation.

4.

In your book *Body Consciousness: A Philosophy of Mindfulness and Somaesthetics*, you write: "pragmatism seeks to synthesize the beautiful and the good" (Shusterman 2008, p. 47). And one of the most important chapters of *Pragmatist Aesthetics* is devoted to the question concerning "postmodern ethics and the art of living", and hence the relationship between aesthetics and ethics (indeed, the chapter begins with a famous Wittgenstein quotation from the *Tractatus* of 1921: "ethics and aesthetics are one"). In your philosophical view, does beauty play any role also in ethics beside aesthetics?

Yes, it does because I see a significant overlap between ethics and aesthetics, which includes an overlap in ethical and aesthetical vocabularies. Adjectives like fine, fair, or fitting that we use in commending things aesthetically are obviously used in ethical contexts as well. In English we don't often speak of fine or noble ethical acts as being beautiful, but in several other languages "beautiful" is used to describe and commend ethical acts or to praise the character of the person who performs them. Besides the beauty of admirable ethical acts, there is the fact that beauty very often inspires people to ethical action. Beauty arouses love, and love is a powerful incentive to cultivate and exhibit virtue. The idea of beauty as essentially related to goodness and as inspiring

love is central to the Platonic tradition, including its flourishing in the Italian Renaissance, where God was the ultimate source and perfect exemplification of Beauty, Goodness, and Love.

In our postmodern (and some might add posthuman) times of extreme skepticism about a permanent human essence from which we can logically derive absolute, universal ethical rules, we are increasingly led to make our ethical decisions through the sort of reflective, nondeductive judgment that characterizes our aesthetic judgments of taste. The detailed arguments for that claim are in the chapter you mention, so I won't go into those details here.

5.

Finally, one of the latest developments of somaesthetics, and more precisely of its second subdiscipline (pragmatic somaesthetics), concerns scrutinizing the issue of Asian erotic arts (see Shusterman, "Asian Ars Erotica and the Question of Sexual Aesthetics", in *The Journal of Aesthetics and Art Criticism*, vol. 65/1, 2007; reprinted and enlarged in *Thinking through the Body*). Is there any difference, any specificity or particularity, in investigating from an aesthetic point of view the role of beauty in such a particular field as eroticism and sexuality, in comparison to more traditional fields or domains of aesthetic inquiry?

One distinctive feature about dealing with the aesthetics of erotic desire or the beauty of lovemaking is that the erotic has been essentially excluded from the dominant modern tradition of aesthetics because that tradition has been defined by disinterestedness in opposition to desire. Even before Kant formulated his views of aesthetic judgments as disinterested and of beauty as essentially different from anything related to pleasures of the appetite (whether of food or sex), the influential English philosopher Shaftesbury insisted on the radical gap between appreciating the beauty of the human body and the experience of sexual attraction to that body. As I explain, in my chapter on Edmund Burke's somaesthetics in *Thinking through the Body*, he was one of the very few modern aesthetic theorists to affirm beauty's sexual dimension. Nietzsche, to some extent, was another, and both thinkers were probably led to this conclusion because they recognized the body's crucial role in aesthetics. Both these thinkers I regard as forefathers of somaesthetics although in my writings I criticize some of the limits of their theories of the body.

But we should not forget that premodern thinkers also recognized the beauty-erotic connection. This connection lies at the heart of Plato's philosophy. Beauty is the object of Eros, and it is Eros that guides the philosophical quest to perceive the ideal Form of Beauty and, through this vision, to give birth to beautiful forms of action and knowledge. The first step in Plato's erotic quest for beauty is the desire for another person's body because of the beauty it possesses, and which (according to Plato) it possesses as a reflection of the ideal Form of Beauty. The philosophical quest involves gradually raising one's desiring love from the body of the beloved to ever more abstract and spiritual manifestations of beauty until it reaches the ideal Form of Beauty itself. But the first rung of Plato's ladder of love is sexual desire for a beautiful body, and we find this idea also in Renaissance neo-Platonism, where we also find an erotic desire for union with God. The various ways that erotic desire takes beauty as its object (whether human, abstract, or divine beauty) forms part of my current research along with my explorations of the somaesthetic experience of beauty in practices of lovemaking as taught in the erotic arts of various cultural traditions. I have been slow to publish such research for a variety of reasons, some of which you can easily imagine. Academic philosophy is a conservative and somewhat prudish field so philosophizing about the somaesthetics of lovemaking risks having

the whole field of somaesthetics dismissed as a low-minded and superficial provocation. As you know, I am willing to take such risks but I do so here with more care and prudence than with other topics more respected by philosophy, including the topic of fashion on which I was happy to write an article for your collection. Moreover, beyond the conservatism of academic philosophy (that also has its positive aspects in preserving certain valuable traditions) but more generally in current culture, the whole topic of eroticism has been tainted by the recent scandals and outraged backlash concerning the widespread sexual harassment and erotic exploitation of women. I deplore such predatory behavior not only as immoral but also as viciously ugly, so this is a good place to end our interview about beauty.

Beauty Trouble

Anne Elisabeth Sejten

Abstract: *By tracing the concept of beauty as an epistemic move toward sensibility and embodied experience, this article provides a survey in which beauty appears to have disturbed rather than stabilized the philosophical field of aesthetics. On the other hand, the enduring ability to disturb philosophical thought is exactly what testifies to beauty's conceptually dynamic and vital role in aesthetics. The troubling consequences of the concept 'beauty' are discussed in five centennial tableaus that accentuate mutually conflictual aspects: sensitive beauty in the eighteenth century, idealistic beauty in the nineteenth century, sublime beauty in the twentieth century, and appearing beauty in the twenty-first century. This outline of changing conceptions of beauty throughout the history of aesthetic philosophy entails questions about the distinction between the aesthetic and the artistic, as well as it addresses the relationship between art and nature in a new fashion.*

Keywords: *Sensible beauty, artistic beauty, the beautiful and the sublime, appearing beauty, art and nature.*

Beauty's foundational role in aesthetics is irrefutable. The epistemological specificity that has allowed aesthetics to join philosophy in its own right has to do with the disunion of the alliance that, since antiquity, has linked beauty to morality and truth as inseparable pillars of true knowledge. From the canonization of the idealization of beauty in Plato's era throughout medieval Christianity, beauty has indistinctly been embraced in sensitive and metaphysical splendor in various spiritualized forms. This metaphysical conceptualization remained largely unchallenged until the eighteenth century, when Enlightenment philosophers began splitting beauty from supra-sensitive transcendence.[1] In many essays, beauty was increasingly conceptualized in relation to the specific—and sensible—pleasure it occasions[2] before finally receiving its attribute of aesthetic in Baumgarden's *Aesthetica* (1750) and being incorporated by Kant as the beautiful in his transcendental philosophy in the *Critique of Judgment* (1790).

The purpose of this article is to revisit various key formulations that have orchestrated the ascension of beauty throughout modern thought not only to exemplify to the extent to which

1 The history of ideas unfolding around "the beautiful" is treated in numerous works, e.g., Ferry (2001), Lacoste (1986) and, most recently, Talon-Hugon (2004).

2 For example, in Dubos' seminal *Critical Reflections on Poetry and Painting* (1719) and Hutcheson's *An Inquiry into the Origin of Our Ideas of Beauty and Virtue* (1725).

beauty has taken an active part in arguments for an autonomous field of philosophy—a genuinely aesthetic take on human experience—but also to witness how beauty acts as a subtle troublemaker. From the beginning of its epistemic turn toward sensibility, beauty seems to have disturbed rather than stabilized and weakened more than strengthened the newly gained autonomy of aesthetics it was supposed to secure. Nonetheless, the enduring ability to disturb philosophical thought is exactly what provokes the interest in beauty. Although beauty belongs to one of those *choses vagues* that qualify abstract ideas and emotional phenomena[3], such dubious familiarity does not necessarily discredit beauty's potential to embrace a dynamic concept in philosophy. The persistence of beauty is evidence to the contrary. Does not beauty possess an astonishing immunity that serenely overcomes the ever-failing attempts at conceiving a theory of beauty? Ideas of beauty continue inexorably to survive a destiny of being dragged through ordinary and poetic language that endows beauty with the ability to signify a thousand different things. However, the difficulty of grasping beauty philosophically may well reside in its popularity and extreme vivacity in ordinary life and the arts, combining all kinds of articulations from spontaneous exclamations, such as "How beautiful!" to the grandiloquent allegorical figure of Beauty in the fine arts. Likewise, the long-term absence, if not disesteem, that has fallen to beauty's lot in modernist and contemporary aesthetics may have to do with the concept's plasticity. If beauty is capable of hibernating in other concepts, especially those that sensuous experience brings together, such as emotions, feelings, affectivity, sensitiveness, and do on, beauty tends taciturnly to traverse them all in an englobing category.

Therefore, somaesthetics offers a powerful horizon of theorization that implicitly communicates with our investigation. Whether beauty is troubling because it is perceived as an obstacle to fulfilling aesthetical thought, or beauty is troubling because it claims to be genuine in aesthetical thought, the reasons converge in beauty's inner connections to sensibility and to a somewhat secret body knowledge. Sensitive experience remains essential to beauty, which is the assumption that I would like to expand upon. In this context, somaesthetics evokes an obvious response because of the interest this research field has in the active and participating aspects of bodily perception. The guiding thread that links philosophical positions on beauty, which are presented below in four condensed centennial tableaus, is thus a discussion concerning the types of sensitiveness these approaches to beauty imply, regarding whether their trouble-making activity conveys the purpose of cultivating or abandoning beauty in aesthetics.

It goes without saying that, within the limits imposed by the scope of this article, the selection is extremely fragmentated and restricted to momentous sources of classical philosophy in the first place. Second, the selection is even more eclectic in its focus on the German philosopher Martin Seel, who provides an indicative voice of what might be seen as the scholarly return to beauty in contemporary aesthetics.

Eighteenth-century tableau: Diderot and the French Enlightenment

Denis Diderot, the author of the article "Beautiful" in the French *Encyclopedia* (1752), illustrates the ongoing reconstruction of the understanding of beauty during the eighteenth century in a highly significant way. Even before broaching the subject, he observes the convoluted nature of beauty. Paradoxically, he claims that the general use in ordinary language is exactly what makes beauty such a "difficult" concept:

3 The expression *choses vagues*, i.e., things misty, derives from Paul Valéry's *La politique de l'esprit* (1941) and signifies things which escape definition and are thus loaded by spirit, and spirit *only*.

> *Before delving deeper into the difficult research that the origin of the* beautiful *is, I would first bring to the attention, with all the authors who wrote on the subject, that by a sort of fatality, the topics most addressed among men are rather ordinarily these least known to them; and that such is, among many others, the lot of the* beautiful. (Diderot, 2006 [1752])

He then moves to a meticulous discussion of the erudite sources of beauty from antiquity to his own contemporaneity, touching on, among others, Saint Augustin's definition of beauty as "unity," Wolff's notion of the kind of "pleasure" that beauty occasions, Crouzac's emphasis on the "feeling" that arouses art, Hutcheson's discovery of an "internal sense," and Father André's distinction between essential and arbitrary beauties. However, in formulating his own position, Diderot, being highly skeptical about the positions he has just reviewed, laconically points to a criterion in a debate about music between Rameau and Rousseau, that is, "the perception of rapports." Still, what matters in the experience of beauty, as implied as the perception of rapports, is the preeminence of the senses. To affirm that something is beautiful is mediated less by the intellect than by the senses:

> *When I say, then, that a being is* beautiful *through the rapports that one notices in it, I do not refer to the intellectual or fictitious rapports that our imagination brings into the being, but I refer to the real rapports that are there, and that our understanding notices through the help of our senses.* (Diderot, 2006 [1752])

The secular change in the understanding of beauty is sealed in the spontaneous expression by which Diderot pays tribute to the senses: "through the help of our senses." The beautiful is definitively no longer a property that exists only through reason but arises within the perceiving and sensing subject.

Sensible beauty, in fact, constitutes the groundbreaking outcome of the major epistemic transformations that came to affect the entire way of understanding the world in the transition between the sixteenth and seventieth centuries. Because of the major scientific advances that occurred, particularly in mechanical physics, the sensible achieved an autonomous position alongside the intelligible. Kant's transcendental criticism may be singled out as the accomplishment of the epistemological rehabilitation of the senses, as far as the senses constitutively contribute to the work of knowledge in constituting the world of phenomena.

Diderot's encyclopedia entry is interesting because it crosses the line insofar as he accompanies beauty in joining the field of "out there" in a general and everyday manner. Beauty then obviously migrates into the sensible world by Diderot's losing sight of the speculative wordings of the authors he consulted. Scarcely retaining any of the outlined theories, he nonetheless embraces their underlying assumption: beauty happens within a relationship between the subject and an object. Of course, we might still talk about the idea of beauty, but this idea is certainly not a faint echo of the Idea of Beauty. Beauty refers to the feeling occasioned by something that a subject has come across in the sensible world, or, as Diderot stated, "the real rapports that are there."

Emphasizing the pure, formal condition of the power that some things and beings have to affect us, Diderot appears to argue for a basic, but enlarged, understanding of beauty that is by no means restricted to the arts. Instead, he pays attention to the proportions at play within material tissues that stimulate the ability to perceive freely. Thus, receptiveness to beauty requires a certain "active" passivity that allows understanding to grasp the world through the senses. It is no coincidence that during the same period, Diderot ventured into a strange "anatomic-

metaphysical" project that drew lessons from the blind and the deaf-mute in experimentation that led him to closely explore bodily perception (Sejten, 2000, pp. 99–144). Learning from the blind helped Diderot to put forward the idea of autonomous bodily knowledge, which is based solely on sensorial receptivity and is beyond understanding and reason. Similarly, his observations of the deaf-mute indicated the existence of a language beyond ordinary language; that is, a far more musical language that was capable of making sense of sensuous polyphonies.

For Diderot, beauty, slightly troubling, acts beyond will, apprehending human beings through the senses, which is more captivating than the entitlement to master beauty through understanding. Implicitly cultivating sensibility becomes part of living practice, which commits itself to optimizing and intensifying experiences of beauty.

Nineteenth century tableau: Idealistic counter-reactions

The liberation of beauty from idealism, however, cannot be complete, even though aesthetics at the end of the eighteenth century gained a solid philosophical foundation in the judgment of beauty based solely on a fabulous (although seemingly frail) feeling of pleasure. In the Enlightenment in general and in Kant in particular, the intensity of this feeling refers to the subject itself, celebrating less what has triggered that feeling than the subject's own capacity to conceive freely without concepts and to share cultural humanity. This ambiguity is one of the reasons for the renewed troubling of beauty. Although unchained from its former union with morality and truth, beauty encounters unmistakably re-idealizing movements during the nineteenth century. The Kantian legacy had already been taken into opposite directions by its immediate philosophical successors. Schiller reformulated the famous Kantian free play of the imagination and understanding toward the pedagogical humanism of *Bildung*, whereas Hegel literally dismissed the "aesthetic" in its sensuous aspects— "as a mere name it [the word "Aesthetics"] is a matter of indifference to us" (Hegel, 1975)—in order to confine beauty to the sole domain of art. For Hegel, the nascent philosophical discipline of aesthetics identifies the "spacious realm of the beautiful" with the "province of art." It was less metaphorically formulated when Hegel (1975) resumed the scientific approach of his inquiry into beauty: "our science is Philosophy of Art and, more definitely, Philosophy of Fine Art."

A similar promotion of beauty in the name of art takes place in Schopenhauer's opus magnum, *The World as Will and Idea*, from 1819. In undisguised Platonic terms, Schopenhauer posed the epistemological question of which knowledge might lead to the ideas:

> *What kind of knowledge is concerned with that which is outside and independent of all relations, that which alone is really essential to the world, the true content of its phenomena, that which is subject to no change, and therefore is known with equal truth for all time, in a word, the* Ideas*, which are the direct and adequate objectivity of the thing in-itself, the will?* (Schopenhauer, 1919, pp. 238–239)

In response to this elaborate question, Schopenhauer highlighted Art as the answer and provided a similar rhetorically and sharply worded reply:

> *We answer,* Art*, the work of genius. It repeats or reproduces the eternal Ideas grasped through pure contemplation, the essential and abiding in all the phenomena of the world; and according to what the material is in which it reproduces, it is sculpture or painting, poetry or music.* (Schopenhauer, 1919, p. 239)

Even though art solely represents an incomplete and temporary means of emancipating human beings from the will, as art in Hegel absorbs itself in the odyssey of absolute spirit, art also has the power to accomplish what Plato denied it: the direct access to the world of Ideas.

These paramount philosophical elaborations of aesthetics during the early nineteenth century not only illustrate that, almost exclusively, aesthetics has become a philosophy of art. They clearly testify that beauty within that movement again became metaphysical. Both Hegel and Schopenhauer reconducted beauty to a new form of idealism. Hegel's *Idea* was derived from the Platonic form and idea even though it differed from Plato by combining concept and concrete reality. Nonetheless, *artistic beauty* serves a higher purpose in the dialectical self-realization of the total spirit.

In addition to the re-idealization of beauty, things are not much better in terms of what has become of the philosophy of taste based on the idea of sensible immediacy. Initially, and especially during the German Enlightenment, as evidenced in Schiller, the concept of taste entailed *Bildung*, which emphasizes the need for education and cultivation. However, if taste, in the first place, stands for the theoretical appreciation of a direct, unmediated sensuous access to beauty, the concept remains ideologically problematic to justify in the long run, as argued by Christoph Menke (2012). On one hand, taste is truly emancipating because it allows the subject to independently assess and yet lays claim to universal validity. On the other hand, taste is soon compromised by social determinations and overruled by a specific—bourgeois—standard of taste before eventually being absorbed by hidden power agendas (Menke, 2012, pp. 226–239), which is our understanding of taste today. In its modernized and standardized version, taste presents a sociological diversity of domains of taste, such as taste in fashion, taste in music, and taste in cooking. From Georg Simmel to Pierre Bourdieu, sociology has mainly explored taste in relation to culture and value.

The double, antagonistic pressure on beauty, which is not only absolutized in speculative idealism but also banalized by social coding, should not prevent us from summing up the long-lasting outcome of the generalized view of beauty in this tableau. Manifestly, the decisive impact of eighteenth-century philosophy consists in tying the concept of beauty to the arts. Aesthetics swiftly became a philosophy of art. However, this alliance with art launched beauty over further troubled waters. Most importantly, the aesthetic dimension, with its sensitive constitution, seems at risk. Furthermore, the valorization of the arts as the only valuable entry to beauty considerably reduces the areas in which beauty may be experienced. However, the sanctification of art and the corresponding devaluation of aesthetic receptivity may lead to a more moderate and more radical claim. Without excluding other types of objects or experiences, artworks may represent elaborated things that are explicitly aimed at evoking aesthetical emotions, thus intensifying living practice in its entirety.

This affirmation was partially strongly formulated by Nietzsche in the second half of the eighteenth century. In his notorious declaration in *The Birth of Tragedy* from 1867, Nietzsche took his nearest philosophical predecessors to a new higher level, especially Schopenhauer, whom he quoted extensively in literally assigning human life to art—"we have our highest dignity in our significance as works of art"—only to make the hidden rupture provocative. According to Nietzsche, art and life are assimilated, "for it is *only* as an *aesthetic* phenomenon that existence and the world are eternally *justified*" (Nietzsche, 1910, p. 50). Accordingly, Nietzsche insisted on a specifically aesthetic core of art. Beauty trouble certainly gained renewed force from that point.

Twentieth-century tableau: Oscillations between the beautiful and the sublime

The evolution of beauty outlined above hides some reasons that the vocabulary of beauty became old-fashioned relatively early. Beauty has suffered from more than just being confined to idealism. The fall of beauty, in large part, has involved its complicity with a traditionalist, if not manifestly conservative and bourgeois, register of taste. Some of the most visionary intellectual sensibilities since the end of the nineteenth century were aware of the changes by which beauty may become an antiquated concept. For example, in 1928, Paul Valéry asked whether "the Moderns still make any use of it," only to conclude that "the Beautiful is no longer in vogue," and that "Beauty is a kind of dying person" (Valéry, 1957, pp. 1239–1240)[4].

An eminent connoisseur of art, Valéry, who was both a poet and an art critic, knew what he was talking about. As fond as Hegel was of classicist paintings and the ideals of beauty that underpin them, modern painters from the Age of Impressionism and forward have been eager to ruin the academic codification of beauty. Likewise, in dawning Modernist poetry, of which Baudelaire and Mallarmé are prime examples, writers have claimed to serve Art instead of providing the leading classes with splendid literary works that might legitimate their position in society. When Modern art eventually coincided with Modernism, beauty became too pleasing, too facile, too conformist, and a slippery slope that must be avoided[5].

However, Valéry and his fellow kindred spirits were skeptical about what could replace the beautiful when beauty was increasingly subsumed as entertainment, or according to Valéry (1957), "all the values of the chock have supplanted Beauty." This concern is even more urgent today because society is currently characterized by the phenomena of increasing aestheticization, which calls for analogous reflection. There is undoubtedly no direct return to the eighteenth-century aesthetics category of taste or to highly speculative beauty. However, between taste's early developments in bourgeois identity and future mass consumerism and between autonomy and the market, in recent philosophy, innovative conceptualizations have responded to the need for rethinking beauty in aesthetics.

The reappearance of the concept of the sublime during the 1980s among French philosophers featured new departures in aesthetics[6]. Compared to beauty's trajectory, the sublime embarked on what could be described as a glamourous career, at least since French philosopher Jean-François Lyotard promoted it as a core concept, which was particularly dynamic and powerful in inspiring philosophical thought. The sublime proved capable, apparently much more so than beauty, of grasping modern art, avant-garde art, and contemporary art, which most people consider obscure, if not utterly incomprehensible.

The sublime, in fact, refers to an art that ruins the very idea of an infinitely pleasant and harmonious experience of beauty. The feeling of the sublime is characterized by an eminently discordant and double structure that, according to Burke, is torn between sorrow and enjoyment and between terror and delight. In Kant's epistemological terminology the dichotomy is between the failure of the imagination to present perceivable forms and the exhilarating enthusiasm in which raison surpasses this failure of imagination. All these negative features relate to the task to which Lyotard (2012) summoned art and critical thought to present the non-presentable: "*présenter l'imprésentable*."

4 Translated by the author.

5 For an updated discussion of beauty critically informed by art, see Danto, A. (2002). The abuse of beauty. *Daedalus*, 131(4), 35–56. www.jstor.org/stable/20027805.

6 See *Du sublime* (1988), a collection with contributions from, e.g., Jean-François Lyotard, Philippe Lacoue-Labarthe, and Louis Marin et Jean-Luc Nancy. Paris: Belin.

If the sublime dismisses beauty and eventually replaces beauty, why return to beauty? Most refreshingly, Sianne Ngai has advocated for replacing both the beautiful and the sublime by three entirely new categories—the zany, the cute, and the interesting—as the only means of making sense in the "hypercommodified, information-saturated, performance-driven conditions of late capitalism" (Ngai, 2012, p. 1). Ngai's three categories are of great interest because they systematically elucidate the aesthetic experience of being part of "socially binding processes:" the zany in relation to "production;" the cute in relation to the sphere of "consumption;" even the interesting, which might have some similarities to the sublime, is confined to the sphere of mere "circulation" of information (Ngai, 2012, p. 1).

The consequence of submitting adjusted aesthetical concepts to social immersion, however, is that they expand sociologically but diminish aesthetically. Ngai emphasizes their relative "lack of power" and their "weakness" in terms of "aesthetic impact" compared with the classic feelings of the sublime and the beautiful that were both supposed to be "powerfully felt" (Ngai, 2017, pp. 18–19). Therefore, finally, beauty has very little application in Ngai's project. As she asserted, the feeling of the beautiful is necessarily a strong one. In troubleshooting, she proposed replacing the beautiful by more socially adjusted categories, indicating that she implicitly agreed to understand beauty and the nature of beauty as relying on aesthetic and affective immersion. Only the diagnosis of late modern lifestyles seems to leave little space for that kind of experience. Simultaneously, Ngai's approach exposes a socially determined negotiation of the relationship between the aesthetic and the artistic, insofar as aestheticization conditions generally led her to stress the prevalence of popular, entertaining, and even infantile emotions in late capitalist society.

A quite different strategy for insisting on beauty's lasting relevance in aesthetics remains latently associated with the concept of the sublime, which, paradoxically, was supposed to overcome beauty. Rethinking the sublime concerns beauty. The sublime does not exclude the beautiful; instead, it connects to the beautiful if not as an inclusive concept in aesthetics that is at least part of the sublime, then as an intensified feeling of pleasure. Initially, Kant confirmed the interconnectedness between the two categories when he affirmed that the feeling of the sublime did not necessitate a proper transcendental deduction but could be based on that of the feeling of beauty. Even Lyotard did not fail to credit the beautiful in Kant when he confirmed that the great philosophical importance of the beautiful and the sublime in the third *Critique* resides in the "derealization of the object" (Lyotard, 1986, p. 45), which affects aesthetic feelings *per se*.

Twenty–twenty-first century tableau: Appearing beauty

The German philosopher Martin Seel appears to address these inner ties between the sublime and the beautiful through the notion of "appearing", which he promoted as "a promising basic concept of aesthetics" (Seel, 2005, p. xiii). Seel argues for the necessity of tracing the aesthetic experience back to a common ground of perception independent of what is perceived, which, in the first place, situates the investigation in nature outside art, but does not exclude art in its further steps. This reorientation of aesthetics toward nature, which extended the topic of Seel's habitation thesis, *Aesthetics of Nature* (1991), also modifies the understanding of the sublime. The opposite is true in French poststructuralism. Lyotard emphasized the validity of the sublime and its philosophical pertinence almost exclusively in art, whereas Seel aims to unfold the sublime in relation to nature. Likewise, the sublime, according to Lyotard, was essentially elaborated on with respect to time, whereas Seel explores the sublime mainly in relation to space (Hoffmann,

2006, pp. 19–48).

This shift in perspective allows Seel to connect the sublime and the beautiful in terms of a tension between the two. From that point, the categorical separation between the sublime and the beautiful corresponds to a hypothetical and ideal line of demarcation, rather than justifying the reality of two essentially different aesthetic sensations and experiences. In other words, if the beautiful and the sublime are to be differentiated gradually and not categorically, the cause of their aesthetic capacity must be sought in the same elementary condition from which they both emerge. According to Seel, appearing occupies that crossing point. The beautiful and the sublime both appear to our senses; their ontological status, strictly speaking, is less "to be" than "to appear." They are inseparable from their appearing nature, which marks their inner link to nature.

In tracing aesthetics to nature, another basic precondition in aesthetics is revealed, that of contemplation, which Seel placed as the fundamental layer of his aesthetics of nature (Seel, 1991, pp. 38–88); here, beauty takes the lead. Appearing connects to beauty in the most spontaneous contemplation of nature. Objects of nature, whether organic or inorganic, are beautiful as long as they simply occupy or fill contemplation; they last as long as contemplation lasts. They are as they appear, which is the reason for their beauty. In this specific contemplation mode, objects of nature are beautiful, simply because they seem to be in the world for no reason except the perception of their appearance. This is also the reason that there is not really anything to understand in this experience of beauty, in which phenomenal givenness and the contemplative gaze co-exist and nourish each other.

Regardless of how far this minimal natural beauty may be from the sublime and beauty in superior levels of the aesthetic experience in art or elsewhere (also in nature), when imagination and reason participate more actively than in pure and free contemplation, the condition of appearing continues to provide a common ground for both beauty and the sublime. What is captivating is perhaps less than whether the world appears in visible, perceivable proportions (as in the classical beautiful) or in visible disproportion to the subject's possibilities of perceiving (as in the classical sublime). It might be more fascinating to experience what is not harmonious in that which is harmonious and what is harmonious in that which is not. Modern poetry from Baudelaire onward certainly mirrors that ambition, and we might say that the collaboration of beauty and the sublime generally enhances the intensity of the aesthetic experience, as if each lacks suspense without the other. Beauty that pacifies without troubling is not beauty; the sublime that is disquieting without being uplifting is not sublime. In fact, combining the beautiful and the sublime might not even be incompatible with Lyotard, for whom "derealization" is constitutive in both.

In addition to being chosen as an exponent of a certain return to beauty in aesthetics, this debate on the sublime should benefit from Seel, as far as he invites us to consider the asymmetry between beauty and sublime in the former's favor. While an element of beauty is inherent in the sublime, the former can exist without any admixture of the latter. Apprehending beauty through the sublime is completed by bearing witness to the persistence of beauty and to its extraordinary transversal ability to emerge in places and situations where it is least expected. Might it be that beauty runs through all levels of the aesthetic? Or that the difference between the beautiful and the sublime may not be understood consistently if they are not seen as being oppositions *within* beauty? Returning to the beautiful through the sublime thus accentuates the paradoxical relationship between beauty and appearing. Beauty itself does not appear, but beauty is inseparable from appearing. According to Water Benjamin, "semblance belongs to the

essentially beautiful as the veil covering something else", while specifying "[u]nveiled, however, it would prove to be infinitely inconspicuous [*unscheinbar*]" (Benjamin, 2004, p. 351).

Rephrasing beauty between the aesthetic and the artistic

Our rough outline of the determining features of beauty throughout the relatively young discipline of aesthetic philosophy includes constellations varying between "the aesthetic" and "the artistic," both of which are assigned to form part of "the beautiful." Diderot valued the aesthetic component and paid little attention to art, whereas Hegel excluded the aesthetic dimension from his philosophy of art. Although it is distributed differently, this controversy also affects the dissimilar approaches to the sublime taken by Lyotard and Seel. Obviously, emphasizing that aesthetic objects are basically objects of appearing encourages rethinking the relationship between the aesthetic and the artistic. Anglophone philosophers in particular have pleaded in favor of establishing a clear analytical distinction between the aesthetic and the artistic (Best, 1982)[7], but Seel elaborated the issue differently.

On one hand, in its elementary aesthetic sense, to be beautiful implies the condition of appearing. A thing must appear in such a way that it shows itself to be intrinsically valuable. Beauty, accordingly, takes on its aesthetic significance at that elementary level. Here art has no exclusive right to beauty. In the proper sense of the word, the horizon of the aesthetic resembles unlimited. All objects and situations may occupy or temporarily captivate a given observer, be they romantic gardens, lovely people, fancy cell phones, or amazing Italian coffee makers. That is why the aesthetic of everyday experience must be taken into consideration, provided that it enables an encounter with a relieving or enchanting present, appearing here and now. Moreover, when addressing aestheticization phenomena, this issue does not seem satisfactorily solved by referring—at least without further elaboration—to the Kantian distinction between pure beauty and dependent beauty, disinterested beauty without any purpose, and purposive beauty.

On the other hand, artworks indubitably constitute a sphere of their own. Seel's main focus on appearing provides inspiration in defining that distinctive otherness according to the artwork's specific ways of appearing. Artworks appear in a particular way; they do not simply appear as nature does but show themselves in their appearing. Therefore, they also must rely on reception and acknowledgment. The word "work" in "artwork" or "work of art" signifies participation; the spectator, reader, and listener must ascertain and discover what a work of art brings into the world. In short, to pursue the interplay of words, artworks work in us, and we have to work on them to interpret and come to terms with their more or less idiosyncratic language.

However, the influential distinction that Beardsley (1979) proposed between aesthetic and artistic values ignores the fact that all artistic production is the creation of unique appearances in the world, which are specific appearances, because artworks display unique interpretations of the world. Artworks are elaborate signs and more than merely things. Nonetheless, artistic presentation is rooted in embodied perceptions, sensations, and affections. Duchamp and Warhol, who needed appearance, needed to insist on appearance and to exhibit the puzzles and entanglements of aesthetic and artistic beauty. In art, even non-appearing is a matter of appearing. Likewise, many beautifully designed objects may join the world of artworks because they produce aesthetically intense meaning.

7 More recently Jean Marie Shaeffer (2015) has followed the same path.

Beauty and nature

If beauty can still lay claim to being essential in aesthetics and art in general, it is because artworks, in their own way of appearing to the viewer, are unique and remarkable as well as captivating and powerful. From this perspective, it makes sense to maintain the hypothesis that beauty is a broad concept that includes the sublime. However, although art has moved away from presumed classical forms of beauty, the aesthetic remains both an essential and a defining aspect of art[8]. As Gilles Deleuze convincingly demonstrated, whoever does not regard the paintings of Francis Bacon as beautiful will not be able to find what is troubling about them. Of course, in this context, what is beautiful refers to the forces actualized by Bacon's colorful and distorted paintings and not merely to the intellectual interest someone might take in these artworks but to what constitutes their aesthetic dynamism and affects beyond affections (Deleuze, 2003). In Deleuze's thought, the major concepts relate to intense beauty. How do we evoke these states of "events" and "lines of becomings," as valorized by Deleuze, without implying an element of beauty or without implying the joy of being transported elsewhere by sensation alone to connect with the intensity and multiplicity of life through concrete, empirical sensations that cannot be unfamiliar to beauty?

Beauty's persistent ability to appear when least expected is rather troubling. If beauty can be reaffirmed at the edge of modern and contemporary art, which for other art theoreticians has proven its final disappearance, more solid arguments are needed in pleading for the genuinely aesthetically beautiful. For that purpose, referring again to Deleuze might be helpful. In his thesis, *Difference and Repetition* (1968), Deleuze launched the project of "transcendental empiricism," in which concrete and empirical sensation is the vital conceptual framework in which the new philosophy of difference coincides with aesthetics:

> *Empiricism truly becomes transcendental, and aesthetics an apodictic discipline, only when we apprehend directly in the sensible that what can only be sensed, the very being* of *the sensible: difference, potential difference and difference in intensity as the reasons behind qualitative diversity.* (Deleuze, 1994, p. 56–57)

By affirming that sensation is immanent to unknown material forces because of the ability to "apprehend directly" within the sensible, Deleuze clearly demonstrated the ontological assumption of his project. In sensation, we meet what transcends us as far as "the very being *of* the sensible" literary puts human beings in touch with life in its intensity and multiplicities.

On the ontological horizon of sensation, beauty may join another similar fabulous border concept in aesthetics, that of nature. In Deleuze, nature signifies the concrete and empirical field in which radical difference can be sensed and thus "experimented." Deleuze and Guattari's conceptual rhizome underpins a radical understanding of nature, claiming that "in nature roots are taproots with a more multiple, lateral, and circular system of ramification, rather than a dichotomous one" (Deleuze & Guattari, 1987, p. 5). Seel, although more phenomenologically oriented, also insists on thinking about nature as incommensurable with "difference."[9] Human experiences of nature, he argues, provide encounters with something that cannot be fully translated into culture or reason, something that resists any cultural capacity. However,

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8 Simultaneously, a figurative return to nature has taken place in contemporary art. If modern art seems to testify to the opposite in conducting the process of emancipation of art from the fixation on unambiguous images of familiar figures from the external world, many contemporary artists have actually returned to figurative painting in addition to drawing attention to nature; e.g., the works of Anselm Kiefer, Gerhard Richter, and Andreas Gursky clearly show the appropriation of natural configurations.

9 In German, "*Differenz von Natur*" (Seel, 1991, p. 14).

critical theory's grand old master, Theodor W. Adorno, had already emphasized the complex interrelations between art and nature. In *Aesthetic Theory* (1970), Adorno attempted to rescue Kantian natural beauty or more precisely to dialecticize Hegelian cultural beauty (*Kulturschönen*) through Kant's natural beauty (*Naturschönen*). Most surprisingly, Adorno insisted that natural beauty marks the very inner life of beauty: "The more strictly the works of art refrain from natural proliferations and imitation of nature, the more closely the successful ones approach nature" (Adorno, 1997, p. 120).

This quotation may be used as a motto for uncovering a central common thread in the visual arts of the last two centuries. In the change from a supposedly traditional, classical imitation of nature to the pictorial adaptation of the very forces of figuration beyond representation, nature continues to articulate a radical otherness, while simultaneously being both the source of beauty and the unbridgeable difference from it. What matters from Adorno's critical point of view is that artworks have the potential to reveal the following: what is real about reality is richer than all the appearances we could attempt to fix in the language of conceptual knowledge. Underlying the work of art is that reality is not just a collection of facts because it reveals the difference between determinable appearance and indeterminable appearance, which points to the return of the sublime at the heart of beauty. Rightfully, Adorno quoted Valéry in recalling the perspective that Lyotard followed in elaborating the sublime: "Beauty demands, perhaps, the slavish imitation of what is indeterminable in things" (Adorno, 1997, p. 120)[10].

The assumption that a reciprocal relationship exists between aesthetic nature and art may join the classical formulation that Kant presents in section 45 of *Critique of Judgment*: "Nature, we say, is beautiful [*schön*] if it also looks like art; and art can be called fine [*schön*] art only if we are conscious that it is art while yet it looks to us like nature" (Kant, 1987, p. 174). In answering the question whether free nature or free art should serve as the model for aesthetic perception and production, Kant disentangles a complex relationship between nature and art. Commenting on Kant's argument, Seel persistently identifies a "double exemplariness":

> *Kant's solution lies in the thesis of a* double exemplariness *of nature for art and of art for nature. The presence of aesthetically perceived nature is a model for the inner vitality of the work of art; the imagination of the work of art, on the other hand, is at least one model for an intensive perception of nature. The reciprocal fecundation of art and aesthetic nature arises only when nature, among other things, can be perceived* as *successful art and when art, among other things, can be perceived* as *free nature, without the difference between art and nature being extinguished. It is neither nature perceived in the appearance of art nor art perceived in the appearance of nature that Kant establishes as the norm of an unrestrained aesthetic consciousness, but rather a* dialogue *between art and nature.* (Seel, 2015)

Seel is correct in arguing that that dialogue is still "ours" (2015). Especially when beauty is scrutinized in the much broader context of a complex cultural landscape, it becomes evident that domains besides art, from high-tech design to the broadest sense of everyday life, embrace profound aesthetic experience as much as art does. Beauty, nature, and culture continue to cross, define, enlighten, and challenge each other on the same ground that gave rise to aesthetics in philosophical thought, where our inquiry began with Diderot: sensuously and bodily embedded

10 The translation diverges slightly from the original French: "*Le beau exige peut-être l'imitation servile de ce qui est indéfinissable dans les choses.*"

experience.

The pivotal foundation of aesthetics, the body and the underlying bodily relationship between art and nature, also suggests what requires further exploration in the field of somaesthetics. Based on the cases selected here, the most stimulating beauty trouble the present inquiry encounters concerns the permanent, yet differently valued, inner, intuitive access to what merits the name of beauty because of that same inner, intuitive constitution. However, the circular ingrown ability of beauty is not natural but must be cultivated and practiced, which is what art partly does and what explains why much theorization of the beauty conceived by artists often refers to a two-foldedness within beauty. For example, Baudelaire (2010) specified two kinds of beauty—universal and ephemeral—which inhabit each other. Ruskin insisted on natural creation in architecture: "Man cannot advance in the invention of beauty, without directly imitating natural forms" (1900, p. 101). Similarly, somaesthetics advocates the need to carry out the project of cultivating beauty to include everyone's life as an art of life. As long as beauty keeps troubling us, there is hope for cherishing the quality of human life.

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Fine Art as the "Art of Living"

Johann Gottfried Herder's *Calligone* Reconsidered from a Somaesthetic Point of View

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Abstract: *Inspired by Shusterman's concept of philosophy as an "embodied art of living," this paper revisits Johann Gottfried Herder's late* Calligone *(1800) from a somaesthetic point of view, arguing firstly that Herder's theory of the agreeable and the beautiful is based on his conception of aesthetics as a theory of the senses; and secondly that Herder's theory of art focuses on the relationship between art and life.* Calligone *should accordingly be re-evaluated, this paper maintains, in light of a recent development in aesthetics: from the philosophy of art to what is known as somaesthetics, aisthetics, or everyday aesthetics.*

Keywords: *the agreeable and the beautiful, the feeling sense of touch and the groping sense of touch, the subtle senses and the media, Pygmalion of the self, art of living.*

Explaining how he coined the term "somaesthetics," Richard Shusterman once said that "new names can be helpful both in stimulating new thinking and in reorganizing and reanimating older insights." Based on the Greek and Roman idea of philosophy as an "embodied art of living," somaesthetics has succeeded in reorganizing and reanimating older, often forgotten discourses on *sôma* and *aisthêsis*.[1] Inspired by Shusterman's concept, this paper revisits Johann Gottfried Herder's late *Calligone* (1800) from a somaesthetic point of view.

A Metacritique on the Critique of Pure Reason (1799) and the *Calligone* are the major works of Heder's last years: the former posed against the theoretical philosophy of his former mentor Immanuel Kant's *Critique of Pure Reason* (1781) and the latter against the aesthetic theory of the *Critique of the Power of Judgement* (1790). However, few attempts have been made to analyze Herder's late contributions. In particular, little attention has been given to the *Calligone*,[2] which

1 Shusterman, *Thinking through the Body: Essays in Somaesthetics*, p. 5.

2 As far as I know, there are only three books that thematically deal with the *Calligone*, namely: Jacoby, *Herders und Kants Ästhetik*, Fugate, *The Psychological Basis of Herder's Aesthetics*, and Osterman, *Die Idee des Schöpferischen in Herders* Kalligone. In the last few decades, however, several articles have been devoted to the study of the *Calligone*. For example, in "Free Play and True Well-Being: Herder's Critique of Kant's Aesthetics," Paul Guyer, a renowned Kant scholar, reconstitutes Herder's main arguments in the *Calligone*, comparing them with Kant's argument in the third critique. In the field of musicology, Mark Evan Bonds argues that the *Calligone* constitutes a significant step toward the so-called metaphysics of the instrumental music. His thesis that originates in Hugo Goldschmidt's *Musikästhetik im 18. Jahrhundert und ihre Beziehungen zu seinem Kunstschaffen,* 186, opposes the 1972 assertion of Carl Dahlhaus that "the metaphysics of the instrumental music

is likely due to the following reasons. The first is intrinsic as the *Calligone* is, like *Critical Forests* (1769), a polemical work whose construction is largely based on the work it criticizes. It is therefore not easy to discern and reconstruct Herder's own arguments. In his letter to J. W. L. Gleim dated June 13, 1800, Herder expresses his desire to "put away from the second edition of the *Calligone* everything that does not belong to it,"[3] i.e., criticism of the third critique. The second edition, however, never appeared.

The second reason for the neglect of Herder's late works is historical. The decade 1790–1800, marked by the publication of the third critique and the *Calligone*, was a most significant period in the development of modern aesthetics. Friedrich Schiller's *On the Aesthetic Education of the Human Being* (1795) avers that we are "human" thanks to "aesthetic play."[4] Friedrich Schlegel's essays and fragments, and above all the *Conversation on Poetry* (1800), serve as manifestos of German Romanticism. Finally, Friedrich Wilhelm Joseph Schelling's *System of Transcendental Philosophy* (1800) insists that "aesthetic intuition" or "art" is the "only true and eternal organ and document of philosophy."[5] These works have in common a utilization of aesthetics, or the aesthetic, to overcome Kant's critical dualism. In comparison, Herder's *Calligone*, which is primarily directed at Kant's critical philosophy, seems to have been left out of the received historical narrative.

At issue in Herder's criticism of Kant's aesthetic theory is that he accepts neither the strict distinction between the beautiful, the agreeable, and the good, nor the opposition between nature and art. These distinctions underlie Kant's third critique and its dualistic foundations. Herder, in contrast, whose view is often regarded as "monism,"[6] does not approve of such dualistic distinctions. This does not mean that Herder wants to undermine all distinctions. Rather he aims at restructuring or rearranging these distinctions according to his monistic view. As I shall argue, Herder's theory of the agreeable and the beautiful is based on his conception of aesthetics as a theory of the senses; and his theory of art focuses on the relationship between art and life. This would suggest that Herder's *Calligone* should be reevaluated in light of the contemporary transformations of aesthetics: from the philosophy of fine art to somaesthetics, aisthetics, or everyday aesthetics.

1. Aesthetics as a Theory of the Senses

In the third critique, Kant distinguishes between three kinds of the feeling of pleasure: 1. the passive and private pleasure that depends on given sensations (e.g., colors or tones), i.e., the pleasure of the agreeable; 2. the universally-valid pleasure that presupposes a given representation but originates from the free play of our cognitive powers, i.e., the pleasure of the beautiful; and 3. the universally-valid pleasure that accompanies a judgment of the perfection of an object, i.e., the pleasure of the good (Kant 5: 209, 217).[7] The beautiful and the agreeable are similar insofar as they do not presuppose any concept of an object, whereas the beautiful and the good

was quite unknown to Herder" (Dahlhaus, *Klassische und Romantische Musikästhetik*, p. 95). See Bonds, "Idealism and the Aesthetics of Instrumental Music at the Turn of the Nineteenth Century," pp. 387–420, here pp. 409–410.

3 See Adler, "Herders Ästhetik als Rationalitätstyp," pp. 131–139, here p. 131.

4 Schiller, *On the Aesthetic Education of Man*, pp. 80, 135.

5 Schelling, *System of Transcendental Idealism*, p. 231.

6 See Nisbet, *Herder and the Philosophy and History of Science*, pp. 4, 109.

7 Kant's works are cited in the body of the text according to the volume and page number in *Immanuel Kants Schriften*, Ausgabe der königlichen preußischen Ausgabe der Wissenschaften (Berlin: W. de Gruyter, 1902–). Translations are from the Cambridge Edition of the Works of Immanuel Kant, series editors Paul Guyer and Allen W. Wood (New York: Cambridge University Press, 1992–).

are similar insofar as their pleasure is not private but universally valid. Kant's argument is based on his dualistic position: the distinction between the subjective and the objective; and between matter and form, i.e., between what is given and what generates order.

To Kant's distinctions Herder responds: "No one doubts that the words 'agreeable, beautiful, and good' designate different concepts. In all our notions and feelings we are of the *one* nature that thinks, senses, and desires; these related concepts must, therefore, share borders. The question is how these concepts border on each other, how they are divided and connected. Mere oppositions do not solve riddles; much less do the arbitrary barriers of words" (Herder 8: 672–3 n.).[8] Thus, Herder reduces these three concepts into *one* single nature, thereby rearticulating them anew based on his conception of aesthetics as a theory of the senses.

Herder's definition of the agreeable reads as follows: "What our sense readily accepts [*annehmen*], what is acceptable to it [*genehm*], what it readily approves [*genehmigen*]—that is what is agreeable [*angenehm*]" (8: 664). Compared with Kant's rather dry definition that "the agreeable is that which pleases the senses in sensation" (Kant 5: 205), Herder's definition is highlighted by his linguistic insight that the adjective *angenehm* (agreeable) and the verb *annehmen* (accept) have the same origin, which cannot be adequately rendered in English. By the expression "readily accept" [*gern annehmen*] Herder understands the following: "It is what maintains, promotes and enhances the feeling of our being, it is what is *in harmony* with it that each of our senses readily accepts, assimilates, and finds agreeable" (Herder 8: 667). In short, by feeling something as agreeable, we perceive our "well-being [*Wohlsein*], health" anew (8: 667–68).

Why is Herder so interested in the agreeable? There are two reasons. First, well-being is striven towards both by the human being and nature as a whole. Following the order of nature, the human being seeks the agreeable. Second, assimilation is fundamental for human beings who assimilate not only the agreeable, but also the beautiful (8: 689, 712). The "concept" is also that which "we assimilate from an object in cognition" (8: 732).

Here one should clarify what Herder means by "concept" [*Begriff*]. In section six of the third critique, Kant avers that "there is no transition from concepts to the feeling of pleasure or displeasure," concluding on this basis that the determining ground of the judgment of taste is not a "concept" but a "feeling," which is also the reason why the beautiful and the agreeable are essentially distinguished from the good (Kant 5: 211). Herder, on the other hand, insists that we "distinguish concept and feeling only by means of abstraction" and that we are "always conscious of this innate transition. […] Even a fanatic does not descend so deep into the dark ground of his soul that he believes that he feels—or even judges—without any concept" (Herder 8: 733). That is, concepts pertain to all activities of our souls, i.e., not only in the higher levels like thinking and willing but also in the deepest sensory levels.[9] For Herder, it is concepts that create a scaffolding upon which the sensory-intellectual human being is engaged in the world via senses, imagination, intellect, and will.

The "ground of the soul" is not a chaos that eludes concepts, as Kant argues; it is rather organized by concepts in a human manner (as a kind of *Gestalt*). Thus, Herder argues that according to Kantian dualism where only form can generate order in matter, matter itself would be a "*Tartarus* without concepts" and we could not hope to "reach the light of concepts" (8: 734).

8 Herder's works are cited in the body of the text according to the volume and page number in Werke, 10 vols. (Frankfurt am Main: Deutscher Klassiker Verlag, 1985–2000). Translations are mine.

9 See Adler, "Fundus Animae – der Grund der Seele: Zur Gnoseologie des Dunklen in der Aufklärung," pp. 197–220 and Otabe, "Der Grund der Seele: Über Entstehung und Verlauf eines ästhetischen Diskurses im 18. Jahrhundert," pp. 763–774.

Rather, matter is already formed or form resides in matter. Thus "each sense is organized so as to assimilate one out of many [*ein Eins aus Vielem*]; otherwise it would not be an organized sense of the soul" (8: 733–34).

I now discuss how Herder relates the agreeable to the beautiful. In his theory of the agreeable, Herder thinks primarily of the "darkest senses" (8: 676) i.e., "the sense of smell and taste" (8: 668) as well as "the sense of touch" (8: 668). Both senses pertain to "maintaining our well-being" (8: 672). Among these two senses, however, the sense of touch alone has the function of grasping the form of an object: "By injustice the sense of touch is counted as a rude sense. […] Not only as a helper and tester it assists sight and hearing; it further provides sight with its firmest basic concepts [*Grundbegriffe*] without which the eyes would perceive only surfaces, contours, and colors" (8: 677).

Here two points should be noted. First, the sense of touch is understood in two ways. While the sense of touch is closed in a subject, it is open to the world when it grasps the forms of an object,[10] thereby mediating between the so-called lower senses (smell and taste) and the so-called higher senses (sight and hearing). Herder calls the touch of sense that is closed in a subject the "feeling sense of touch" [*das fühlende Gefühl*] (8: 676) or the "rude, and self-preserving sense of touch" (8: 677) and the touch of sense that is open to the world the "groping sense of touch" [*das tastende Gefühl*] (8: 677), or the "understanding sense of touch" (8: 689). Certainly the "groping sense of touch" is primarily located in the grasping hand, but it pervades the whole body. The human being is "endowed with the sense peculiar to it, i.e., the groping sense of touch in its whole shape" (8: 751). The groping sense of touch is peculiar to the human being because it is distinguished from other animals by its "hand" (8: 751).

Second, it is necessary to investigate the relation between the senses of touch and sight more closely. Triggered by Molyneux's problem and following Berkeley's E*ssay towards a New Theory of Vision* (1709),[11] Herder insists that what we properly perceive by sight are flat surfaces with colors and that our perception of form is only possible when the sense of touch that grasps an object underlies the sense of sight. "A man born blind whose vision was restored" must, therefore, "adjust a visible world with a tangible one," which is, however, the case not only with a man born blind whose vision was restored but also with "children and the visually impaired" (8: 691). With the help of the sense of touch we learn to see forms such that we come to "see also gropingly" (8: 751), i.e., vision can replace the sense of touch to see an object haptically as a three-dimensional object without the aid of the sense of touch. "Being founded on the sense of touch, our images of vision [*Gesichtsideen*][12] stand on their own basis" (8: 751).

Being open to the world, the groping sense of touch (or the vision under its guidance) grasps "shapes in certain numbers and measures as conditions of rest and motion" (8: 752). "We live in a well-ordered and well-shaped world in which the results of the natural laws in gentle shapes manifest to us *beauty as corporeal perfection that is harmonious with itself and with our sense of touch*" (8: 687). An object is beautiful when the double condition that it is harmonious with itself and with our sense of touch is fulfilled.[13] In contrast, the "agreeable" fulfills only the single condition that it promotes the well-being of a subject that perceives an object. The sentence "X is agreeable" seems to determine an object X; but it only signifies that the well-being of the subject

10 See Jacoby, *Herders und Kants Ästhetik*, p. 107.

11 See Morgan, *Molyneux's Question: Vision, Touch, and the Philosophy of Perception*, pp. 1–5, 59–62.

12 Herder distinguishes *Begriffe* from *Ideen*, etymologically ascribing the former to the sense of touch and the latter to the sense of sight.

13 The meaning of this harmony will be analyzed later.

is promoted by object X. "For the sake of brevity, we attributed to the object what belongs only to the feeling subject" (8: 725). On the other hand, the sentence "X is beautiful" points out not only a subjective condition but also actually determines the object X. Despite these differences, the beautiful and the agreeable do not exclude each other, as Kant claims, because a beautiful object is also agreeable in that it is harmonious with a perceiving subject and promotes the well-being of that subject. Accordingly, the agreeable and the beautiful form two layers: a base and an upper layer, respectively.

Next I address the question of how Herder distinguishes the higher senses from the lower senses. According to Herder, in the lower senses "subject and object are, as it were, one in sensation"—we find in our "subtle organs, vision and hearing, *το μεταξυ*,[14] a medium that enters between an object and a feeling subject" (8: 708), thus enabling remote perceptions: "Both media," i.e., "light and sound," have "an immutable rule that is harmonious with the organ"—"color wheel" and "tone scale," respectively (8: 709–710, 695).

Any given medium faces us with a new world. As for sight, Herder remarks that "Vision gives <a> not only a new language, a shortened alphabet of the sense of touch that gropes in darkness, […] but also <b>—a sacred power! The omnipresent light transforms us, as it were, into omnipresent beings at once. A world of objects that we slowly—often forgetfully, seldom perfectly—groped in darkness […] is now presented by a light ray to the eye and, thus, to the soul as a huge *co-operation and co-existence* [*ein Mit- und Nebeneinander*] according to eternal laws" (8: 692—<a> and <b> added by the author). In <a> Herder reiterates that sight can replace the sense of touch to see an object gropingly. What is peculiar to vision is, however, according to <b> that, due to the characteristics of light, it can instantaneously visualize the world as "a huge *co-operation and co-existence*" at once . In <a> vision still functions successively, like the sense of touch, whereas in <b> it is marked by simultaneity.

As for hearing, Herder continues as follows: "Being bumped and elastically restoring itself, does not each object give a sound? Is not there a medium that receives and transmits this sound to other harmonious bodies? The sound is nothing other than *a voice of all moved bodies that is uttered from within* and *conveys* their suffering, resistance, and aroused powers to other *harmonious* beings loudly or quietly" (8: 698). While the medium of light conveys to us the surfaces of an object, we are led by the medium of sound to an inner dimension of an object—a new world that is closed to both sight and touch.

Thus Herder concludes that "by means of a *rule that encompasses the whole world*, both media [i.e., light and sound] reveal us *All*, the former visible *All*, the latter audible *All*, respectively—*a world order*" (8: 706)

What does Herder then understand by a world order? Based on the ancient four elements theory, Herder considers each living being in relation to an environment that he designates its "element" or "region." "Fish," for example, "seems to us a lively representation of the silver sea itself; the sea reflected and embodied itself in fish, and, if I may say so, it transformed itself into a feeling of fish" (8: 715), because the characteristics of the element of water (or sea) are manifested precisely in fish, particularly in its shape or activities. The same applies to birds and animals (8: 717–718). Each living being inhabits a certain element whose characteristics it embodies. And to live such a life is well-being: "Everywhere I find nature in high consonance with the well-being of the creature and in the original beauty suitable for each region" (8: 717–718).

Every environment is independent: "'What Nature has given to you is not given to me. I do

14 Here Herder uses the Greek word το μεταξυ, referring to Aristotle's *De anima* (II.7).

not know anything about your groping sense of touch. […] Sight and smell make a world for me; I am created to this world,' said a bird of prey with an elephant, a parrot, and a whale. They all spoke from *their* world, from their elements" (8: 715). Thus, each animal speaks in and from its world. Herder adds, however, the following: "But only it, i.e., the human being, spoke in them; in the name of all it conducts this conversation" (8: 716). Herder personifies animals to let them say that each living being lives in its own element, pointing out at the same time the peculiar position of the human being that only it can hear—and consciously recite—the conversation of animals. Such consciousness proves that it is endowed with reason.

Accordingly, the human being does not simply live in its element but does so with consciousness: "All living beings in nature aim for *well-being*, by making nature harmonious with it and vice versa; only the human being can do it with reason and reflection" (8: 776). Reason is the capability of becoming conscious of what the human being naturally does in "all life performances [*Lebensverrichtungen*]" by following the way embedded in nature. To use one's reason is, therefore, to live a life "with consciousness" (8: 753). This means the senses and reason are not opposed. Reason is rather embedded in the base layer of the senses and constitutes an upper layer by becoming conscious of the base layer. As such, aesthetics as a theory of the senses forms the basis of Herder's philosophy as whole.

2. Art and Life

According to Herder, only the human being can "make nature harmonious with it and vice versa […] with reason and reflection" (8: 776). Herder continues: "The realer purposes the human being accomplishes by means of this harmony between nature and itself, the worthier its art" (8: 776). Thus, Herder understands art as "all life performances" insofar as they are penetrated by "understanding and rule," i.e., the "use of active reason by means of sensory organs" (8: 774). The following section clarifies how Herder defines art in the second and third part of the *Calligone*.

In the second part of the *Calligone*, Herder addresses the relationship between nature and art: "We often oppose *nature* to *art*, while we often ascribe to nature the greatest art. Both are not without reason" (8: 759). Herder explains: Art is often ascribed to nature because nature generates via various means many purposive productions and, in this way, practices a kind of art— "nature's art" [*Naturkunst*] (8: 759–760). The human being was also born of "nature's art." "The most gifted artwork of nature, the human being," however, "ought to be an artist by itself—that is immensely crucial" (8: 761). That is, although nature's art gave birth to the human being as an "artistic creature," the human being ought to exert its natural endowment in order to be an artist. For the human being, what matters are only the results attained by its art. To that extent, nature is opposed to human art.

The relationship between nature (or nature's art) and the human being (or human art) is therefore bidirectional. Nature provided the human being with an organ so that it can exert its natural endowment. In this sense, nature is regarded as a "mother extremely propitious toward the human being" (8: 762). The human being must, however, do everything "*by itself*" (8: 762). When nature throws obstacles in its way, the human being is "opposing its art to nature" (8: 761). In this sense, the human being has to intrude into nature. It does not, however, follow that human art aims at conquering or negating nature. "Formed as harmonious with nature, the human being lives in nature, and must live with nature" (8: 774). Nature as the base layer represents a condition for human art positioned in an upper layer, while human art in turn acts upon nature such that each layer constitutes an inseparable whole.

In Section 43 of the third critique, Kant distinguishes "free or liberal art" as an "occupation that is agreeable in itself" from "handicraft" as an "occupation that is disagreeable (burdensome) in itself and is attractive only because of its effect (e.g., the remuneration)" (Kant 5: 304). Herder disapproves of this distinction, arguing that it is contrary to "nature"; instead, Herder maintains, we must "treat *the footstep of art* [*Kunstgang*] of the human nature according to nature" (Herder 8: 763–764). Thus, in the second part of the *Calligone* Herder reconstructs the development of human art in an extremely peculiar way.

Human art begins with architecture and garden art. "Being brought outside and exposed to the weather and dangers of nature, the human being needed shelter and house" (8: 764). Garden art, closely connected with the house, represents the essence of fine art insofar as it distinguishes "in nature harmony from disharmony," thus "heightening and assembling the beauty of nature everywhere" (8: 766). The third and the fourth arts, clothes and wars, correspond respectively to woman and man, clothed and naked, *decorum* and *honestum*. The final art is language: "To be together, the human race needed language from an early age. Language, an instrument of the noblest arts of spirit, was not invented without need. In it resides a fine art of the human being" (8: 771).

One notices, first of all, that these five arts are regarded as matrices for further arts e.g., household art results from the third art, clothes, and the art of glorifying fighters—in the form of epics or sculpture—from the fourth art of war (8: 770). Second, the role of women is emphasized not only in the third art, clothes, but also in the fifth art, language: "We learned to speak from our mothers; how fortunate it is! Their sonorous tone and their agreeable talkativeness […] bring a melody of language into our mind and heart, a rich source of the variously beautiful" (8: 771). Third, we should draw attention to the expression "the fine art of living" [*schöne Kunst des Lebens*] (8: 770). This expression used to characterize the third art of clothes anticipates the main theme of the third part of the *Calligone*, which will be analyzed later.

Except for architecture and garden art, the five aforementioned arts do not belong to the "fine arts" in the terminology of the 18th century. Besides being useful, architecture and garden art do not play central roles in the fine arts, and in fact they are often excluded from the fine arts.[15] It follows that for Herder, who gives the *five arts* as examples of fine arts, the concept of the autonomy of art is alien. This can be also seen in Herder's theory of taste.

"Clothes, gesture, dwelling, and speech in its election of contents and presentation inexorably reveal the taste and tastelessness of the person concerned to those who examine" (8: 841). The "domain" of taste covers the above-mentioned five arts and even goes beyond them, for taste resides in lifestyle from which the "so-called fine arts" tend to be detached. "It is a sign of the lack of taste to imagine that taste is necessary or possible only in the so-called fine arts, i.e., music, painting, dance, and the novel; we experience pretentious art connoisseurs who fancy themselves to have excellent taste in these arts and yet who have the most tasteless lifestyles [*Lebensführung*], even in their way of presenting themselves as connoisseurs" (8: 847–848).

This view reflects a Rousseauesque criticism of modern Europe: "How often the folks who led an active life under a favorable climate laughed at the artful but clumsy Europeans, taking pride in their sense that they better understood the art of living [*die Kunst zu leben*], and practiced it from their youth more easily and happily than the latter" (8: 845). For Herder, taste is, therefore, evident in the "art of living," and the fine arts which became independent of other

15 Charles Batteux who introduced the term "beaux-arts" excludes eloquence and architecture from the fine arts. See Batteux, *The Fine Arts Reduced to a Single Principle*, p. 22.

arts lost their root in life as a result.

In the third part of the *Calligone*, Herder once again addresses "fine sciences and arts" [*schöne Wissenschaften und Künste*]. Literally translated from the French words "belles lettres" and "beaux arts," this expression coined in the mid-18th century is vague in its meaning. In order to avoid such vagueness, Herder advances that "this genre of sciences and arts should become *formative* [*bildend*]—it should form the *human character* in us; at this point they all converge, even though they would otherwise not be united in the way of their operations"(8: 941). Accompanied by the adjective "*bildend,*" the noun "*Kunst*" generally means "plastic art." Herder, however, changes the meaning of the adjective, understanding the art which forms or builds the human character in us.

The question consequently arises: "What is cultivable and trainable in the human being?" Herder's answer is that "everything awaits this training, without which the human being was and is not only a raw wood, an unformed marble, but is and becomes a brute" (8: 943). That is, "all limbs," the "subtle senses," "our soul-forces," and "our inclinations" are to be trained.

Here we should notice, first, that Herder emphasizes cultivating the senses: "The subtle senses, vision, hearing, hand, and tongue need training" (8: 944). While the first part of the *Calligone* dealt with the cooperation of the senses of touch and vision in connection with Molyneux's problem, arguing that the sense of touch serves as a ground for that of vision, in the third part of the *Calligone* Herder revisits the issue in the context of cultivation of the senses to "form eye by hand, and vice versa" (8: 944). As for the relationship between ear and tongue, Herder underscores the need to "accustom the ear to hearing intelligibly, i.e., to hearing not only the tones, but also the thoughts of human speech" and to "accustom the tongue to expressing the latter, as is required by its nature and end" (8: 944). In other words, the ear and the tongue are to be cultivated toward language—the "fifth fine art of the human being" according to the second part of the *Calligone* (8: 771). Herder thus integrates his theory of the senses and art into his theory of cultivation in the third part of the *Calligone*.

Second, Herder's argument throughout the *Calligone* converges on the "forming art of living" [*die bildende Kunst des Lebens*] (8: 946), an idea starkly opposed to the modern idea of autonomous art.[16] It does not, however, follow that his "art of living" has nothing to do with fine art: "the person who always struggles for 'removing what should not be in the wood, precisely that way fosters the form of the image,' as Luther says, is a Pygmalion of the self who follows the idea of the beautiful and the supreme that enlivens him" (8: 946). Here Herder compares the art of living to the art of sculpture, quoting Luther's words in his very first publication, the *Seven Penitential Psalms in German* (1517),[17] which are also cited in Hamann's *Socratic Memorabilia* (1759).[18] This metaphor originates from the ninth section of Plotinus' essay *On the Beautiful,*[19] where a sculptor regards himself as a statue to be formed, hence Herder uses the expression

16 The history of the idea of the art of living still needs to be investigated. As for the art of living in the 18th century, see Schmid, *Philosophie der Lebenskunst: Eine Grundlegung*, pp. 33–37.

17 "[…] gleich wie ein bildmacher, eben yn dem er weg nymet und hawet, was am holtz tzum bilde nit sall, yn dem furdert er auch die form des bildes." Luther, *Werke*, vol. I, p. 208. Dietrich Irmscher, the editor of the 8th volume of the Frankfurt edition, notes that Luther's source is "not proven" (8: 1241).

18 Hamann, *Socratic Memorabilia*, p. 384.

19 See: "Recall your thoughts inward, and if while contemplating yourself, you do not perceive yourself beautiful, imitate the statuary [*οἷα ποιητὴς ἀγάλματος*]; who when he desires a beautiful statue cuts away what is superfluous, smooths and polishes what is rough, and never desists until he has given it all the beauty his art is able to effect. In this manner must you proceed, by lopping what is luxuriant, directing what is oblique, and, by purgation, illustrating what is obscure, and thus continue to polish and beautify your statue [*τὸ σὸν ἄγαλμα*] until the divine splendour of Virtue shines upon you, and Temperance seated in pure and holy majesty rises to your view." *Thomas Taylor The Platonist: Selected Writings*, pp. 157–158.

"Pygmalion of the self."[20] What characterizes the *Calligone* is that this metaphor of a sculptor pertains to the existence of the human being who takes care of itself by forming itself as a kind of living artwork.[21]

3. Artistic Illusion

In the *Calligone*, as we have seen, Herder does not seek to distinguish the fine arts and other arts as two different species. His theory of artistic illusion in the second part of the *Calligone*, however, reveals a characteristic peculiar to the fine arts.

Herder describes artistic illusion (*Täuschung*) as follows: "The word '*täuschen*' [give an illusion] comes from the word '*tauschen*' [exchange]. The poet gives me an illusion when she puts me in her way of thinking, or in her plot and feeling; I exchange [*tauschen*] my way of thinking with her, or let it lie dormant while she acts; I forget myself. […] I have to forget myself, even my time and space, carried by the wings of the poetry into its dramatic plot, into *its* time and space" (8: 788–789). This exchange is, however, not to be confused with a state of complete self-oblivion, as Herder's expression "lie dormant" suggests, alluding to the Leibnizian concept of "dormant monad." No matter how deeply the observer is absorbed in a work of art, she does not confuse fictions with realities. At issue is an exchange of ways of thinking without losing oneself: "by the power of a plot, I must *mentally* be where the poet lets me exist; my imagination, my feeling, serves the poet, but not my person" (8: 789).

Excellent works are endowed with the power to make me forget myself and to take me out of myself: "without pettily returning to myself, I am filled with the idea that elevates me above myself and occupies all my powers" (8: 730). A work of art engages me in feeling and thinking together with the artist and living the unknown world, contributing in this way to the "art of living" on a deep level.

Herder's view of artistic illusion was relatively new in the 18th century. In Lessing's *Laocoon* (1766), we find an expression of the view widely shared in the 18th century: "The poet desires to make the ideas which she awakens in us so vivid, that from the rapidity with which they arise we believe we perceive the sensory impressions of the object they refer to; and in this moment of illusion we cease to be conscious of the means—that is, of the words—which she employs for this purpose."[22] By "artistic illusion," Lessing means that as the recipient is not conscious of the means of a work of art; she gets the impression that the objects to which they refer are immediately present. For Herder, on the other hand, artistic illusion means that the recipient imaginarily assimilates the way of thinking and feeling of the artist, displacing her own way of thinking and feeling into the background.

In conclusion: by investigating the five senses as a basis for aesthetic theory; by understanding the human being to be constituted by an inseparable base layer of nature and upper layer of art; and finally by interpreting the fine arts as an art of living, Herder is uniquely positioned within modern aesthetics.

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20 Influenced by the prevalence of the myth of Pygmalion by Ovid (Metamorphoses, X, 243–97) in 18th century France and Germany, Herder added to his book *Sculpture* (1778) the subtitle: "Some Observations on Shape and Form from Pygmalion's Creative Dream" (Herder 4: 243).

21 The analogy between the art of statuary and the art of living dates back to Epictetus (ca. 55–135 A.D.): "For just as wood is the material of the carpenter, and the bronze that of the sculptor, the art of living has each individual's own life as its material." Epictetus, *Discourses, Fragments, Handbook*, p. 36.

22 Lessing, *Laocoon*, pp. 160–61 (slightly modified).

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The Beauty of Mathematical Order
A Study of the Role of Mathematics in Greek Philosophy and the Modern Art Works of Piet Hein and Inger Christensen

Esther Oluffa Pedersen

Abstract: *Since antiquity, mathematics has been identified as a science that allows humans to comprehend the inner workings of harmony. In Greek philosophy, mathematical form is celebrated as an eminent source of beauty. The Greek understanding of cosmology is the principal reason for the strong connection between mathematics and beauty in Greek philosophy. A harmonious and definite cosmos is described by the geometrical figure of the circle. The mathematical images of the cosmos are an important starting point for seeing beauty in forms that can be described mathematically. The question, however, concerns whether the connection between beauty and mathematics survives in modern conceptions of beauty. Of course, even in ancient Greece, the concept of beauty was not exhausted by objects that could be grasped mathematically. In the modern context, it would be even more peculiar to argue for a necessary connection between beauty and mathematics. My focus is much humbler: I intend to illuminate how mathematics continues to play a role in certain conceptions of beauty. I also argue that the way in which mathematics is connected to beauty illuminates a specific mode of embodying intellectual insights. The two examples I consider are taken from design and poetry: the invention of the super-ellipse by Piet Hein, the Danish designer, poet, mathematician, and artist; and the Danish poet Inger Christensen's collection of poems,* Alphabet.

Keywords: *Mathematical beauty, Plato's Timaeus, Eudoxus, Piet Hein, Inger Christensen, embodiment of mathematical beauty, mimesis and modern art.*

My aim is two-fold. On one hand, I argue that mathematics is a special and, in many respects, an extraordinary theory of art, which is rooted in the Greek philosophical tradition of viewing mathematical forms as carriers of beauty. On the other hand, I explore how this inherited Greek philosophical tradition has undergone far-reaching changes in our modern world.[1] The Greeks

1 In *Aesthetic Measure* (1933), G. E. Birkhoff attempted to create a general mathematical formula to describe aesthetic beauty. In contrast, I do not mean to argue that *all* beauty can be described mathematically but that mathematics historically has played a great role in shaping notions of beauty and that some modern artists and designers continue to take inspiration from mathematics. Their interest in mathematics reveals a relationship in the philosophical tradition stemming from Plato and Aristotle. The modern aesthetic inspiration by mathematics rests

would have experienced the world as a finite, eternal, and ordered cosmos, whereas we have come to know ourselves as placed in an infinite universe in which our solar system is just one of many such systems in the cosmos. The developments and achievements of modern science have overthrown the culturally inherited belief in an ordered cosmos. Thus, modern humans are confident that we are able to create new technologies and designs to meet the challenges of human life. At the same time, we are aware that the ability to recreate nature by way of science and technology also poses a self-inflicted threat because we destroy natural resources and create technological means of mass destruction. The ambiguity of our place and role in the universe is clearly reflected in the poetry of Inger Christensen. Moreover, it is apparent that Piet Hein's design is a new way of imitating nature. Modern humans are no longer at rest in a harmonic cosmos that is fitted for human life. Instead, we must ourselves to create harmony while we also realize our destructive influence on life.

The article has two parts. In part one, I provide a rudimentary summary of mathematics' role in Greek philosophy in order to delineate the deep relationship between mathematical form, beauty, and art, which we have inherited by way of history. In the discussion of Greek philosophy, I will focus on how geometry, as beautiful form, mediates intellectual insight and sensible perception. I argue that we can find a link from the Greek conception of beauty to modern art and design in the aesthetic theory of Kant. In part two, I apply the theoretical ideas described in part one to two short interpretations of works by Piet Hein and Inger Christensen. I start by discussing how, as a designer, Hein brought mathematical insights into play in his work. From the example of Hein's very elegant and simple creation of a modern form of mathematical beauty, I move to discuss the poetry of Inger Christensen. In the collection of poems called *Alphabet*, Inger Christensen uses mathematics as an artistic means to convey poetic meaning. The beauty of harmonious mathematical forms becomes its opposite in the poems. Inger Christensen was inspired by the Fibonacci sequence of numbers in the construction of her poems. I will explain the alphabet's eerie and alarming connection to the Fibonacci sequence. In the conclusion, I return to the interconnections between beauty, mathematics, and art to consider how Hein and Christensen employ mathematics in the search for beauty and briefly outline some differences between the role of mathematics for the creation of beauty in antique Greece and our modern world. A very evident difference is the significance accorded to the human body.

Part One: Mathematical Beauty in the Greek Tradition

Plato's *Timaeus* is a prime source to consult to apprehend the immense importance of mathematics in Greek philosophy and its legacy in Western thought. The dialogue is atypical, as Plato gives the lead to the Pythagorean philosopher Timaeus from Locri, which is present-day Calabria, Italy. Traditionally, we know Plato as a composer of philosophical dialogues in which Socrates debates with and questions the people of Athens, including philosophers and sophists. *Timaeus* has only a very short prologue that consists of a dialogue among Socrates, Timaeus, Hermocrates, and Critias (17a–27d), during which they decide to listen to Timaeus' speculative account of how the cosmos, human beings, animals, and plants were created. I will not follow Timaeus' deliberations step by step but instead focus on the most significant assertions indicating the strong tie between mathematics and beauty in Greek thought.

Mathematical forms, such as the conic sections, were described by Euclid around 300 BC. The

on a very different understanding of humankind and our place in the universe. Thus, employing mathematics in modern design and art is also an interplay with interesting layers of cultural and philosophical meaning.

intellectual conception of conic figures, such as the circle, ellipse, parabola, and hyperbola, gave rise to geometrical descriptions and rules of transformation and construction. However, Euclid's neat axiomatic comprehension of geometrical forms was preceded by the long development of mathematical thinking. A major difficulty was understanding the relation between geometry and arithmetic. Greek arithmetic was based upon rational numbers, and its explanatory power was challenged by the discovery of irrational numbers, such as √2, which do not have a solution in rational numbers. These difficulties were solvable in the advanced understanding of geometry by Eudoxus, who was a close colleague of Plato, around 330 BC.

The great invention of Eudoxus was to reinterpret irrational numbers such as √2, Φ, and π as non-quantified mathematical relations of magnitude to explain and describe continuous geometrical entities, such as lines, angles, areas, and volumes as well as geometrical proportions, such as the golden ratio, Φ. For example, in school, we learn that the area of a circle is calculated by multiplying the square of the radius by π: Area = $r^2 * \pi$. An illustrative approximation of the proof can be shown by cutting the circle up into smaller parts, of all which have the same length as the ratio (see figure 1). This geometrical invention is thought to be the basis of Plato's mature treatment of mathematics (see Fossa & Ericson 2005 for a historical and mathematical argumentation for the relationship between Eudoxus and Plato), which laid the foundation of Euclid's axiomatic proofs in geometry. Thus, geometry became the most important mathematical discipline, and the proofs of geometrical figures, such as the circle, the ellipse, the triangle, and the square, became the epitome of human intellectual achievement.

The Divine Craftsman

For Plato, geometry was a fitting model of intellectual knowledge because the drawn geometrical figures were images (*eikon*) of the intelligible model figure (*paradeigma*). By means of a sensible hand-drawn image, the intellect is able to understand the model's figures. We may draw an approximation to a perfect circle to comprehend that the round line of the circle is exactly the same at any point, and the radius stays constant. The intellectual grasp of the intelligible geometrical figures entails drawing those that function as images of the properties and relational proportions of the corresponding geometrical forms. There is an intriguing relationship between the intelligible geometrical forms and the physically and sensuously created images of circles, triangles, and squares we use to comprehend geometry. There is also a stimulating relationship between the embodied drawings of geometrical figures and the intelligible grasping of their mathematical significance, which is the only possible means of drawing the sensible images. For Plato, the interrelation between sensible images and the intellectual grasping of their mathematical nature functioned as an image of the intricate interconnections between the sensible and the intelligible. Using an analogy, Plato argued that our beliefs (*doxa*) concerning the sensuous world relate to the eternal knowledge (*episteme*) of being in the same way that the drawn geometrical figure relates to the geometrical form. Moreover, these two kinds of knowing were proportionally related. The ability to draw the physical image (*eikon*) of a geometrical figure is furthermore a craft (*technê*) that we acquire in practice and education. Hence, there is a strong tie between knowledge and craft.

In *Timaeus*, the analogy is taken even further, as Plato argues that the knowledge of the cosmos that Timaeus presents is only an image "that is no less likely (*eikôs*) than any anyone else's" (29c). Hence, it is a likely account of an image of the model. Humans strive to comprehend the created cosmos, but as mortal and finite beings endowed with a spark of intellect (*nous*), we are only able to give a likely account of how the intellect of the demiurge created the cosmos.

The cosmos was created; thus, its coming into being was a product of the craft (*technê*) of the demiurge. Any human intellectual comprehension of this process will always fall short. Consequently, the best account of the cosmos is the one that is not less likely than anyone else's. Plato thereby builds fallibility into his cosmology, not as something that makes his account less reasonable but that demarcates the relationship between the fallible human intellect and craft and the eternal, beautiful, and good cosmos created by the demiurge or divine craftsman. However, just as the divine craftsman created the cosmos, humans can create images that assist in our knowledge of the cosmos. Hence, knowledge is intimately connected to an embodied and sensual relationship to the world. The creative practice of *technê* by the demiurge as well as the human consists of producing something that the material with which both are working does not contain from the outset. In Plato's understanding of this process, mathematical proportions enable humans to envision this creative act (see Gleen 2011), which is what Timeaus employs as he gives his likely account of how the cosmos was created.

By following the lead of geometry, Timaeus gives an account of the creation of cosmos by the demiurge. The first premise is that the cosmos is unitary, created, and beautiful; moreover, the demiurge is good and has crafted the most perfect cosmos. The cosmos was crafted by the *technê* of the demiurge to represent the eternal model. Timaeus conveys his understanding of the beauty of the cosmos and the goodness of the demiurge by giving a likely account of its mathematical structure. Thus, the beauty of mathematical proportions and simple geometrical figures is represented in the images to which Timaeus, as a human being, clings in order to give a likely account. Therefore, the route to insight commences in the sensible embodied drawing of geometrical figures so that intelligible knowledge emerges from this practice. Timaeus argues that cosmos was formed as a perfect sphere, which is unitary and self-sufficient. Hence, the cosmos is "a happy god" (34b) and contains all beings within it. The inner cosmos contains two concentric circles that continually revolve in the same spot (36c). The outer circle is interpreted as the sphere of the fixed stars. It has the same motion, whereas the inner circle is interpreted as the space designated for the planets, which has a different motion. Thus, the retrograde movements of the planets are explainable as instances of difference compared with the motion of the fixed stars. Only after the perfect and eternal movements of the heavenly bodies is in place did the demiurge create time and appoint the planets to be the keepers of time (see 37c–39e).

The space between the fixed stars and planets is occupied by the four elements: fire, air, water, and earth. These are described as standing in a harmonious relation to each other by means of fine mathematical proportions. Furthermore, the elements are imagined in the form of a platonic solid, which according to Plato, are "the most beautiful bodies, dissimilar to one another, but capable in part of being produced out of one another by means of dissolution" (53e). The five platonic solids constitute the only perfectly symmetrical three-dimensional forms arranged in the use of only one figure. In *Timaeus*, Plato argues that the four elements, as the smallest parts of the cosmos, are describable as unique figures that change internally. Because three of the solids are composed of triangles, simpler forms can be made into the most complex forms. Fire, which is the most heavenly and unstable element, is given the form of a tetrahedron—a pyramid-like form of four triangles. Air is identified with the octahedron, which consists of eight triangles that form a spherical double pyramid. The elementary form of water is an icosahedron that consists of 20 triangles. Thus, two fire elements and one element of air become one element of water. Earth, the most stable and corporeal element, is given the form of a cube that consists of six squares. The fifth platonic solid is the dodecahedron, which consists of 12 regular pentagons and resembles a sphere. According to Plato, "god used it up for

the decoration of the universe" (55c). This strange passage is often interpreted as Plato's concept of the dodecahedron as the canvas on which the constellations of the stars are depicted (see Gregory 2001: 43).

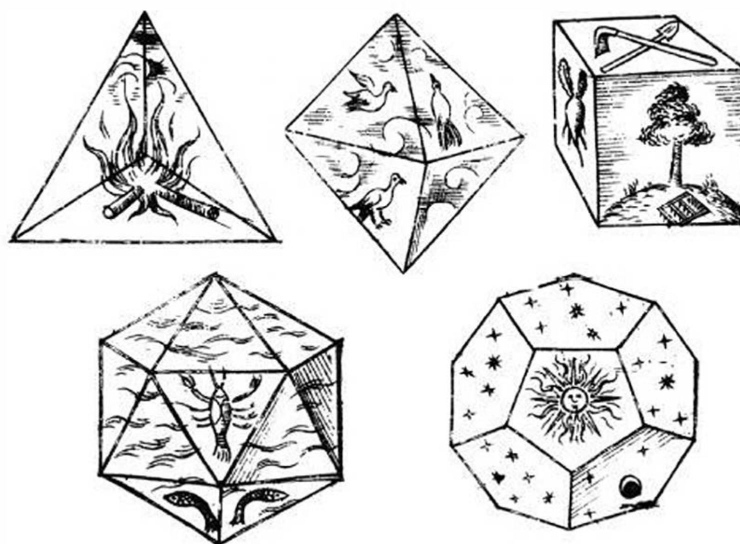

Figure 1: Illustration by Johannes Kepler of the five Platonic solids and the 4 elements as well as the cosmic sphere from the book *Harmonices Mundi*, 1619

Plato shows the human ability to grasp and gives a likely account of the creation of the cosmos that is dependent on mathematical insight. As mortal humans, to appreciate the beauty of the cosmos, we need mathematics, which not only gives us insights into the workings of the cosmos but helps us gain its equanimity in our minds. By contemplating the cosmos, which is the demiurge's creation, we imitate the "revolutions of reason in the heaven and use them for the revolving of the reasoning that is within us, these being akin to those, the perturbable to the imperturbable" so that "through learning and sharing in calculations which are correct by their nature, by imitation of the absolutely unvarying revolutions of the god [cosmos] we might stabilize the variable revolutions within ourselves" (47b–c). The detection of harmonious forms in the cosmos is closely affiliated with mathematical forms and with the individual's peace of mind. Therefore, the pursuit of mathematical knowledge as well as the pursuit of beauty advances serenity. By this means, the ascription of beauty to mathematical forms and the cosmos is by analogy the ascription of beauty to the perpetual forms of nature and our imitation of them in art.

The demiurge created the cosmos as "a living creature endowed with soul and reason" (30c) and imbued it with the heavenly bodies, the four elements, and the gods. After these creations, the demiurge requested the gods to populate this most beautiful and harmonious world with living beings. As beings created by the demiurge, the gods can only be torn apart by the demiurge itself. However, their creations are finite and mortal beings (see 41c–b). Thus, the frailty and fallibility of humans, animals, and plants are due to the gods rather than the demiurge as a divine craftsman.

Human and Divine Technê and the Creative Process

There is a sense in which the job of the divine craftsman does not differ from that of any other craftsman. The demiurge has to act on a material, and the material must be receptive to the model in order to be made into an image (*eikon*) of the model (*paradeigma*). The idea that the world is a product of design has enormous consequences for the relationships among mathematics, design, and art. It implies that human craftmanship can attain perfection in forming matter analogous to the divinely created cosmos. Even though it is obvious that humans are less perfect in all their doings, they may strive to become good by imitating the beautiful creation of the demiurge. We come closest to intellectually understanding the perfect forms of the cosmos by way of mathematics, especially geometry. The human understanding of geometry commences with the bodily practice of drawing and constructing geometrical figures and images. Intellectual knowledge thus emerges from this embodied practice. If we can combine mathematical comprehension with craftmanship, we can create sensuous forms, such as buildings, as imitations of the divine craftsman. We can by analogy become craftsmen who create harmonious forms that will be deemed beautiful if they are akin to the divine bodies created by the demiurge. In the Greek understanding of the human activity of creating objects, human craftsmanship is an imitation of the created cosmos, and thus its beauty is measured by mathematical and natural forms.

According to Aristotle, craftsmanship, not the craftsman, matters. Therefore, he directs attention to the *technê* of craftsmanship and to the process of creation rather than the individual creator. One reason for Aristotle's shift in focus from the agent to the process is his overall critique of Plato's cosmology. According to Aristotle (see *Physics* 251b), the ideas of the beginning of the cosmos as the demiurge's creation and the later creation of time are nonsensical. In Aristotle's view, the cosmos was eternal, and he envisioned it in its totality as an unmoved mover that was perfectly beautiful and indivisible and that contemplated nothing but perfect contemplation (see *Metaphysics* XII, 1072a). Thus, human craftsmen and their creations cannot be understood as analogous to the divine craftsman. Aristotle understood the process of creation as one in which the art of building (the *technê*) was the moving or efficient cause of a house, which resides in the builder (see *Physics* III. 3, 195b). The person who creates new objects as a craftsman is also a practitioner of a certain craftsmanship or *technê*. Hence, form resides in *technai*, such as architecture, painting, carpeting, and so on, which is responsible for its own realization; the medium is the person. Moreover, to become a medium for the realization of form, the craftsman must practice his craft. Thus, Aristotle focuses on practice, which is bodily training.

Plato and Aristotle agree that humans create objects of beauty by imitating the inherent structure of the intelligible cosmos. In Plato's view, we imitate the demiurge; in Aristotle's view, we become media for the process of forming the cosmos. Thus, in the Greek conception of creation—processes of designing and creating art works—individual humans participate in the act of forming by bringing the right *technê* into play. In human creation, it is vital that it takes place in a sensuous environment and involves forming sensuous images that allow intelligible forms to emerge. The sensible and intelligible are deeply intertwined, and there is no access to the intelligible realm of forms without the embodied creation of the sensuous.

As an underlying and defining structure, mathematics enables us to envision how the design product or the art work participates in the much larger world of mathematics and thereby carries connotations to other fields of significance. Mathematics is essential in understanding the close connection between beauty and intellectual experience. The divine heavenly bodies are archetypes of beauty, and any human comprehension of the workings of the cosmos is through

mathematics. Thus, mathematics can be viewed as the science that explains beautiful forms in a language that humans can learn. Understanding the mathematical explanation of the conic sections entails both intellectual pleasure and the possibility of being able to create objects that are approximations of these forms. The interdependence between mathematical knowledge and craftsmanship in designing and creating objects emerges. However, according to Aristotle, not only the intellectual endeavors of the mathematician or the mathematically trained craftsman foster intellectual pleasure, but also the connection between art and intellectual comprehension concerns all types of knowledge. Aristotle noted in his *Poetics*, “to be learning something is the greatest of pleasures not only to the philosopher but also to the rest of mankind” (1448b: 13–15).

According to Aristotle, if a product of design or an artwork helps us learn something about the world, it will give rise to intellectual pleasure. If a crafted object alludes to a mathematical structure, the viewer has direct access to the intellectual pleasure of grasping this structure. Aristotle viewed “imitation, … sense of harmony and rhythm” (1448b: 20) as natural to humans and thereby also something in which we instinctively find delight. From antique Greece throughout the Middle Ages and the Renaissance, cosmology implied a harmonious relationship between the cosmos and humans. This conception enabled humans to grasp cosmic harmony and create beauty in human designs using imitation, proportion, or rhythm in a manner that was analogous to the order of cosmos. Its metaphysical and epistemic foundations were the geocentric worldview. Thus, in the early modern period, with the appearance of the heliocentric world view and its mechanical description of the infinite universe, the role of beauty and creation in art and design shifted, as the analogous relationship between the human creator and the divine craftsman lost its metaphysical foundation.

A Modern Reformulation of Beauty: Immanuel Kant

The idea of a certain intellectual pleasure connected to the experience of beauty has a long history, but it was given its modern formulation by Immanuel Kant in the *Critique of Judgement* (1790). In aesthetic judgements, Kant argues that we experience intellectual pleasure as the subjective counterpart to the experience of an object that we deem beautiful. For example, the sensuous experience of *this rose* gives rise to a harmonious play between the power of judgement and the understanding (see §8 of *Critique of Judgement*, AA V: 215). The understanding suggests different concepts to capture what makes the rose beautiful, while the power of judgement insists that these concepts are inadequate: there is something more in the beauty of the rose than can be grasped by concepts and understanding.

Less often recognized in aesthetic discussions of the *Critique of Judgement* is that in the *Introduction* Kant claims that this feeling of intellectual pleasure also accompanies our discovery of order in nature. Thereby, within the framework of his own critical philosophy, Kant reformulates a modern version of the relationship between beauty and nature formulated by Plato. According to Timaeus, “all that is good is beautiful and the beautiful is not void of due measure” (*Timaeus* 887c). From the modern metaphysical and epistemic perspective, there can be no ontological relation between the good, the beautiful, and mathematical proportionality. However, Kant offers a perspective on reflective judgement, which enables us to consider the relationship between our epistemic functions and our search for patterns in the sensible phenomena. He speaks of a *technique of nature* (see *Critique of Judgement*, AA V: 216) that guides us in comprehending a subject to apprehend a unified conception of nature. The understanding of sensuous experience as guided by laws, which was the concern of his First Critique, Kant now argues, explained only how we acquire knowledge of singular experiences. The conceptualization of sensuous

experience that arises when the understanding applies concepts to the empirical sensations of intuition cannot explain *why* and *how* we grasp the various different empirical laws of nature as a united and ordered whole. It is, declares Kant in the Introduction to the Third Critique, only through the workings of the reflective power of judgement that we impose a unity on nature, as a feeling of pleasure is attached to the concept of purposiveness in nature (see *Critique of Judgement*, AA V: 186-188). The reflective power of judgement proposes the unification of the singular laws into a purposeful whole, which exceeds the determining judgements that guide the understanding. This understanding can help us apprehend individual natural laws. However, these empirically heterogenous laws can be united under a principle that is not empirical, which is a result of reflective judgement and hence gives rise to the intellectual feeling of pleasure. Kant asserts that unification under a non-empirical principle is incidental; there is nothing in the understanding or in nature that necessitates such ordering. When we judge that nature is an ordered whole, we are solely justified in arguing that we experience nature *as if* it was ordered. We do not have access to any metaphysical or ontological resources in our attempts to understand nature, which enables us to claim that nature is ordered according to a harmonic structure that we can grasp. Nevertheless, we do comprehend nature as an ordered whole.

However, we no longer feel any special pleasure in the comprehensibility of nature even though humanity must have felt such a pleasure in the distant past. This leads Kant to put forward the astonishing claim that if reflective judgement was not used to search for connections between clusters of empirical knowledge, "even the most ordinary experience would not be possible" (*Critique of Judgement*, AA V: 187). Because reflective judgement has an important but undetected role in the comprehension of nature, the feeling of pleasure that accompanies the success of proposing principles of order and unity in our knowledge of nature has become so interwoven with knowledge that it is no longer deliberately noted.

Within the framework of his critical philosophy, Kant develops a modern version of the Aristotelian idea that humans acquire an intellectual feeling of pleasure from comprehending what is empirically given as a system of connections, which mirrors the Greek idea that the closest we can come to grasping the cosmos is through our mathematical descriptions of the movements of the heavenly bodies. However, Kant's understanding of nature is no longer the finite cosmos of the Greeks but an infinite universe. The mathematization of nature in the natural sciences, as founded by Kepler and Galileo in opposition to the cosmology of Greek philosophy and medieval Christianity, were developed from specific empirical laws to unite them under general principles. The movement from the concepts of the understanding to the reflective principles of the power of judgement held the promise of attaining the conception of a unified natural world, but we do not know how far our endeavor reaches. Kant seems to think that if we devise with new principles that unite empirical laws into a whole, they will be accompanied by an intellectual feeling of pleasure that is similar in kind to the feeling of pleasure that accompanies the experience of beauty. Hence, we acquire from Kant's critical philosophy the path for a modern interpretation of why the application of mathematical insights to design processes and artworks gives rise to a distinctive experience of beauty.

In parallel reflective judgements, nature is observed *as if* it is ordered according to a *technique of nature* and view objects *as if* they are beautiful, which introduces within a modern framework a new interpretation of the interrelationship between nature and beauty. Although aesthetic judgements do not single out ontological traits of beauty, and even though the technique of nature is only a perspective of reflective judgement, these judgements give rise to a feeling of pleasure, which encourages us to view nature as an ordered whole and to judge our own

creations as analogous. Furthermore, just as geometrical insight has to start with the sensuous embodied practice of drawing and constructing geometrical images and figures, the content of the reflective power of judgement is the singular sensuous experience. We cannot develop general claims about what is beautiful or about which experiences should give rise to a feeling of intellectual pleasure. Reflective judgement arises only from our bodily interactions with the sensuous environment.

Based on this modern formulation of a purely functional relationship between intellectual insights, beauty, and the modern mathematical natural sciences, we now focus on two examples of the application of mathematics in design and art.

Part Two: Mathematical Beauty in Modern Design and Art

In modernity, the analogous relationship between a created and intelligible cosmos and the objects created by humans has been reduced to a myth. However, as we have seen in Kant's foundation of modern aesthetics, the concept of beauty is connected to reflective judgements of our environment *as if* it is conducive to human comprehension. The functional relationship between our judgements of beauty, our comprehension of nature as ordered, and our feeling of intellectual pleasure enlightens our understanding of modern craftsmanship and its relationship to mathematics. In the following, I start by considering Piet Hein's practice of design by revealing that human creation can recreate order in environments that are shaped by humans. The poetry of Inger Christensen, in contrast, indicates that the human reordering of nature by means of scientific and technical developments confronts humans with our civilizational limits.

Creation of a New Form: Piet Hein and the Super-Ellipse

When the city center of Stockholm was being modernized in the late 1950s, the city planners encountered a problem that at first seemed unsolvable. They intended to remodel *Sergels torg*, one of the main squares of the city, so that it would both accommodate the increased car traffic and preserve it as a beautiful space and meeting place for pedestrians in the city. *Sergels torg* is rectangular, and the city planners envisioned a makeover that would allow for a plaza with fountains within a traffic circle. The form of the plaza would repeat the shape of the peripheral road with shops and restaurants on the outskirts. The problem was how to design the road and the interior plaza. A simple circle would waste too much space, the curves in an ellipse would be too narrow for the traffic to move smoothly, and a rectangle would not add novelty to the newly designed square. The city planners tried a modified ellipse with wider curves. However, although this shape functioned as road, it looked awkward when it was repeated in the interior plaza. The chief architect of the renovation project knew Piet Hein from their student days and decided to phone him to ask for help.

As the story goes, Hein immediately had a suggestion for the solution: "What we want," he told the architect, "is a curve that mediates between the circle and the square, between the ellipse and the rectangle. I think a curve with the same equation as an ellipse but with an exponent of two and a half would do it" (Hicks 1966: 56). With the aid of the calculation powers of computers in those days, Hein produced a drawing of the curve with the exponent of two and a half, which fit the specific rectangle of the square. This curve could be increased and decreased without losing its original shape, and thus the inner plaza could be fitted harmoniously into the traffic circle.

Figure 2: Sergels torg with super-elliptical round-about and interior plazza. Stockholm early 1960'ies.

By thinking about the problem as a geometrical challenge, Hein invented a new shape, the super-ellipse, which could be increased and decreased in size to fit the different areas of the rectangular square. Hein pointed out that its superiority lay in its "unity, like a piece of music" (Hicks 1966: 56). The city planners' freely constructed modified ellipse was doomed as a solution to the challenge because it "isn't fixed, isn't definite like a circle or square. You don't know what it is. It isn't esthetically satisfying" (Hicks 1966: 66). Hein stressed that a form drawn freehand would not be aesthetically appealing because it would lack definiteness. This argument shows that he adhered to the Greek ideal that the symmetry and definiteness of mathematical forms are more beautiful than the contingency of a form created using only the human eye. The proportions and the precise calculation of the super-ellipse are appealing not only to the human eye but also to the human intellect. Designed in the curves of the super-ellipse, the road enabled both people and cars to move more freely than they would have on a road in the shape of an ellipse or a rectangle. Thus, Hein's design was not merely an intellectual achievement but a practical invention highlighting that the practical use of the design object is central to good design processes. The obvious but necessary restriction in all design is that it must fulfill its practical purpose. At *Sergels torg*, Hein's super-ellipse enables humans to drive cars and enjoy café life in the same square. Good design always starts by considering the embodied human being and the humanly shaped environment.

The mathematical formula of the super-ellipse has been known at least since the French mathematician Gabriel Lamé described it in 1818 (see Solomon 1999: 48 for a concise description of the mathematical properties of Laméian ellipsoidal harmonics). The super-ellipse is a special instance of the theory of ellipsoidal harmonics, which Lamé developed to describe the equation by which the curve of an ellipse is transformed.[2] The curve of an ordinary ellipse becomes increasingly similar to the square if the value of n becomes greater than 2. It will become increasingly pointed and star-like when the values of n are less than 2. Hein knew about these mathematical descriptions of transformations of the ellipse, and, as a designer, he drew on his mathematical knowledge to create an aesthetically satisfying solution to the challenge posed by *Sergels torg*. The first to calculate the form *and* to bring it into being as a physical object, Hein

2 An ordinary ellipse is described by the equation $(x/a)^2 + (y/b)^2 = 1$. If a = b the ellipse becomes an ordinary circle. Ellipsoidal harmony, as an equation for describing all variations of an ellipsoidal form, is defined as: $|x/a|^n + |y/b|^n = 1$. The super-ellipse has the exponent of n = 2.5.

called his favorite exemplar of ellipsoidal harmonics the super-ellipse. Its curve is close to the rounding of an ordinary ellipse, but it is also squared when the value of n is 2.5.

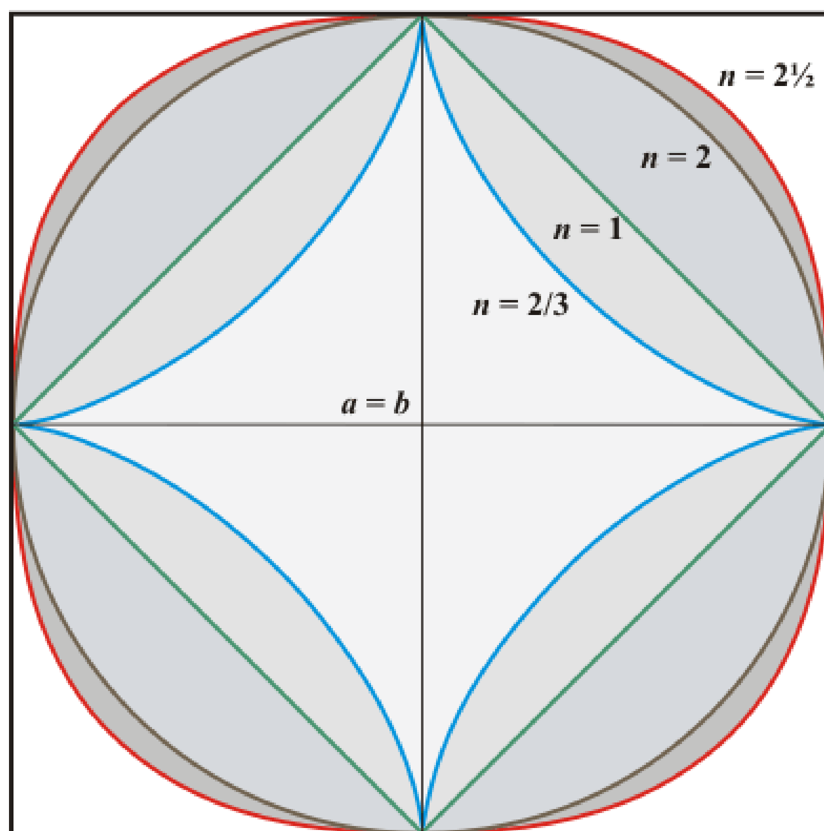

Figure 3: Different curves of an ellipse with one centrum. n = 2 is the ordinary circle. For any value of n smaller than 2 the figure becomes more and more pointed. n = 2,5 displays the rounding of Hein's super-ellipse. Values of n larger than 2 makes the figure moreand more square.

Because the super-ellipse mediates between the square and the circle, it can be used to solve the human problem of directing traffic smoothly and harmoniously in a rectangular square. Hein's drawing of a new path for traffic at *Sergels torg* is, in my opinion, an example of how *technê* works through the individual. The combination of Hein's skills as a designer and mathematician enabled him to envision a new solution. Hein has described the creative process of design as mystical, which resembles Aristotle's insistence that *technê* works through the individual. He emphasizes that "you must know the field … but *thinking* you know too much can be a hindrance to creativity. I [Hein] work according to a principle of being unwise. It helps to be unwise. But I had to develop sheer stupidity into unwisdom" (Hicks 1966: 66). The insistence on unwisdom sounds strikingly familiar to Socrates' declaration that he knew nothing. For Hein as for Socrates, the important thing is to be open to new solutions and new knowledge rather than dogmatically adhere to human views. In the process of design, the move from "sheer stupidity" to "unwisdom" develops through continuous engagement with practice. It is by forming objects, drawing images of mathematical figures, and improving these practical skills that the designer can be open to yet unknown solutions.

According to Hein and the Greek tradition of *technê*, the creative process and the invention of beauty are nurtured when we let the knowledge of the field play in an open mind. As I

have already pointed out, the mathematics of the super-ellipse was well-known. However, the application of this mathematical form as the most harmonious and elegant way to manage the traffic at the square was possible because Hein was able to think as both a designer and a mathematician. The Aristotelean idea that *technê* speaks through the designer, who in this case was Piet Hein, sheds light on how he thought of the super-ellipse. Because Hein understood ellipsoidal harmonics, he could invent the new physical form of the super-ellipse. Because the unity of a mathematical form makes it possible to enhance or decrease its size, the harmony of the road at *Sergels torg* could be reiterated in harmonious forms within the roundabout, thus generating harmony and beauty in the plan of the square.

The process of designing *Sergels torg* was based on the intellectual comprehension of form as a solution to a concrete and contingently shaped human urban space. According to Hein, the solution that he envisioned for *Sergels torg* addressed a problem that was specific to modernity, which mediated between "two tendencies" of civilization: "one toward straight lines and rectangular patterns and one toward circular lines" (*Life*, 66). These tendencies are humanly produced, and "there are reasons, mechanical and psychological, for both tendencies. Things made with straight lines fit well together and save space. And we can move easily—physically or mentally—around things made with round lines. But we are in a straitjacket, having to accept one or the other, when often some intermediate form would be better" (*Life*, 66). Thus, as a form mediating between the circle and the square, the super-ellipse is a human solution to the "lines [drawn by man] which he himself then stumbles over" (*Life*, 66).

After he designed *Sergels torg* in the form of the super-ellipse, Hein created other objects using the same form. The best known of his designs is the super-ellipse table and the super-egg, which is a three-dimensional, solid super-ellipse. One of the most beautiful features of the super-ellipse table is that it has no end. The rounding of the corners is not done simply by cutting the sharp edges. Hein's creation of tables in a super-ellipse form is an example of how a new form is created in the design process, one that is not found in nature, but has nature-like features because it is mathematically well-described. It is an improvement of the ellipse. The super-egg form is an improved shape of a bird's egg. The super-egg can be stood erect, and its shape is perfectly symmetrical and harmonious. Hence, Hein has imitated nature by employing mathematical figures to create forms that exceed natural forms.

In using the example of Piet Hein's use of the super-ellipse, I have demonstrated that the design process can be helped by applying geometrical forms that surpass the forms of nature. We do not encounter super-eggs in nature; the orbits of the planets are not super-elliptical. Instead, design objects are mediations between the two archetypical directions in human orientation: straight lines and circular lines. Hein's invention of the super-ellipse is a modern response to the needs that arise in the course of fitting human-designed objects to a more or less unified whole. We need cars and desire to drive smoothly in the city, and we have square rooms in most houses but wish to fit many people at a table. The super-ellipse is an efficient shape for our roundabouts and tables. Furthermore, as a definite mathematical form, the super-ellipse satisfies our intellect, thereby providing intellectual beauty in addition to its immediately pleasing form. The artificial environments in human culture require the excellent designer to possess a *technê* that will be able to imitate the human understanding of geometrical forms in nature in order to create design objects with new geometrical properties.

As a bridge to the next example, Inger Christensen, it is fitting to point out that the dimensions of all Piet Hein's super-ellipse tables are approximations of the irrational number $\Phi = 1.618034\ldots$, which is also known as the golden ratio. Thus, the ideal mathematical proportion is

fundamental in Hein's designs. Throughout our history, Φ has given rise to various more or less mystical interpretations. Some have argued that Φ not only proves the mathematical structure of the universe but also that a universe with such unity and order under the surface must have been designed by God—the great demiurge. This is, however, not what should interest us here.

The Play Between the Finite and the Infinite: Inger Christensen

In turning to Inger Christensen, I direct the focus away from design and toward art, specifically poetry. I have already mentioned Aristotle's *Poetics*. In the treatise, Aristotle puts forward the rather questionable theses that all art is imitation or *mimesis*. Since then, critics have asked how can a poem be viewed as an imitation? Does the love poem imitate the feelings of the lover? If so, in what sense? Much of the criticism against imitation as the central and defining feature of art is reasonable. However, Inger Christensen's collection of poems, *Alphabet* (1981), is an example of how the artistic play with the theory of imitation could be used to create intelligent and evocative art. Of course, the collection could be interpreted in many ways. However, in accordance with my theme, which is the mathematical structures in art and nature, I interpret the poems as a playful interaction with the ideal of mimesis.

Christensen's collection of poems is based on a stringent system, which is the imitation of the Fibonacci sequence correlated with the order of letters in the alphabet. The Fibonacci sequence is a sequence of numbers in which each successive number in the sequence is obtained by adding the two previous numbers: 1 + 1 = 2, 2 + 1 = 3, 2 + 3 = 5, 3 + 5 = 8, and so on. The ensuing sequence of numbers has the characteristic that the ratio between any two succeeding numbers is an approximation of Φ, which is defined as $1+ \sqrt{5}/2 = 1.618034$. The Fibonacci sequence is an arithmetical expression of the golden ratio. For example, $2+3/3 = 1,666$. The larger the Fibonacci numbers are, the closer the approximation to Φ; so, for example, the ratio between the 11th and 12th Fibonacci numbers is $144 + 233/233 = 1.618026$.

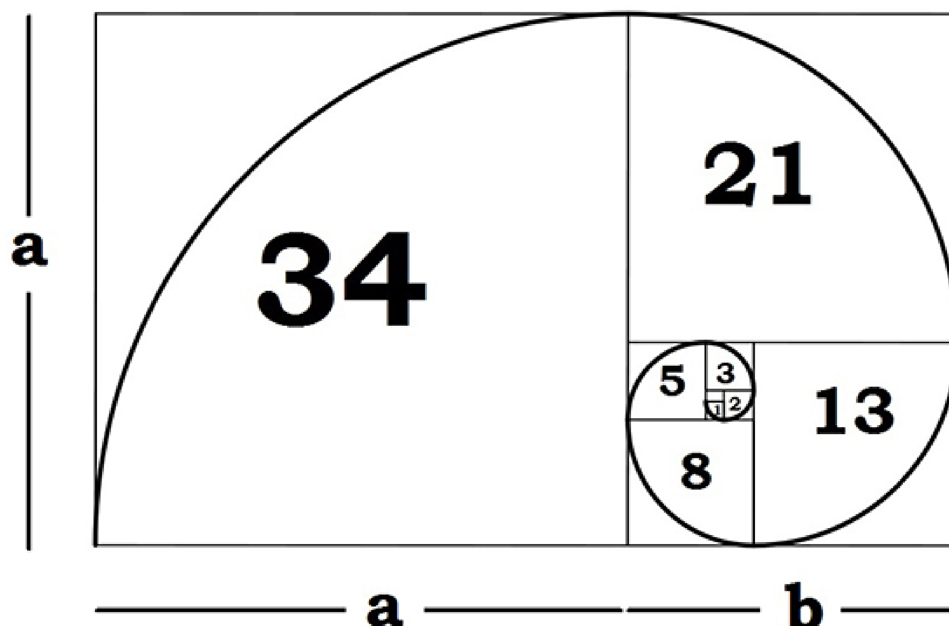

Figure 4: The illustration displays how the proportions of the golden rectangle consists of Fibonacci numbers. a and b being two succeding Fibonaccis numbers.

The golden ratio or golden section expresses the harmonious division of space. It was used by Plato in his famous divided line analogy in the fifth book of the Republic (509d-511e – see Fossa & Erickson 2005) as an analogy of the different kinds of knowledge and the route the individual has to undergo to develop the ability to recognize in mere meaning (*doxa*) the eternal and divine knowledge (*episteme* and *nous*). In Plato's use of the golden ratio, we see the ideal of emergent qualities arising from mathematical proportion as well as the acute interrelationship between sensible and intelligible understandings of this proportion. In the analogy of the divided line, Plato suggested that eternal knowledge reveals to the human intellect that a mathematical structure underlies the phenomena of the world. Plato thus read apparently non-mathematical contexts as though their inherent deep and hidden truth were written in mathematical language (Fossa & Ericson 2005: 76).

The golden ratio gives us an immediate view of a harmonious relationship within a form, whereas the exponential development of the Fibonacci sequence points to vast and relentless growth. Hence, the Fibonacci sequence does not depict a unified form but an eerie, unified formulation of infinite expansion. In *Alphabet*, Inger Christensen exploits the intricate relationship between the golden ratio, which fosters the beauty of a closed form by means of mathematical proportions, and the open and explosive development of the Fibonacci sequence of numbers, which expands exponentially and quickly develops into numbers that are too large to be comprehended in images.

Because the Fibonacci sequence develops exponentially, the 28th number in the sequence is 832,040. In the Fibonacci sequence, it is impossible to write poems with succeeding numbers of lines following the rapidly increasing numbers and for the reader to comprehend a collection of 28 poems in which each succeeding poem has the length of the next number in the Fibonacci sequence. The large numbers are too large for us to view in sensible images, and a poem of 832,040 lines is immensely difficult to read as a unified whole. In *Alphabet*, Christensen does not follow exactly the Fibonacci sequence but plays with the effect of conjoining the closed and contingent system of the order of letters in the alphabet with the open system of the exponentially developing Fibonacci sequence, the form of which is endowed with mathematic necessity.

The Danish alphabet has 28 letters. Each poem in *Alphabet* is connected to a letter by the first sentence in each poem. The first sentence announces the existence of a natural object by correlating the starting letter with its place in the alphabet. For example, the third poem starts with the line, "The cicadas exist"; c is the third letter in the alphabet. The collection of poems is thus structured by two formally structuring principles: the order of letters in the alphabet and the exponential increase of the numbers in the Fibonacci sequence. The beginning letter of each poem follows the alphabet, and the length of the number of lines in each poem develops according to the Fibonacci sequence. Depending on which letter in the alphabet has been reached, the poem has as many lines as the correlated Fibonacci number has. The first poem is simply a reiteration of its first and only line: "Apricot trees exist, apricot trees exit." It is followed by the next poem, which has two lines, and thereby the Fibonacci sequence is begun:

Bracken exists; and blackberries, blackberries;
bromine exists; and hydrogen, hydrogen

The imitation of the Fibonacci sequence as an arithmetical expression of the golden ratio is inhibited because it develops so quickly into large numbers that the finite numbers of letters in the alphabet cannot be represented. Thus, there is a mismatch between the finite and the infinite,

which is similar to the mismatch between the sum of letters represented by a Fibonaccian number and the infinity of meanings created by language. Thus, imitation and ability to supersede nature, which Hein's designs exemplify, fall short in Christensen's poems. The failure to represent all letters in the alphabet in this collection of poems conveys artistic meaning. If Christensen had followed the Fibonacci sequence stringently, the last poem would relate to the Danish letter *å* and consist of 832,040 lines. Christensen stops at the letter *n*, which ought to be represented in a poem of 610 lines, instead stopping at line 377. The letter *n* is used in modern mathematical annotation as a space holder for any number. Thus, because the poem stops in the middle of *n*, it suggests that we may comprehend that the entire inventory of letters and things exist as space holders for other things, which might just as well exist but have not been mentioned in Christensen's *Alphabet*.

The poems begin by naming a natural object based on the first letter of the alphabet. One way in which Christensen plays with the idea of mimesis is by imitating the human endeavor to name and list all things in the world. Christensen has called this list a "sloppy dictionary" (Christensen in Holm 2016: 138). By naming things, we move from the sensuous practical engagement with things to an intellectual and theoretical comprehension of them, which is potentially detached from any bodily interaction with the world. The failure to develop 28 poems following the Fibonacci sequence indirectly hints that the endeavor to name and list all things is in vain. Furthermore, Christensen not only lists ordinary and friendly natural objects that exist but also merges this image of the natural world with negative phenomena such as death, pollution, and killers. The relation between words indicates the human use of nature to create weapons, such as the atom bomb. Beneath the surface lurks catastrophe that is our own creation. The alarming possibility that humanity creates disasters by the scientific manipulation of nature gives new meaning to the sudden ending of the poem. Perhaps the catastrophe has already taken place. The final lines of poem 14, which commences with the statement, "nights exist," ends with a vision of children seeking shelter in a cave from what might be an exploding atom bomb:

> *but they are not children*
> *nobody carries them anymore*

In the uncanny and frightening ending of Christensen's collection of poems, children lose their childhood because they are deserted or dead. The collection simply breaks off in a manner that is analogous to death cruelly ending a life. The significance of the application of the Fibonacci sequence as the structure of *Alphabet* can be seen as an imitation of the growth as well as the sudden termination of life. Furthermore, it can be read as an imitation of the fission caused by an atom bomb. Because the letters in the alphabet are a closed and contingent unity, humans can produce names and theories about anything in the world. Similarly, we have produced the means of our own nihilation through modern science and technology. Thus, in Christensen's poems, the usual positive connotations related to the symmetry of the golden ratio become an alarming and uncomfortable mirror of the human demiurge. That is, our quest not only to comprehend but also to transform the natural order seems on one hand to lead to failure because of the infinity of possibilities that Christensen represents in the Fibonacci sequence as a structure representing the finite alphabet. On the other hand, we are also threatened by failure because we have produced artificial objects that can destroy us as well as the planet.

The Beauty of Mathematical Forms in Modern Art: An Outline of a Conclusion

In designing objects, Piet Hein employed mathematics to augment the beauty of our world, and he invented a form to address the challenges posed by modern urban landscapes. In *Alphabet*, Inger Christensen applied the classical trope of mathematical beauty—the golden ratio—and the Fibonacci sequence to represent the potentially uncanny and alarming effects of human endeavors to design and redesign our natural world. Hein's use of mathematics is paradigmatic of the concept of beauty as a finite form, and his manner of creating designs for the modern world adheres to the ideal of reordering the potential chaotic modernity in a neatly finite human-created cosmos. Christensen's play with mathematics has a critical connotation, the subtext of which questions the sanity and serenity of our intellectual quest for understanding and controlling nature. The ability to theoretically model the natural world entails the possibility of transforming the natural order, thus enabling humanity to become a powerful and potentially destructive demiurge. In *Alphabet*, Christensen displays this new powerful human position, which threatens to obliterate our physical existence.

The loss of belief in a finite and eternal cosmos has led to difficult questions about how humans operate in potential infinity. The beauty of the finite cosmos of the Greeks has vanished, but the language of mathematical beauty continues to suggest itself as a reference that can be used to construct novel forms of harmony from the chaotic modern world or as a mimetic approach to articulating the predicaments of our intellectual achievements. Hein's designs exemplify that the practical engagement with mathematics and specific problems of design can reshape the natural world into a pleasing artificial environment that fits both the human body and technological invention. On one hand, Hein augments nature and the space of human movement. Christensen, on the other hand, reveals that human-augmented nature and the human desire to control it by means of science and technology pose potential threats to humankind. She thereby exposes the fragility of the human body and the natural environment as well as the ambiguity of the persistent human desire to control nature.

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How can there be Beauty in Participatory Art?

Falk Heinrich

Abstract: *The article proposes a notion of beauty that is relevant to participatory art and culture. The article emphasizes the experiential aspect of the concept of beauty, identifying this part as enacted intensity, in which all heterogeneous constituents create moments of experienced unity. Unity is not understood as static phenomena but as a cycle of intensity and release that relate to (inter)action and understanding. The article elaborates an experiential unity of beauty based on Deleuze and Gadamer. Höller's* Test Site *and Seghal's* This Success/This Failure *serve as concrete works of art to test, validate, and specify the proposed theory.*

Keywords: *Beauty, Participatory Art, Intensity, Experience, Performance.*

Introduction: Beauty and beautiful experiences

This article reflects on the notion of beauty as it is relevant to participatory art and culture. For participatory artworks the audience is an intrinsic part of the work because they are assigned a more or less well-defined function or agential role. The participant has multiple points of access to a participatory work of art: as an observer of others' participation, as an actor or agent within and part of the work, and as a retrospective interpreter that relives the experience of participation.[1]

Philosophically, beauty is the aesthetic judgment of an object. My premise, however, is that the notion of beauty undergoes constant transformation. My claim is that in participatory art (as in experience culture in general), the concept of beauty has morphed into beautiful experiences. This linguistic change seems minor and without semantic importance; however, a close examination reveals differently, as I intend to show. I will also differentiate between beautiful experiences and aesthetic experiences, showing that beautiful experiences are based on a judgment of pleasure that contributes to the overall aesthetic experience. However, not all aesthetic experiences include the experience of beauty.

1 The term participatory art is very broad and contains various subgenres and sub-definitions. The concept of participation demands that a person or persons (excluding professional performers) are (an) agential part(s) of a work of art, such that a participatory work of art is never finalized in a distinct form but is completed by each participation. Participants are given poietic agency because the participants' actions within the framework of a participatory work of art model each instantiation of the work. In contrast to the finalized work of art, a work of participatory art is foremost a framework for participant agency. However, participation is an ambiguous term because it depends on the perspective and focus. For example, the psychological participation of onlookers and audiences involves not only that the onlooker/reader/audience projects him or herself into the presented occurrences but also the projection has physical implications. Another example is art's social and societal aspects, which was elaborated by Rancière. Here, the audience participation in art is a societal phenomenon. I want to limit my research to participatory works of art that include the participants' actions as artistic material.

In the twentieth century, art and art theory attempted to convince us that the concept of beauty had outplayed its role. Beauty was considered an aesthetic objective that was mainly relevant to bourgeois art. Modern art, particularly various avant-garde movements, rejected beauty altogether and focused on other dimensions, such as material, perceptual, political, societal, and conceptual aspects (e.g., Danto, 2003; Nehemas, 2007). Beauty seemed to have left the domain of art and found a new habitat in the experience economy of late-stage capitalism (e.g., the beauty industry, architecture, services, design including experience design, food aesthetics, and self-development). Here, the concept of experience is linked to active engagement, agency and interaction.

However, art has become part of the discourse of experience in both economic and epistemological senses. The epistemological sense has been elaborated since at least Dewey's *Art as Experience* (1980). Nevertheless, experiences are not merely the bases for knowledge ascription and personal growth. Experiences have become goods that are bought and consumed as leisure activities. For example, museums and their exhibitions have a decisive experiential dimension. Solo exhibitions of one artist have often been superseded by thematic, historic, or even associative logics of curation that offers the visitor an experiential journey. Today, curating entails designing for audience experiences that exhibit additional dimensions that are intended to be novel and surprising.

Furthermore, audience development programs and activities offer experiences in addition to and different from exhibited works of art. Regarding economics, art experiences have become the products and goods of art institutions that have high visitor numbers. In this respect, the museum shop is also important, not only as an additional source of income but also as a place where audiences exchange elusive experiences with material objects.

Agential participation in all kinds of events, entertainment and art has become a major societal and personal value. The proliferation of gaming, co-design, participatory design, participatory art, and the experience economy has changed our aesthetic valuation, our epistemic discourse, and thus, as I claim, our usage of the notion of beauty. Participatory art can also be seen in this light. Its experiential potential lies in the inclusion of the audience and its transformation into agential parts of art pieces that offer various modes of encounters, such as conceptual realization, communicative encounters, and bodily affective dimensions (including propriosensory ones) all of which offer experiences.

It seems that beauty has overtaken art from the inside. In this process, I claim that the notion of beauty has changed, or rather, a new facet of it has emerged. That is not to say that older concepts of beauty have ceased to exist but that a novel notion of beauty has surfaced, which considers the experiential dimension of participatory art. This claim is a hypothesis that might be dismissed as pure speculation without any referential or empirical validity. It seems to collide with the following: first, Plato's incremental notion from Eros to the recognition of eternal forms; second, both Kant's analysis of beauty as an aesthetic judgment of an object and Hume's heuristic notion; and third, mathematical notions of beauty that favor symmetry (which is the axiom of many empirical investigations). Thus, why is it important to describe a novel concept of beauty, when the world of academia and aesthetics seems to circle round Kant's (and others') understanding of pure representational beauty, where contemplation yields the pleasures of the purposeless interplay of cognitive and sensory faculties and where adherent beauty is aligned with moral qualities?

The field of definitional approaches to beauty is much bigger and much more complex than I presented. Beauty has been associated with diverse ideas and ideals. However, in modern

Western culture and its academic approaches, beauty is traditionally either derived or projected onto an object that is external to the human perceiver (e.g., Kant 2007, § 9). Beauty, which is a subjective judgment based on positive feelings such as pleasure and delight, seems to reify itself in an external object. In contrast, an experience, that is significant life events as compounds of "doing and undergoing" (Dewey 1980, p. 44), seems to be excluded as a potential object simply because many experiences cannot be projected onto an object outside the experiencing human. If this is so, participatory works of art cannot be experienced as beautiful because no experience, as defined by Dewey, can be beautiful. An 'objective' counterpart seems to be missing. According to this line of thought, an experience can be stimulating, exhilarating, soothing, and interesting, but not beautiful.

Etymologically, *beauty* stems from *deu, a proto-Indo-European root meaning "to do, perform; show favor, revere." (Harper 2019) Thus, the root of "beauty" entails action and performance. This definition does not undermine that perceiving and purposelessly judging are acts of showing favor, but it emphasizes that actions can be experienced as beautiful. Etymology always opens a field of potentiality. The sentiment of beauty can also be based on action whether as motor-imagery, as Starr has convincingly shown in her book *Feeling Beauty* (2015, p. 82) or as action in participatory art.

However, I want to accentuate that the mere performance of actions is not enough. A reifying dimension must be part of the experience of beauty. This dimension can be established by an enacted understanding of the underlying concept of the participatory work of art or, in the case of important life experience, the creation of *an* experience as a decisive and completed event in the Deweyan sense. I will return to that notion. Furthermore, there needs to be an evaluative dimension that connects the experience of actions to a play of understanding (in the Kantian sense). If this is the case, then the act of judgment and the judged act converge.

Nonetheless, we should not dispose of the existing elaborations of beauty but extract from them sub-concepts and notions that can be reformulated in light of the question about beautiful experiences in participatory art.

Carsten Höller, *Test Site*

My test case is Carsten Höller's work, *Test Site*. I have chosen this work because it seems remote from what we usually judge to be beautiful, which is the reason it is an effective test for my ongoing investigation of the oppressed or forgotten side of beauty. Höller's work consists of huge, glass-covered slides that wind like a corkscrew across several stories in the Tate Modern. The slides are made of metal and plexiglass. The mere sight of these slides indicates fast transportation downward, and might, simply by looking at them, elicit feelings of joyful expectation, nausea, and excitement as well as physiological arousal. Slides are sites of action. In addition to having a sculptural dimension, *Test Site* has an experiential one in which visitors are offered the possibility of sliding down.

Höller's slides were located in an art museum or in an art context. The institutions of art museums demand distinct behavioral and cognitive-discursive scripts (e.g., Schank & Abelson, 1977). The most important is aesthetic contemplation and judgment, which are based on taste, artistic expression, composition, and curatorial arrangement. Only recently has participation gradually become an artistic strategy in galleries and museums, adding new experiential dimensions to the existing ones. Every participatory artwork exhibited in a museum puts the visitor in a double position, in which agential participation is contrasted to aesthetic

contemplation.

Clearly, *Test Site* involves recipient participation in either direct interaction (actually sliding down) or indirect interaction (imagining sliding down). Participatory artworks are based on the incorporation of the recipients and/or their actions as a necessary and intrinsic part of the artifact. They are constituent parts of the artwork without which the work would not be complete. Hence, there are many instantiations of one artwork, and the work is completed many times in different variations. Each instantiation is different, depending on the participants' actions and their experiences of those actions as part of the work of art. Most importantly, a participatory piece entails multiple perspectives that are derived from the different types of participant action. Interaction creates one observational perspective; contemplative onlooking creates another kind. Participatory art relies on multiple privileged positions of experience in which both agential and reflective participation are demanded. How can such works be beautiful?

Tino Sehgal, This Success/This Failure

Perhaps one test is not enough. In 2007, Tino Sehgal exhibited the artwork *This Success/This Failure* for the first time. In 2018, the Museum of Contemporary Art in Aalborg, Kunsten bought this piece and thus gained the right to exhibit it. The artwork consists of instructions that are not written but communicated verbally to the museum leadership. The artwork instructs children to execute specific actions—namely, to play in a huge, empty, white room without any objects. They are instructed to ask visitors (mostly adults) to join in their play. They convey that they are the artwork, they say its title and the name of the artist. I joined and played with the children who were present. We mainly played tag, but we also talked about their "job" and when their turn was finished. What is beautiful about playing catch or tag in a museum space while being observed by other visitors (among them my teenage son)? Art-theoretical and art-historical analyses of Sehgal's works often focus on the ontological shift from the artwork as a material artifact to the reification of situations and actions as works that can be bought and exhibited as if they were objects. Certainly, Sehgal's work foregrounds the dominance of art-economics discourses that are tied to artworks as commodities through, for example, visitors' and attendants' involvement the artwork itself. However, situational involvement also yields different and specific kinds of experiences that are worth considering. The aim of this article is to convince the reader that *Test Site* and *This Success/This Failure* might entail beautiful experiences, which therefore might give rise to a notion of beauty that is relevant to participatory art.

Beautiful Experiences of Acts

In reflecting on beauty, one needs to start somewhere. I will start with the assumption that beauty entails a specific way of relating to and being in the world (i.e., the world is represented by distinct objects or artifacts), namely, as a pleasurably intensive way that seems to transcend the distinction between the subject and the world by occasioning a perceived unity. This starting point can be modified or even proved wrong. However, it is a valid starting point because this characteristic can be found in many treatises on beauty.[2] However, precisely what yields this specific self-transcending relation that varies across cultures and epistemic discourses and from person to person? How does the experience of participatory art relate to my presumption?

2 I claim that this is one of the few characteristics that many treatises and articles on aesthetics either point out or intrinsically posit. This can be expressed by notions such as love (Nehamas, 2007)) promise (Beyle, 1980), occurrence (Kirkeby, 2007), and recognition (Plato, 1998).

As previously defined, participatory art includes persons as agents in artistic occurrences that therefor also become social occurrences. Of interest here is the construction of these events or scenarios. On the one hand, they are fictional (in the sense of being overtly constructed and artistic). On the other hand, they are palpably real because they demand active, bodily participation. The experience of constructed and designed yet very real scenarios has become an artistic and aesthetic value not only within the artworld but also in the experience economy.

Höller's *Test Site* with its huge winding slides is such a scenario. An art space frames the metal slides, which otherwise could be seen as either transport constructions or huge playground devices. The installation of these slides yields various perspectives and thus various possibilities of experience and interpretation: it is a sculpture, a functional construction, a site of (playful) action—for adults as well as children—and a site for the observation of participating, sliding persons. Participation is based on a remarkably simple script (slide down assisted by museum staff). The experience both stands in contrast to and adds to the still-prevalent behavioral script of the museum as an institution that suggests the distancing, imaginative, and hermeneutical reception of artworks. The simple act of sliding adds a decisive bodily experiential dimension to the piece, thus unquestionably shaping the recipients' judgment of the artwork. After the sliding experience, the sculptural entity becomes a reminder or sign of concrete, physical experience: the feel of speed, the banging sound when my derriere and thighs slide over the joints of the different parts, the feeling of enclosure and outlook through the transparent top of the slides, the special feeling of being a child again, and so on.

Other participatory artworks do not have material components but construct a scenario of participation and interaction through explicit or implicit means, such as rules and instructions or the modification of the space by sound, light, and projection. Some use digital technology (e.g., Rokeby's *Very Nervous System*); others do not. Sehgal's *This Success/This Failure* involves neither digital technology nor physical objects. It consists of only actions. There is no object to which audience experiences could be attached. However, our memory needs such hooks, onto which remembered actions and feelings can be fixed. There is only the white room, its specific atmosphere, and the playing children can be seen as objects (indeed, I have forgotten how many there were and what they looked like; in my memory, they are generic schoolchildren). I remember the running and the touching when I was caught before reaching the base or when I caught a child. Our playing was on display, not only to the onlooking museum visitors but also to the room and the institutional setting itself. I was playing and at times watching myself playing, mixing different aspects of this experience, such as bodily actions, propriosensoric awareness, the atmosphere of the space, and the ongoing sensemaking process into one complex and ambiguous investigative field. Sensemaking processes entail both the intrinsic realizations of the game and the potential significations of the experience as a work of art.

Intensity and unity

Because participants' actions and their individual experiences are constitutive elements of participatory artifacts, it seems reasonable to make actions and acts the focal point of an investigation of beautiful experiences and experiences of beauty. In my book (Heinrich, 2014), I scrutinize three dimensions of actions: first, the visceral dimension of sense-perception, especially proprioception; second, the agential dimension of actions that establish interaction systems; third, the reflective, conceptual dimension brought about by the incorporated external perspective of the onlooker in the participant. Inspired by the gravedigger in Shakespeare's

Hamlet, I termed these dimensions "to do, to act, and to perform." In the book, I further argue that a complex sentiment of beauty is based on the synthetization of these three dimensions into one significant whole, occasioning a feeling of coherence and even unity.[3] This figure of thought has a certain affinity with beauty as a dialectic between integral parts and a coherent whole (i.e., variety and uniformity).[4]

In this article, I want to elaborate on the kind of unity that this act produces and how the assumed unity of an act yields beautiful experiences. I also seek to answer the often-heard question of how participation entails or occasions the sentiment of beauty, while those pieces seem to absorb, or even consume, the participant in and through action, leaving no space for the recognition and sentiment of, for example, beauty.

Sliding down several stories increases the level of arousal. Furthermore, it yields sense perceptions and proprioception; that is, sensing the slides' material and architectural construction and sensing one's own body being modeled by the slide. Sliding down might also elicit memories and fantasies. Second, it works with agency: the decision to slide down, the interactions between personnel, the slide, and the participant. Third, the big slide installations in an art space contain conceptual dimensions. All participatory artworks are based on a scenario that includes an inherent or explicit script that has to be understood to enable participation and the generation of meaning. All these dimensions are constituents of the artwork, and they inform each other in one way or another.

The instructed children in Sehgal's *This Success/This Failure* tell the audience that they and their playing are the work of art. Thus, my playing with them in the white space was also the work of art. I was aware of being observed, and I observed myself while I was playing. Playing, running, talking, the museum space, the white wall, the marble floor, the diffused light, the observing people standing in one corner of the room, my knowledge of the piece and its conceptual art-historic stance, my ambition to get rid of my awareness of being observed, feelings of pride and nervousness, the smiling faces of the children: those and many more were this artwork's constituents (at least for me).

How can both artworks, with very different constituents, create an experience of unity?

First, I want to specify my notion of unity. It seems clear that different constituents do not yield a unity in the platonic sense, that is, as a form or idea that unites plural characteristics into one universal—at least not on an experiential level. On this level, felt unity is brought about by acts of correlating, differentiating, and creating internal correspondences and linkages between the components. This is not an (academic) analytical undertaking aimed at the formation of concepts, but rather the creation of fields of intensity where the constituent parts feed into each other. Here, the very concept of a participatory work of art is one constituent.

My usage of the notion of unity has much in common with the idea of *communitas* formulated by researchers of rituals, such as Turner (1967), and applied by performance researchers, such as Schechner (2003). Here, *communitas* is understood as an experiential space without structured hierarchies of the participants in the ritual. In Turner's view, this is a characteristic of liminality. I want to extend the notion of *communitas* to include concepts, feelings, perception, the space, other participants or onlookers, thoughts, and so on, as I described earlier. It is not exclusively a *communitas* of people but of all the constituents included in a participatory artwork.

3 I describe the emergent characteristics of an act in chapter 7 of my book, *Performing Beauty in Participatory Art and Culture.*

4 See, for example, Hutcheson (1726) and Diderot (2011).

Intensity is generated by the constituents' feeding each other; that is, by the tensions, collisions, and momentarily insolvable contradictions that enable and even necessitate (inter)actions in the attempt to resolve them. However, the components' interplay and feeding into each other both enable participation and are based upon participation. The art recipient must participate in order to create these points of intensity. The concept-based demand for participation is thus both a necessary constituent and a result of intensity.

In participatory art, unity must be seen as a defined field of possibility within which ongoing performative interplaying between all the different constituents occur. Participatory unity cannot be understood as a completed entity or representation. On the contrary, representations (e.g., the concept of a slide) and interpretations are also constituents. Interpretations and representations must be validated by interactions. Validation is an act of realization in the double sense of recognition and elicitation. The notion of intensity should be understood in two ways: first, simply as felt psychophysical intensity (i.e., arousal); second, in the Deleuzian sense of compression and potentiality (Deleuze 1994). Intensive linkages are not only emotional and cognitive occurrences, even though they might be perceived as such, but also extend to a space, its objects, and its occurrences (e.g., the slides, other participants, the building, my curiosity and nervousness, the children, the white space, other onlookers, my steps, the movement of my hand while trying to tap one of the children, my feeling of being observed, etc.).

There is a difference between the perception of intensity and the intensity that makes up a participatory work. This difference is important because the heterogenous reality of the constituents cannot be grasped by the participant. The participant can only be attuned to it by interactions and by forming ideas about it. The ungraspable heterogeneous simultaneity of a participatory work of art's constituents might bring about the idea of unity. However, this idea of unity is not only a concept (i.e., a uniting form). It is, first of all, a feeling and a longing to be or act as part of something. The cognitive idea of unity is just another constituent. It yields participant engagement that is aimed at the realization of unity. Engagement is not an unreflective immersion, not a kind of "flow" in which the sense of self disappears, but self-awareness and the idea of unity flow in connection with all other constituents. It is not a dissolution of the subject because the image of the subject as agent is also a constituent.

In my experience and view, these felt intensities and the longing for unity harbor the sentiment of beauty in participatory art. Needless to say, not all participatory artifacts and not all participation yield intensity and thus possible beautiful experiences. Hence, beauty also emerges from ongoing judgments of and within the ever-changing situation. The sentiment of beauty arises in the relationship between bodily felt intensity and the idea of partaking in something that transcends the participant. Thus, intensity is also an act of transcending my subjectivity and the perception of immanence (i.e., to partake). Intensity is an almost material occurrence and expression of the anticipated unity. Thus, beauty emerges (Kirkeby, 2007) as a moment of pleasurable engagement and surrender.

In *Test Site*, the participant has to decide to participate and get in line at the top of the slide. From the decision to the actual sliding down, intensity increases. Thoughts, expectations, anxieties, memories, and perhaps tiresome waiting combined with the sounds, atmosphere, and materials of the art space (Tate Modern) create a specific felt intensity, depending on the individual participant. This intensity is expected to be transformed into one main action: sliding down, which is the point of no return. However, many other decisions are possible (e.g., going away, hesitating, arguing with the personnel, or preventing others from sliding down). The specific intensity is pre-forming the experience of sliding down: is the anxiety sustained

or released? Does the bodily experience of sliding add a different dimension to the conceptual understanding?

While sliding down, intensity might be transformed into an immanent unity, in which all the elements seem to "work" together, sense perceptions add to understanding and vice versa, the curves of the slide oscillate with the sensation of the space, adults fall into a child's enthusiasm while sliding again and again on childhood's playground. According to Dewey, "The moment of passage from disturbance into harmony is that of intensest life." (Dewey 1980, p. 17) The experience of beauty is an experience of accepted and lived presence where the experiencing subject resonates with other constituents of the event within the framework—the scenario—of a particular artwork. However, the participating subject, the I, is not a finite entity but consists of various constituents in addition to the other parts of the piece. Enjoying sliding down, the speed, the curves, and the impression of rotating space is both a culmination and a release of intensity: beauty happens.

Your Success/Your Failure does not offer release as easily the act of sliding does. It builds tension from the moment one enters the room and realizes the rules of the artwork. It increases (dramatically for some) when one is invited by the children to play with them. Transgress the invisible line between the space of the onlookers and the playground! Now one is part of the work regardless of what one is doing: standing, running, walking, talking, and so on. The simple fact of being observed increases the intensity, but this is the psychological intensity of the participating subject. Another kind of intensity builds up based on the declaration that this is an artwork, and I am part of it. The declaration (and its recognition) dissolves the established order of the art museum (e.g., a museum is a space that contains and displays works of art). By crossing the threshold, the space, the children present, everything craves a new local meaning, another ordering of the constituents' internal relationship. The order can only be established by my concrete participation and by the actions I undertake. My actions are concrete sensemaking practices and continuous tests. The emerging sense is only one formational image of the constituents' simultaneous but fluctuating connections. Fluctuation is intensity yearning for form or forms. One form is the idea of unity, the feeling of being at the right place at the right time, doing the right thing, ordering the universe of this piece into a momentary cosmos; in my case, form was accepting and finding pleasure in playing with children in a museum hall. Beauty happens.

Gebilde

Let me try to approach from another angle. As I reiterated, participatory artworks distribute agency among all the partakers. In the case of *Test Site*, this includes the participant, the slide, the onlookers, and the museum. In *Your Success/Your Failure*, the components included me, my actions, my words, the gaze of the audience, the whiteness of the space, the children's fatigue, and so on. By means of a conceptually determined structure of interaction, the artifact determines how, when, and where the participant is seen as a participant that is able to interact. Of course, the participants can do what they want, but if their actions should make sense within the framework of the work, then the inherent interaction structure must be respected (or otherwise considered).

Participation can be seen as a form of playing, as conceptually framed, rule- or script-based interactions. According to Gadamer, playing means to be "transformed into a structure." The participant is thus also "being played" (Gadamer, 1973, p. 103). Hence, a participatory artwork

appropriates the partaking subject; the subject delegates agency because the structure (or what I have called interaction mechanics) determines how to interact/play. Appropriation is also a form of self-transcendence that yields "one-anotherness" (*das Einander*) (Gadamer cited in Scheibler, 2001, p. 124) "*[D]as Einander*" is a neologism expressing the simultaneity of being oneself and being part of something else. By playing, the participant willingly assumes a conceptual and agential function and thus becomes part of the structure. In *Test Site*, this happens by the participant's being a performative part of the winding, speed-producing slides and vice versa, and by the slides as part of the participants' body and bodily experience. In *Your Success/Your Failure*, it happens by talking and playing with the children and observing yourself as a palpable instantiation of Sehgal's artistic concept.

It is important to notice that Gadamer's notion of structure does not negate the form of intensity that I attempted to describe earlier. On the contrary, the field of unifying intensity depends on a well-defined structure, which determines the playground for participation. Within this structured space–time, the intensity of tension, collision, momentarily insolvable contradiction, correlations, and so on unfold. In Turner's description of *communitas* as an unstructured ritual space, he meant the momentary annulment of societal structures. (Turner 1988, p.133; 1985, p. 124) However, each ritual has a performance structure that allows for *communitas* to happen, which must be recognized. Gadamer discusses the performance structure that each work of art constructs.

Participatory art can only be recognized as works of art if the participant considers his or her actions an intrinsic part of *something*. This something is reified by the conceptual framework that the participant is able to observe and realize as artifact. According to Gadamer (1973, p. 126), this something is a performative *Gebilde*. Arthos wrote that the term *Gebilde* "allows [Gadamer] to play on the capacity of art to be both a work (ergon) and work (energeia), just as Spiel is both play and a play" (Arthos, 2013, p. 28). The artwork as *Gebilde* constitutes the conceptual and performative framework without which an act could not be recognized and performed. Furthermore, a participatory *Gebilde* (*ergon*) has to be "realized" in each (inter) action (*energeia*); I use the term "realized" (to make real) in both its senses: "constructed/ initialized" and "comprehended." Thus, *Gebilde* in participatory art is *energeia* based on and enabling *ergon*, which is a conceptual understanding that composes the aforementioned constituents into a structure. It is my hypothesis that the simultaneous congruity of *energeia* and *ergon* is experienced as pleasurable intensity and subject-transcending integration. Beautiful experiences are pleasurable oscillations between the two forms of realization: *ergon* and *energeia*.

In *Die Aktualität des Schönen* (Gadamer 1977)[5], Gadamer traces the importance of beauty in modern art by investigating three aspects: play, symbol, and festival. He did not analyze participatory art that did not exist as an art form at the time of writing, yet in his chapters on art, he prioritized the performative aspect of art works as play and art as festival. In his view, all art invites the audience to be a player that enters and is an active part of the *Gebilde* of each work of art. According to Gadamer (1986, p. 28), "The concept of play was introduced precisely to show that everyone involved in play is a participant. It should also be true of the play of art that there is in principle no radical separation between the work of art and the person who experiences it." However, in participatory art, acts of playing (i.e., participating) are a constitutive part of the work and not only hermeneutic play. The proprioperception of one's acts melds with the perception of the other constituents of a participatory work of art. Gadamer (1977, p. 38) applied

5 Gadamer, H.-G. (1986). *The Relevance of the Beautiful and Other Essays*, trans. Nicholas Walker, ed. Robert Bernasconi, Cambridge: Cambridge University Press.

the term "*die ästhetische Nichtunderscheidung*" ("aesthetic non-differentiation") to characterize the aesthetic perception of art as playing. Aesthetic non-differentiation is tied to a holistic perception that aims neither at recognizing artistic means nor at definite interpretations. It is a performative conglomerate of sense impressions and momentary and preliminary cognitions. In other words, "aesthetic non-differentiation" is the perceptual intensity of heterogenetic space–time of which the participant is part. Gadamer compared his notion of non-differentiation with Kant's interplay of understanding and imagination. I would like to extend Kant's notion by claiming that in participatory art, understanding as a concept-based activity interacts not only with imagination as the synthetization of the manifold of sense-perception but also with all the present constituents of a singular work of art and its spatial and social contexts. Intensity is both a subjectively felt state and the atmosphere (Böhme, 1993) that includes the participant.

In his chapter on art as festival, Gadamer (1986, p. 42) seemed (among other aspects) to reiterate this intensity by claiming that each work of art establishes its own time outside everyday time. He discussed "'fulfilled or autonomous time." In the original German text, he used the term "*Eigenzeit.*" He explained, "It is the nature of the festival that it should proffer time, arresting it and allowing it to tarry. This is what festival celebration means" (42). Tarrying time resembles compressing, thickening time (at least in the perception of it); arresting time creates intensity. He continued, "In this respect, the work of art does resemble a living organism with its internally structured unity. In other words, it too displays autonomous temporality" (43). He explicitly tied this idea of autonomous temporality to the notion of beauty.

However, intensity alone is not enough. To be pleasurable, intensity needs release or resolution. I propose to equate the pleasurable resolution of intensity with sensemaking. Here, I am inspired by Luhmann's terminology, in which sense is not only a hermeneutic-based meaning of generation but also indicates an act (or a systemic operation) of selection (Luhmann, 2000). Sense (in German *Sinn*) is produced as and through selections. It is an act based on the difference between potentiality and actualization. Potentiality entails multiplicity (in Deleuzian terms, virtuality), which must lead to actualizations (i.e., concrete actions). Sense resolves an intense multiplicity into action that reduces complexity and that makes the situation available to the sensemaking system. In participatory artworks, actions reduce the complexity of the situation. In the case of a participatory artwork, participatory action ensures the continuation of the work. In the case of the participant's cognitive system, it is any act of consciousness (thoughts, interpretation, associations, feelings, etc.).

However, each actualization brings about new multiplicities, altered constellations of sensations, perceptions, agencies, and understandings in a changed landscape of all constituents. If the cycle of building and releasing intensity is able to create an experience of oscillation or swinging, then I claim that participation can be experienced as beautiful. Expressed differently, the cycle is experienced as beautiful when involvement makes sense and when sense-making enforces immersion.

Conclusion

Participatory art contains the promise of sense-making through the fulfilling and pleasurable experience of presence, which is the promise of unity experienced here and now. However, unity has to be realized through participatory acts, through actually playing with children, and through feeling the curving slide on my derriere. The beautiful is no longer a veil that is projected onto an object. Instead, it is the sense and sensation of the congruence or harmony of

possibility and realization. Judged as beautiful, the act contains an oscillating movement between intensity, release, another intensity, another release, and so forth. Of course, the experience of a participatory artwork can be remembered, analyzed, and judged *post festum*, but it necessitates the rudimentary reliving of intensity and release (or no intensity and no release because not every participatory artwork offers this oscillating movement, and not every participant can effectuate and experience it).

A beautiful experience in participatory art is still an aesthetic judgment based on a comparison between promise and felt realization. However, it is not primarily an evaluative judgment of a participatory art piece. It is primarily a particular judgment in the process of engagement. The beautiful experience becomes one constituent among others. Beautiful experiences are evaluations of each cycle of intensity and release. Only then could one judge a participatory piece of art—based on one precise instantiation of it—as a beautiful experience or not.

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Challenging Urban Anesthetics: Beauty and Contradiction in Georg Simmel's Rome

With Seven Images and Notes "In The Meantime"

Henrik Reeh

Abstract: *Georg Simmel's essay "The Metropolis and Mental Life" is barely capable of informing aesthetic categories such as Beauty. After all, Simmel's concept of the* blasé attitude *is so pervasive that it seems to exclude sensory experience from modern city life. Documents from Simmel's stay in Rome in 1898, however, reveal his aesthetic sensitivity as a traveler; he is attentive to the city as a constellation of differences that inspire beauty, and his encounter with modern Rome is a source of sensory contradictions. Topographically, Simmel's Roman essays provide one example: a silent garden overlooking noisy Rome. By revisiting this place in 2018, we trace Simmel's viewpoints and arguments and develop a somaesthetic experience of beauty and urbanity during a springtime afternoon at this site.*

Keywords: *Georg Simmel (1858-1918), Rome, blasé attitude, Blasiertheit, urbanity, urban culture, contradiction, Gegensatz, Giardino di Sant'Alessio, children, happiness.*

Introduction: Aesthetics Facing Anesthesia

One of the foundational texts in the field of urbanity and aesthetics is an essay by the German philosopher and sociologist Georg Simmel. Dating from 1903, it is titled "Die Großstädte und das Geistesleben," which translates as "The Metropolis and Mental Life."[1] Discovered in the 1950s and 1960s, this essay, which was based on a lecture, establishes a framework for understanding urban culture at the intersection of sensory life, monetary exchange, and spatial density. Simmel also situates human experience at the center of an urban setting that far too often is reduced by instrumental discourses of architecture, urban planning, and engineering. In reality, the city has been the pivotal stage of modern life since the late 18th century.

1 *Großstädte* means metropolises or big cities. Please note the definite article and the plural in *Die Großstädte*, with which Simmel conceives of big cities without mentioning names, such as Berlin, Paris, London, or Rome. A more accurate translation of the German title would have been the following: "The Big Cities and the Life of Spirit." However, Simmel's generic approach to big cities and the socio-cultural perspectives of his text survive in "The Metropolis and Mental Life," which is the Anglo-American title adopted by Kurt H. Wolff in 1950, years before this essay in a 1903 yearbook was republished in a Germanophone anthology of Simmel's texts: *Brücke und Tür: Essays des Philosophen zur Geschichte, Religion, Kunst und Gesellschaft*, ed. Michael Landmann (Stuttgart: K. F. Koehler, 1957). Georg Simmel, "The Metropolis and Mental Life," in Georg Simmel, *The Sociology of Georg Simmel*. Translated, edited and with an introduction by Kurt H. Wolff (New York, London: The Free Press, Collier-Macmillan, 1950), 409–424.

However, Simmel does not employ the terms beauty or beautiful in his essay. In contrast, he provides a portrait of urban culture that is so remote from the practices of art and contemplation that one may wonder whether Simmel is indicating the *impossibility* of aesthetics in the metropolitan age. Instead of focusing on 'aesthetics', understood as sensory perception, Simmel highlights the pervasiveness of the so-called blasé attitude, *Blasiertheit*, which implies the loss or lack of sensitivity vis à vis things and spaces. *Blasiertheit* designates a cultural and social *anesthesia* rather than a multiplicity of sensory practices in the city.

However, metropolitan *Blasiertheit* sometimes gives way to overwhelming sensory experiences and thereby to aesthetics and even beauty, which Simmel experiences in Rome in 1898. I had a similar experience in Rome, but in 2018, which I will describe below. First, let us consider the anesthetic *blasé attitude*.

I. Bodies, Money, Density: The Blasé Attitude in the City

Figure 1: "Blasiertheit"? Roma I, 2018

Leaving his car right outside the park, he keeps the keys around his middle finger. He will soon leave after turning his back to the panoramic view of Rome and photographing it with his smartphone. First and foremost, however, he gazes at himself while composing this self-portrait with a view which is to be sent to someone, posted somewhere.

Breaking into my view towards the Campidoglio in the center of Rome, this man becomes an image in his own right. In the meantime, *I cannot but photograph him as he stands there, photographing himself. Would it be just to see him and his selfie as present-day variations on*

Blasiertheit*, the blasé attitude that Simmel conceptualizes at the turn of the 20th century? The man in the picture seems quite focused; he leaves without saying a word, apparently without noticing that he gets another portrait taken by a stranger standing next to him.*

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Many readers of Simmel's essay on metropolitan mentality will recall his emphasis on the decline of sensory practices in the big city. Repeatedly, Simmel observes that the city promotes a general absence of attention to the particularity of things. First, Simmel gives a physiological explanation of the *blasé attitude*. This attitude results from the intensity of *impressions* with which every individual must cope:

> *There is perhaps no psychic phenomenon which has been so unconditionally reserved to the metropolis as has the blasé attitude. The blasé attitude results first from the rapidly changing and closely compressed contrasting stimulations of the nerves.* (§ 5, 415)[2]

Moreover, this physical exhaustion is reinforced by the homogenizing effects of money. Monetary exchange transforms qualitative values into quantitative values. Thus, sensory things are reduced to their price and thus to exchangeability. Their heterogeneous qualities fade, and they are replaced by gray indifference:

> *This physiological source of the metropolitan blasé attitude is joined by another source which flows from the money economy. The essence of the blasé attitude consists in the blunting of discrimination [between things].* (§ 6, 414)[3]

Third and last, the *blasé* consequences of sensory overstimulation and price-tagging are reinforced by the *spatial density* of the metropolis. This density makes people surrender to a culture of excitement, which provides only the temporary fix of a short-term solution.

> *That is why cities are also the genuine locale of the blasé attitude. In the blasé attitude the concentration of men and things stimulate the nervous system of the individual to its highest achievements so that it reaches its peak. Through the mere quantitative intensification of the same conditioning forces this achievement is transformed into its opposite and appears in the peculiar adjustment of the blasé attitude. In this phenomenon the nerves find in the refusal to react to their stimulation the last possibility of accommodating to the contents and forms of metropolitan life.* (§ 7, 415)[4]

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2 Georg Simmel, "The Metropolis and Mental Life," *op. cit.*, 415. In German: "Es gibt vielleicht keine seelische Erscheinung, die so unbedingt der Großstadt vorbehalten wäre, wie die Blasiertheit. Sie ist zunächst die Folge jener rasch wechselnden und in ihren Gegensätzen eng zusammengedrängten Nervenreize, [...]." [II, § 4, 193] Georg Simmel, "Die Großstädte und das Geistesleben," in *Die Großstadt. Vorträge und Aufsätze zur Städteausstellung* von K. Bücher, et al. (Dresden: Verlag Bahn & Jaensch, 1903), 193–195.

3 In German: "Mit dieser physiologischen Quelle der großstädtischen Blasiertheit vereinigt sich die andre, die in der Geldwirtschaft fließt. Das Wesen der Blasiertheit ist die Abstumpfung gegen die Unterschiede der Dinge, [...]." [III, § 5, 193]

4 In German: "Darum sind die Großstädte, die Hauptsitze des Geldverkehrs und in denen die Käuflichkeit der Dinge sich in ganz anderem Umfange aufdrängt, als in kleineren Verhältnissen, auch die eigentlichen Stätten der Blasiertheit. In ihr gipfelt sich gewissermaßen jener Erfolg der Zusammendrängung von Menschen und Dingen auf, die das Individuum zu seiner höchsten Nervenleistung reizt; durch die bloß quantitative Steigerung der gleichen Bedingungen schlägt dieser Erfolg in sein Gegenteil um, in diese eigentümliche Anpas-sungserscheinung der Blasiertheit, in der die Nerven ihre letzte Möglichkeit, sich mit den Inhalten und der Form des Großstadtlebens abzufinden, darin entdecken, daß sie sich der Reaktion auf sie versagen – [...]." Georg Simmel, "Die Großstädte und das Geistesleben", *op. cit.*, 194–195.

In this triangle of stimuli, money, and space, the blasé undermining of genuine sensitivity is pervasive and totalizing.[5]

In reality, this tripartite conception of *Blasiertheit*—stimuli, money, space—is more than a sudden observation by Simmel; he elaborates his analysis in three different writings spanning fourteen years. Citing the blasé tendencies among rich people in "The Psychology of Money" (1889), Simmel progressively considered the blasé mentality as a general feature shared by ”the public spirit" in his seminal book, *The Philosophy of Money* (1900). Finally, in "The Metropolis and Mental Life" (1903), the urban setting is recognized: the blasé approach to things and environments is generated in *city space*.

While Simmel is sometimes considered a thinker who generalizes and even de-historicizes social phenomena in an inadmissibly impressionist way, such criticism does not apply to his concept of *Blasiertheit*. On the contrary, *Blasiertheit* is the result of Simmel's recurring attempts to socially, economically, and spatially ground his use of a concept that traditionally has designated a bodily and mental indifference to sensory and material qualities, which are supposed to be most widespread among excessively wealthy people. In Simmel's view, however, *Blasiertheit* is also an increasingly shared phenomenon that affects most people who are exposed to the big city and its sensory intensity, monetary exchangeability, and spatial and human density.[6]

Indeed, the human body is present in modern cities. However, from the somaesthetic point of view, the body portrayed by Simmel is not an attentive and sensory one because it is occupied by instrumental, quantitative, and rational issues. In summary, the reader has difficulty imagining how the blasé individual's indifference to city life could be overcome or bring about renewed kinds of sensory attentiveness.

5 For a distinction between three discursive layers which are present in Simmel's urban-cultural analysis in "Die Großstädte und das Geistesleben", see Henrik Reeh, *Ornaments of the Metropolis: Siegfried Kracauer and Modern Urban Culture* (Cambridge: Mass. & London: The MIT Press, 2004/2006 [1991]), 22–28.

6 For a genealogy of Simmel's conception of Blasiertheit, see Henrik Reeh, "Réécriture du concept de blasement. Georg Simmel face à l'urbanité moderne" in *Simmel et les normes sociales*, ed. Jean-Marie Baldner et Lucien Gillard (Paris: L'Harmattan, 1996), 141–151.

II: Experiencing Rome: Contextual Beauty and Subjective Liberation

Figure 2: "Schönheit"? Roma II, 2018

Springtime in Rome: Trees are blossoming, and soon their flowers will cover the ground and light it up, adding color to the soil and to the asphalt. Once the street sweepers pass by, these flowers will be removed. In the meantime*, I take a picture of the flowers on the urbanized ground. The constellation of these two elements spontaneously evokes the concept of* Schönheit *(beauty) in my inner view.*

Before taking the photograph, I notice and deliberately focus on two cigarette butts inside the frame of the image. On the computer screen at home, I realize that there are more butts, four in total. All belong to the image. Are they beautiful, either in themselves or in this context? After all, they may challenge a certain conception of beauty or add a beauty of another kind.

In the name of traditional beauty, health, and sustainability, these butts would be rubbish: unworthy of being photographed, destined to an ash tray. In fact, they should never have been produced or smoked by human beings. However, the image presents a striking triangle of fallen flowers, cigarette butts, and urban ground. Without the presence of the cigarette butts, I may not have taken this photograph, let alone shown it here. Would Simmel have considered this motif beautiful?

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The prevalent role of the blasé attitude toward the urban world does not imply that Simmel understands the body in modern life as a fully homogeneous entity. On the contrary, the

division of labor and differences in lifestyles are striking features in the somaesthetic structuring of bodily subjectivity because they promote a radical *differentiation* that leaves room for variety in our individual lives.

One is not always fixed in the repetitive everyday of naturalized habits. In Simmel's day, modern subjects started exploring the mobility promoted by trains and traveling.[7] They went away and abroad. When one changes one's location, new ways of perceiving cities emerge. Therefore, the blasé indifference that Simmel ties to the metropolis is occasionally challenged and fragmented.

Leaving one's home city and going abroad radically changes one's approach to material and socio-cultural environments. Instead of submitting urban space to the purposeful habits and instrumental movements that are predominant in one's ordinary environment, the traveling individual explores a city that is other if not in its own right, then at least as a city which is dealt with in more disinterested and less predictable ways than in everyday life.

A foreign city is revealed as a particular and heterogeneous place. Moreover, a city is named and perceived in the symbolic form of this particular name rather than as yet another example of the generic *Großstädte* that Simmel addresses in his essay in 1903.

This change in perspective and perception is not only a theoretical possibility, as one observes in Simmel's short essays on Florence, Venice, and Rome.[8] His text on Rome in 1898 is particularly relevant in challenging the *anesthetics* of cities. In the late 19th century, Rome is the capital of an Italy that was unified in 1871, which is about to become a modern metropolis.[9] In addition, Rome remains a powerful historic reference, not only to the Roman empire and the later Christian world but also to the early modern institutions of painting, archaeology, and literature. It is hardly a coincidence that Rome is often identified as *Urbs, the city as such*.[10]

In 1898, Georg Simmel and his wife stay in Rome during the month of March and the first half of April.[11] In late May of the same year, Simmel publishes an essay, the equivalent of eleven book pages, which reveals his profound fascination with Rome.[12] In fact, his fascination is aesthetic, which is suggested by the title, "*Rom. Eine ästhetische Analyse*" ("Rome: An Aesthetic Analysis"). The approach is indeed analytical, addressing the body and the subjectivity that the visitor experiences in Rome just before 1900.

Simmel's text does not contain stylistic analyses of Roman monuments and art. Instead, the springtime traveler from Berlin translates his visitor's experience of Rome in *sensory-based* reflection. As a result, an ambitious, general *concept of beauty* is launched at the beginning of Simmel's essay, and its wording exceeds not only the experience of Rome but also the issue of cities and urban life:

> *The most profound stimulation [*Reiz*] of beauty lies in the fact, perhaps, that beauty is always the form of elements that in themselves are indifferent and foreign to beauty,*

7 Wolfgang Schivelbusch, *Die Geschichte der Eisenbahnreise: Zur Industrialisierung von Raum und Zeit im 19. Jahrhundert* (Berlin: Ullstein, 1979).

8 These brief essays written at the turn of the century were published in a posthumous volume: Georg Simmel, *Zur Philosophie der Kunst* (Potsdam: Kiepenheuer, 1922).

9 Steen Bo Frandsen, *Det tredje Rom: Byudvikling og magtiscenesættelse 1870-1945* (Aarhus: Sfinx, 1991).

10 Anne Cauquelin, *Essai de philosophie urbaine* (Paris: Presses Universitaires de France, 1982), 23–27.

11 Simmel's annotated letters from the spring of 1898 are published in Georg Simmel, *Briefe 1880–1911, Gesamtausgabe, Band 22*) (Frankfurt am Main: Suhrkamp Verlag).

12 Georg Simmel, "Rom. Eine ästhetische Analyse", first published in *Die Zeit*, Vienna, 15, 28 May 1898, and, posthumously, in Georg Simmel, *Zur Philosophie der Kunst, op. cit*., 17–28.

and that acquire their aesthetic value only from their proximity to one another.[13]

As in many of his essays—a genre that Simmel cultivates and turns into a modern form of writing—Simmel starts with general statements that soon appear to be grounded in a particular object or experience, which in the present case is a stay in the city of Rome. Despite the notable reservation regarding the generality of his statement, in which Simmel employs *vielleicht* (perhaps) as if to indicate the hypothetical or associative status of his definition, beauty is outlined as profoundly *contextual*. The individual elements of sensory reality are devoid of a distinct value, whereas it is their *adding-up-to-a-unity* (i.e., to a form) that makes beauty possible and effective. Beauty occurs thanks to a *constellation of non-beautiful units*.

In this view, a genuinely urban conception of beauty unfolds. Not individual parts or single elements but their coexistence and reciprocity allow for beauty to occur in a city, which is the coexistence of multiple entities—material, social, and bodily.

Accordingly, the beauty of Rome lies not in its intentional artworks or monuments but in the accidental collaboration of individually purposeful structures that grow into a surprising unity:

> *In the cityscape of Rome such a fortunate and fortuitous growing-together of human purposeful structures into a new unintentional beauty seems to achieve its highest stimulation [*Reiz*]. [...] What makes the impression of Rome so incomparable is that the distances between times, styles, personalities and life-contents which have left their traces here, span as widely as nowhere else in the world, and that these [traces] nevertheless grow into a unity, a mood, and a sense of belonging together as nowhere else in the world.* (§ 3, 31-32)[14]

The unity of impression resulting from Rome's inner differences is exactly what Simmel identifies as *beauty*. It is a beauty that sometimes refers to visual traces. However, beauty also stems from the intense human life in the city, and it depends on the communion of the present with previous times. Space, life, and time vitalize the city and thus invite *the aesthetic experience of the individual to unfold*.

A *Großstadt* implies the increasing domination of so-called objective culture (e.g., institutions and technology) over subjective culture, the size and role of which are diminishing.[15] However, in Rome, the traveler overcomes the exhausted state that is typical of the blasé attitude:

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13 Translated by Ulrich Teucher and Thomas M. Kemple in *Theory, Culture & Society*, 2007, vol. 24 (7-8), 30-37. The translation has been slightly corrected; the position of "perhaps" was moved from the beginning to the center of the sentence.

In German: "Der tiefste Reiz der Schönheit liegt vielleich darin, daß sie immer die Form von Elementen ist, die an sich gleichgültig und schönheitsfremd sind und erst durch ihr Beieinander ästhetischen Wert erwerben; [...]" (§1, 16). Please note that "Reiz" is the term invoked by Simmel, as he first conceptualizes "Blasiertheit" in "Die Großstädte und das Geistesleben", as the emblematic feature of the modern individual who is exposed to the intensity of impressions in the big city: "Nervenreize", as Simmel terms these impressions in the initial quote above (US transl., § 5, 415). A little later, Simmel employs the term "Reiz" in the plural: "Die so entstehende Unfähigkeit auf neue Reize mit der ihnen angemessenen Energie zu reagieren, ist eben jene Blasiertheit, die eigentlich schon jedes Kind der Großstadt im Vergleiche mit Kindern ruhigerer and abwechslungsloserer Milieus zeigt." Quoted from Georg Simmel, "Die Großstädte und das Geistesleben" in G. Simmel, *Das Individuum und die Freiheit* (Berlin: Wagenbach, 1984), § 7, p. 196.

"Reiz" may be translated into English by a multitude of terms, such as "charm," "appeal," "attraction," "stimulus," "attire," "excitement," "attractiveness," "fascination," and "stimulation". See *Reverso – translate and learn, Theo Hoffenberg*, accessed 5 February 2020.

14 Translation modified. In German: "In dem römischen Stadtbilde scheint solches glücklich zufällige Zusammenwachsen menschlicher Zweckgebilde zu neuer, ungewollter Schönheit seinen höchsten Reiz zu gewinnen. [...]. Das ganz Unvergleichliche des Eindruckes von Rom ist, daß die Abstände der Zeiten, der Stile, der Persönlichkeiten, der Lebensinhalte, die hier ihre Spuren hinterlassen haben, so weit gespannt sind, wie nirgends in der Welt, und daß diese dennoch in eine Einheit, Abgestimmtheit und Zusammengehörigkeit verwachsen, wie nirgends in der Welt." G. Simmel, "Rom […]", *op. cit*., §§ 3-4, 18-19.

15 Georg Simmel, "Die Großstädte ...", *op. cit*., towards the end of the essay.

> *If in Rome one does not feel overwhelmed but rather that one has arrived at the height of personality, then this is surely a reflex of the enormously increased self-activity of the inner human being. Nowhere else in the world has good fortune ordered objects for our mind so adequately, so that they call for a deployment of forces to gather these objects across the immense distances of their immediate conditions into such a complete unity. That is also why Rome leaves such an indissoluble impression in our memory.* (§ 8, p. 35)[16]

Instead of becoming a blasé person as in the everyday of an ordinary *Großstadt*, the visitor to Rome experiences a strange transformation; he or she suddenly witnesses what it is to be an active subject that is finally capable of realizing its own inner potentials. Simmel traces this subjective realization back to the successful communion with the urban objective world. This communion, which "probably" (*sicher*) has to do with an inner dynamic that mirrors the outer world, signals that Simmel's encounter with Rome generates an overwhelming and *city-based return of the aesthetic as a realm of sense-based experience and reflection*. After all, a big city may occasion the opposite of a blasé feeling of indifference and instead promote the conviction of objective cohesion in the outer world as well as a subjective intensification within the individual's spirit and body.

III. Beyond Unity – Simmel on the Aventine Hill

Figure 3: "Gegensatz"? Roma III, 2018

16 In German: "Wenn man sich in Rom nicht erdrückt, sondern gerade auf der Höhe der Persönlichkeit angelangt fühlt, so ist das sicher ein Reflex der ungeheuer gesteigerten Selbsttätigkeit des inneren Menschen. Nirgends in der Welt hat der günstige Zufall die Objekte unserem Geiste so adäquat geordnet, daß sie ihn zu der Kraftentfaltung aufrufen, über so gewaltige Abstände ihrer unmittelbaren Gegebenheit hinweg sie zu einer so völligen Einheit zu sammeln. Das ist auch der Grund, weshalb Rom sich der Erinnerung ganz unauslöschlich einprägt." G. Simmel, "Rom […]", *op. cit.*, § 8, 26.

*Discovered from the street, this place—Giardino di Sant'Alessio—looks like a detour. However, it is also a public garden that opens new horizons. It is an untraditional park; there are orange trees, but they are not staged. The ground is covered by simple soil, gravel, or grass that has not been mowed for months. The grass keeps growing and has little yellow flowers in it until a noisy and smoky garden tractor goes into action. Maneuvered by a seated gardener, it introduces an element of contrast or contradiction—*Gegensatz*—into the experience of this place.*

In the meantime, *one realizes how exceptional this garden is, framed by rose abbey walls, devoid of guards and left to the visitors themselves: tourists slightly off the beaten track, dog owners walking their dear friends, people who need rest or want to explore a view of the city from above.*

A space for breathing and relaxation, this place is an unstable spot where people constantly arrive and depart along the central path or follow their individual itinerary across a variety of irregular surfaces. In this metropolitan garden, orange trees grow in a way that makes the oranges themselves disappear. The oranges are there, still hanging in the darkness among branches and leaves. Don't they hide their beauty to people who pass too fast, and, in turn, promote the impression of a nice yet untidy place with no ambition of grandeur? At sunset, a brother or superintendent from the neighboring church arrives, closes the gate toward the street, and locks the garden for the night.

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Although it is short, Simmel's "Rome" is an experimental text that attempts to *make sense* of an ecstatic encounter with this city. The mediation between parts and totality seems to have no limits, when Simmel claims the existence of "a full, organic unity of the impression" of this city.[17] However, Simmel employs many adverbs and conjunctive forms of verbs that not only suggest but also justify a series of risky comparisons and hypothetical interpretations. Maybe things are not as evident as the elegance of Simmel's prose would have us believe. Simmel mobilizes an impressive rhetorical and conceptual energy in his text which delivers a focused and convincing attempt to translate the experience of Rome into the harmonious coexistence of part and totality and of subject and object.

One may thus notice the degree to which non-identity and non-mediation are absent in this essay, which does not provide an analysis of topographic or social phenomena in Rome's cityscape and urban lifeworld. The absence of contradiction and empirical elements makes the reader wonder whether Simmel is capable of addressing the contradictions of modernity, which undeniably exist in Rome at the end of the 19th century.

In order to address my suspicion, I now introduce a second text by Simmel on Rome, which is a one-page fragment entitled "*Gegensatz*," which was published in 1899 in the literary and artistic journal *Jugend* and signed by a pseudonym, "G.S.".[18]

In prolonging a site-specific observation of Rome, this secret text adds an element of contrast or contradiction (i.e., *Gegensatz*) to the experience of Rome.[19] In fact, Simmel evokes

17 In German: "Versucht man, die ästhetische Wirkung Roms psychologisch zu zergliedern, so mündet man von allen Richtungen her auf diesem Zentrum, auf das zunächst sein äußerliches Bild hinzeigt: daß aus den größten Gegensätzen, in die sich überhaupt die Geschichte der höheren Kultur gespalten hat, hier eine völlige organische Einheit des Eindrucks geworden ist." (G. Simmel, "Rom […]", *op. cit.*, § 3, 19)

Translation into English [modified]: "If one tries to dissect Rome's aesthetic effect psychologically, one will arrive from all directions at this centre to which its outward image first points: from the greatest oppositions into which high culture [has] split, a complete organic unity has grown." (G. Simmel, "Rome […]", *op. cit.*, UK translation, 32)

18 Otthein Rammstedt, "On Simmel's Aesthetics: Argumentation in the Journal Jugend, 1897-1906" in *Theory, Culture & Society*, vol. 8 (1991), 125–144.

19 There are no named and observed places in Simmel's official essay on Rome, "Rom. Eine ästhetische Analyse."

a particular Roman experience that is visual and auditory as well as bodily and sensory and hence *somaesthetic*. The experience involves at least two different situations that are not fully harmonious; accordingly, they may be closely related to Rome in the age of modernity. Staging an urban site in not only the most green and organic but also the least noisy and least constructed *monte* among the seven hills of classical Rome *intra muros*, Simmel writes:

> *On the Aventine Hill lies an abbey church, Sant'Alessio, with a small, dark garden, in which there is silence about centuries.* So *silent can it be in Rome only, just as only* those *people know to be deeply, heavily, and maturely silent, who would know how to speak likewise.*[20]

The place on which Simmel comments is defined by the Sant'Alessio church, which has a garden to which the public has access. Thus, the narrator has been there, either alone or with a few people who were not noisy. Under these circumstances, the place is a garden of contemplation and introspection, in which a retreat *from* and a confirmation *of* Rome as a city of subjectivity and reflection is provided.

Figure 4: "Gegensatz"? Roma IV, 2018

The narrow garden has brick walls on its long sides, which give a certain impression of darkness at the back. The other two sides, however, allow for human visibility. First, the gate and the fence

20 Translated from the German by Henrik Reeh. In German: "Auf dem Aventin liegt eine Klosterkirche, S. Alessio, mit einem kleinen, dunkeln Garten, in dem es von Jahrhunderten schweigt. *So* still kann es nur in Rom sein, wie nur *die* Menschen tief und schwer und reif zu schweigen wissen, die ebenso zu reden wüßten." G. S. [Georg Simmel], "Gegensatz" [1899], now in Georg Simmel, *Gesamtausgade*, Band 17 (Frankfurt am Main: Suhrkamp Verlag, 2004), 381.

toward the street attract the gazes of passers-by. Second, the wall at the far end of the garden, stops at elbow height and invites visitors to stop, look, watch.

Approaching the wall, one already feels that something is lurking there. Indeed, the wall orients one's vision. From this point, one sees monumental buildings in odd positions where one would not expect to find them. Because this site is elevated, the wall is more than an invitation to a 180-degree panorama; one also looks down toward the river, which winds in such a curly way that the four points of the sky seem to turn around as well. One watches monuments in order to figure out not only what one is looking at, but also from where. As the perspectives within the city fold on each other, one cannot say with certainty whether a church tower is located on one side of the river or the other.

In the meantime*, traffic is passing down below; the insistence of urban sounds adds up to a metropolitan noise that Simmel points out in his* Gegensatz *fragment of 1899. To a contemporary visitor at the wall, the contrast generated by the noise and movement converges in the feeling that one is on the verge of leaving the garden and returning to the city.*

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The *hortus conclusus* (enclosed garden) that Simmel depicts is a fragment of the city. From inside this garden, one is sometimes confronted by neighboring urban fragments as well as by modern urbanity's practices and utterances. Such activities may exceed their localities and mingle with sensory experiences in other spatial fragments. This is indeed what the visitor's sensory body becomes aware of, visually and auditorily, as he changes position and moves about and away from the protected center of the garden toward its exposed periphery, which is situated on the steep outer slope of the Aventine Hill.

> *Out from the edge of the garden one sees below oneself the Tiber and, below it, the noisy street toward* S. Paolo fuori le Mura*, with the cracking tramway, the loudly speaking children, the foreigners with their sudden and squared movements.*[21]

In fact, the Sant'Alessio Garden—*il Giardino di Sant'Alessio*—is not defined and surrounded only by the church. It also gives sensory access to the city of Rome, which one overlooks from the wall on the edge. Here, one can lean one's body at elbow height while absorbing visual and auditory impressions from the outer cityscape. The location and the panorama one faces are specified thanks to a name, the Tiber, which is nearly as powerful as the name Rome because it refers to the river that traverses *Urbs* from the North (from where many travelers, such as Goethe,[22] arrived on their Grand Tour in the 18th and 19th centuries) before linking Rome to the Mediterranean Sea.

However, the Tiber is much more than a peaceful river; it is an urban harbor and

21 In German: "Vom Rande des Gartens aus sieht man unter sich den Tiber und unter ihm die lärmende Straße nach *S. Paolo fuori le mura*, mit der knatternden Trambahn, den laut sprechenden Kindern, den Forestieri mit ihren plötzlichen und eckigen Bewegungen." G. S. [Georg Simmel], "Gegensatz", *op. cit*., 381.

I wish to thank Italian philosopher Andrea Borsari for the reference to Simmel's second text on Rome – a text *other* – which is now accessible to readers in the recent Simmel *Gesamtausgabe* but which Borsari himself had studied in the original edition from 1899, as documented in an article from 1997. Andrea Borsari, "Persistenza e transitorietà nell'immagine. Nota alle « Istantanee sub specie aeternitatis » di Georg Simmel", in *Controtempo*, 2, 1997, 122–130

22 "Kaum wagte ich mir selbst zu sagen, wohin ich ging, selbst unterwegs fürchtete ich noch, und nur unter der Porta del Popolo war ich mir gewiß, Rom zu haben." Johann Wolfgang von Goethe, "Rom, den 1. November 1786" in *Italienische Reise, Hamburger Ausgabe* (München: C. H. Beck, 1981), 125.

thoroughfare. Moreover, people move along this river in order to reach particular destinations. For centuries, pilgrims have traveled to the *Basilica San Paolo fuori le Mura*, which in 1511 was the first destination on Martin Luther's journey to all seven prescribed pilgrimage churches in the course of a single day.[23] As its name indicates (*fuori le Mura*), this first stop is located outside the city walls of Rome and several kilometers south.

At the time of Simmel's visit, the itinerary linking Rome to *Basilica San Paolo fuori le Mura* was no longer exclusively religious or a road of contemplation and silence. On the contrary, this road was characterized by Simmel as "the noisy street" (*die lärmende Straße*).

Indeed, the noise itself is composite and urban. First, Simmel writes,[24] it involves public transportation represented by the "cracking tram" (*mit der knatternden Trambahn*), indicating the auditory specificity of tramways, which make high-pitched, squeaking noises emanating from iron wheels on iron tracks. Moreover, trams occasionally generate flashing sounds from the electric cables in the air, which also enrich the technological soundscape of the city.[25]

In addition to technological entities, such as tramways, human bodies make noise in their everyday movements. In observing urban life in Rome, Simmel is the opposite of a blasé tourist, as he singles out the presence of "loudly speaking children" as a distinctive and disturbing feature. Children, too, break the silence of the garden and add to the noisy street.

In addition to auditory disturbances, the visual appearance of people contributes to disrupting the initial silence. In fact, Simmel highlights the *Forestieri* (foreigners) who distinguish themselves visually by their "sudden" gestures and "squared" way of moving their bodies. Roman citizens walk in the street as a habitual practice, which appears natural and evident to Simmel. Walking foreigners, however, look strangely hectic and inorganic in the eyes of Simmel who – himself a foreign visitor – overlooks the Tiber and the street from the elevated wall of the Sant'Alessio Garden.

The silence in the dark and secret garden is contradicted as soon as one stands there overlooking the Tiber and the city. In particular, one encounters an auditory element of disharmony, which is due to movement, to city life, and to technology. This disharmony affects the urban traveler in the abbey garden, who no longer savors a "full, organic unity of the impression," as promised by Simmel in his "Rome: An Aesthetic Analysis."[26] Instead, elements of conflict and non-mediation stand out as if they were the very condition of the delight that the narrator just felt inside the silent garden on the hill:

> *In the delight of this silence, however, lies something like cruelty, since we only perceive it [silence] by paying the price that we look down on the movement and haste, that all noise and unrest trembles again inside us, as background of its opposite [*Gegensatz*].*[27]

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23 For a cartographic sketch of Luther's itinerary as a pilgrim in Rome, see Ebbe Sadolin, *Vandringer i Rom* (Copenhagen: Carit Andersens Forlag, 1959), 93.

24 Rome's first busline, the horse-driven line to San Paolo fuori le mura, was authorized by the Pope in 1845. From 1895, the tram lines in Rome were progressively electrified.

25 Simmel's observation regarding the noisy tramway applies to the Rome of the 21st century as well. When tramway line number 3 reaches its terminus at Piazza Thorvaldsen and makes a U-turn on a wide circle of tram tracks, the squeaking movement is distinctly audible at the Accademia di Danimarca up the hill, several hundreds meters away. Ordinary automobile traffic doesn't resonate quite as much, and the U-turning trams are about the only sounds capable of breaking into the meditative sight and soundscape, up here on the back side of the slopy and green Villa Borghese area.

26 In German: "eine völlige organische Einheit des Eindrucks". Georg Simmel, "Rom [...]", *op. cit*., § 3, 19.

27 In German: "In dem Genuß dieser Stille aber liegt etwas wie Grausamkeit, denn wir empfinden sie nur um den Preis, daß wir auf jene Bewegung und Hast hinunterschauen, daß aller Lärm und Unruhe des Lebens in uns nachzittert, als Hintergrund ihres Gegensatzes." G. S. [Georg Simmel], "Gegensatz", *op. cit*., 381.

The visitor's experience of delight depends on its Other and therefore on the recognition of everyday cruelty—*Grausamkeit*. Hence, Simmel's interpretation of Rome transgresses the utopia of the organic unity that prevailed in his official essay on Rome. In "*Gegensatz*" ("Contradiction"), which may be regarded as an unofficial postface, Simmel acknowledges that certain forces of contradiction are integral parts of urban sensory experience.

Indeed, Rome may be *Urbs* per se and an urban reference spanning millennia, but in Simmel's lifetime, the city is also a modern metropolis. A contextualist aesthetics that was already outlined by Simmel remains at work in "*Gegensatz*," but a modernist twist is added, in which instrumental movements or disturbing noises become central to the experience of Rome.

As the *Gegensatz* fragment on Rome as experienced *on and from* the Aventine Hill progresses, Simmel increasingly argues as a *dialectician of simultaneities*. First, his text seems to describe a temporal process in which the pleasure of the site, silence, and meditation give way to movement, noise, and distraction as soon as the narrator moves his attention from the darkness of the central garden to the panorama on the edge. However, in the sentences just quoted, Simmel outlines the *simultaneous coexistence* of delight and cruelty; *one feels delight only when taking into account its opposite*, whether the view of movement and haste ("*Bewegung und Hast*") or the repercussion of noise and unrest ("*Lärm und Unruhe*").

Just as he states in his 1903 essay on the *Großstädte* that a human being is a being of differences ("*Der Mensch is ein Unterschiedswesen* [...]),"[28] Simmel postulates in his *Gegensatz* fragment, "that we can only enjoy each thing in its difference from its Other" ("*daß wir jegliches Ding nur im Unterschiede gegen sein Anderes genießen können*").[29]

The reciprocity of differences is fundamental both in the "*Großstädte*" essay and in "*Gegensatz.*" Similarly, the sensation of beauty that Simmel presents in his essay "*Rom. Eine ästhetische Analyse*" also stems from a constellation of diverse elements, none of which are beautiful in themselves.

Accordingly, the sensation of delight and pleasure in the garden on the Aventine Hill would not be possible without the experience of the contrary. Pain and displeasure are present, both at the site, the here and now, and in the mental space prolonging a particular location, the Sant'Alessio Garden, in the writer's mind and in his narrative.

28 Georg Simmel, "Die Großstädte [...]", *op. cit.*, §2, 188.

29 Cited in full, and translated into English: "Isn't this the real curse of all that is human that we can only enjoy each thing in its difference from its Other?" In German: "Ist es nicht der eigentliche Fluch alles Menschlichen, daß wir jegliches Ding nur im Unterschiede gegen sein Anderes genießen können?" G. S. [Georg Simmel], "Gegensatz", *op. cit.*, 381.

IV. Experiencing Urban Metamorphosis in the Sant'Alessio Garden

Figure 5: "Schönheit/Gegensatz"? Roma V, 2018.

This image may have been taken in the wintertime. Flashy oranges appear on a tree, behind a wall in front of a façade once limewashed in ochre. White arches frame the windows, while Roman tiles cover the roof of this villa, which is located on one of the city's foundational hills. On the right-hand side, there are lemon trees, too, smaller and in a position of retreat but symbolically as powerful as the orange trees.

In the middle of the city, ripe lemons provide an invitation to the passers-by, both foreigners and locals. Who would not dream of living here, in this city, Urbs, *but also in this very house? Such beauty—*Schönheit*—may be savored as a promise of happiness.* In the meantime, *one cannot overcome a slight feeling of contradiction—of Gegensatz. There are few such houses, and obviously, they are not meant for us who remain distant onlookers.*

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Simmel's approach to social and cultural reality has sometimes been questioned because it seems to generalize eccentric and local observations by stripping them of their historical specificity and, instead, granting them an eternal status.[30] A similar observation might be advanced vis à vis Simmel's two essays on Rome.

30 Writings by Georg Lukács, Theodor W. Adorno, David Frisby, and others inform such a critical position vis à vis Simmel's essays and thinking. D. Frisby, *Sociological Impressionism: A Reassessment of Georg Simmel's Social Theory* (London: Heinemann, 1981).

Basically, Rome is a city that Simmel considers a source of beauty and complete unity. In his supplementary side-note, Simmel further signals a fundamental contrast between silence and noise as well as between pleasure and cruelty.

In his first essay, however, Simmel does not cite topographical names or other specific examples. Hence, it is hard to evaluate his observations in a culture-analytical manner that highlights the somaesthetic contribution of his 1898 sojourn in Rome to his thinking and concepts expressed in "Rome: An Aesthetic Analysis."

In "*Gegensatz*" (1899), Simmel's second essay, he points to a particular phenomenon in a particular place, and thereby makes his speculation less totalizing, less absolute. As we shall see in the following section, an empirically updated dialog with his site-specific observations may be possible and thus allow us to add an event-related and autobiographically self-reflective layer of urban-cultural somaesthetics to Simmel's portrait of a local public garden, which I will now situate in a particular somaesthetic context, temporally as well as processually.

Indeed, although it is not always indicated as a green area on tourist maps or in guidebooks, the Sant'Alessio Garden provides an urban space that is open to the public during the day seven days a week. It is not a spectacular garden and not at all as spectacular as the *Giardino degli Aranci* (the Orange Garden), which is a bigger and much more well-maintained park with genuine orange and lemon trees. Neighboring the Santa Sabena Church, the latter remains the major iconic garden and panoramic viewpoint on the green Aventine Hill.

In 1976, guided by our mother, my brother and I happened to pass by the Sant'Alessio Garden around Christmas during our first visit to Rome, which was also my first trip abroad.[31] The *souvenir of lemons hanging on the trees in the middle of the wintertime* fuels my mental image of Rome. Moreover, this particular image remains closely related to my memory of the Aventine Hill, where green trees and gardens contribute to the exclusive, nearly suburban and park-like splendor, which is remarkably different from the urban and densely built parts of Rome.

Is this encounter with fresh *yellow lemons* the reason that in 1976, I made a radical switch from photographing with black-and-white negative film, which had run out after some 36 images, and then loaded a color diapositive film for slides? It may have been done consciously or not. Diapositives are meant to be projected on a screen in a darkened room, thus allowing for the *color aspect of photographed reality* to stand out intensely as light. However, I search in vain for the lemon motif on these slides taken on the Aventine Hill in general and the Sant'Alessio Garden in particular. As I now look at them against the sky or a lamp, I do not see any yellow lemons in the original slides. Nonetheless, I still recall the Aventine Hill as my encounter with lemons, rather than oranges. Those lemons have become a decisive utopian feature in my mental image of Rome: *the city where one may encounter lemons on the trees in the middle of the wintertime*.

In returning to Rome at Christmas and New Year more than forty years later, this *image of lemons*, vague yet persistent, pulls me back toward the Aventine Hill. Here, oranges seem to predominate in the marvelous *Giardino degli Arancia* (the Orange Garden) at least. The geography also appears different and a little confusing compared to the inner and imprecise memory of walking on a path outside the gardens overlooking the Tiber. The initial walk took

31 Arriving by metro from the southern suburbs of Rome, we walk from the city wall towards the centre of town. We thus may have visited the Sant'Alessio Garden with the intention of actually exploring the orange garden further down the street. Located next to the Santa Sabina Church, this second park is a spectacular garden with pines, orange and lemon trees, and a genuine panorama platform. Tourists usually walk in the opposite direction, following the itinerary proposed by the guidebooks, which starts at the center of Rome and finishes at the periphery; they therefore enter the Sant'Alessio only by chance on a hasty detour.

place four decades ago; and in fact, there is no such path there.[32] However, oranges and *lemons* do grow on the Aventine Hill in the wintertime; it is magic.

Just a few months later, I am back in Rome, which I explore in a partially new mental light because, *in the meantime*, I have read Simmel's second and secret text from the city. This text adds symbolic weight to the Sant'Alessio Garden, which I hastily revisited at New Year's 2017–2018 but without recognizing the place. As I arrive in mid-April 2018, no longer in the winter but in the sunny and warm springtime, I immediately head for the *Giardino di Sant'Alessio*.

In order to mentally prepare myself, I respectfully follow our original 1976 itinerary, which I reconstruct by locating and intuitively redoing the black-and-white images that conduct me all the way to the Aventine Hill, now carrying a digital camera that produces images in color. At the end of the day, surrounded by evening darkness, I arrive in front of the Sant'Alessio Garden where the original black-and-white film ended. A guard from the neighboring church is about to lock the gate; he gently lets me into the garden and allows me to go all the way to the wall for a brief visit. The noise along the Tiber, which was noticed by Simmel before 1900, is still here, even remarkably so, in the evening darkness.

Figure 6: "Gegensatz/Schönheit"? Roma VI, 2018

32 Nearly half a year later, I realize that a pedestrian road framed by walls does exist. However, at the time of my return to Rome, in winter 2017 and spring 2018, this street is not accessible to the public, protected as it is by a locked gate at one end and by a combination of "no trespassing" signage, video cameras, and private guards at the other end. Indeed, this oblique path, which was paved but without automobile traffic, was open to pedestrians forty years earlier, as I realize while scrutinizing two color slides I took there in 1976, one from above, and another one from below the steep path linking the Aventine Hill to the road along the Tiber.

A second memory: my first revisit (early January 2018) was a last-minute family walk just a few hours before our departure. Because we started at the city center of Rome, this winter walk followed a direction opposite the initial one (Christmas 1976), which started at the Aurealian city wall, at which my mother, brother, and I had arrived from the suburbs.

Darkness has invaded a city that will soon go to bed. Already this panorama escapes the visitor's topographic deciphering and turns into the signature of an evening city. This cityscape may be particularly breathtaking to somebody who has just been let into the closing garden for a brief view from the wall at the far end. The city itself is disappearing in obscurity, but in the meantime*, it emits sounds, noises, and vibrations. Together, they recall the cyclical world of human work and routine. Even this beautiful spot on Earth is pervaded by the constraints of everyday life.*

*Contradiction (*Gegensatz*) animates beauty (*Schönheit*), which survives, visually as well, by way of powerful elements: the Dome in the horizon, the Façade, broad and mighty, appearing further down in the visual field, and the river, dark and reflective, which occupies the middle field of the image and represents the axis around which the entire city circulates. The river also orients the traffic lanes at the bottom of the image. A particular soundscape arises from there and captures the attention of the person at the wall above.*

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Returning on the following afternoon (my third re-visit after four decades of absence), I record the soundscape as it is continuously encountered by pedestrians like me, who start their walk at the bottom of the hill on the linear boulevard with cars, buses, and trams below. Climbing noble and clerical streets bordered by palace-like bourgeois villas, I approach the Sant'Alessio Garden on the Aventine hilltop. A positive surprise: the neighboring Sant'Alessio church is open to the public, and so is the courtyard in front of it, which features a distinctly audible fountain at the wall toward the *Giardino di Sant'Alessio*, which must be entered through a gate from the street.

During my walk up the hill, I hold a small sound recorder in my hand and wear leather-padded headphones over my ears, through which I take in the amplified environment. I orient my body by way of the instant playback of my continuous recording. Because of this auditory concentration on a microphone reality that is conveyed via sound-insulating headphones, it is not until I enter the Sant'Alessio Garden itself that I realize that here, a genuine metamorphosis is taking place on this late afternoon.

The garden no longer appears silent, dark, and relatively empty as it does in Simmel's 1899 text as well as in my image-borne memories of 1976 or New Year 2017–2018. Instead, it is noisy, bright, and full of people. Perhaps a hundred children as well as many adults, who could be parents or relatives, populate the Sant'Alessio Garden. Instead of the solitary contemplation that pervades Simmel's text and my last-minute visit the previous evening, vital expressions emanate from children who are climbing the smaller orange trees or spontaneously playing football against the plastered walls of the Sant'Alessio church and courtyard.

The intensity of the children's voices accompanying their bodily action, emphasizes the auditory dimension of space, which I savor and absorb. The play taking place before my eyes and the sound invading my ears are all I sense and acknowledge as long as the children and their parents are still present *en masse* in the garden. Eventually, I decide to sit down on a bench at a certain distance from the epicenter of ball-playing, and I have my base there for several hours.

Whereas Simmel described children screaming in the streets outside and below the garden as a disturbing factor—a contradiction—I myself perceive the presence of children and parents inside the garden as a positive contribution. Is this not an unexpected suggestion of the possibility that, below the surface, a powerful human lifeworld may exist in Rome? Generally, the Aventine Hill looks noble and sacred, while tourists outnumber local residents in the streets, parks, and squares. Now, however, an urban lifeworld, which typically develops around childcare

institutions such as kindergartens and primary schools,[33] suddenly surfaces and nearly explodes in a setting where one would hardly expect this to happen. There is a public school for young children just across the street behind an ochre wall; in reality, civic institutional life is not that far away.

The contextual beauty that Simmel praised in Rome on an objective and external level as well as a mental and subjective one is now augmented by a *community* layer that enriches the somaesthetic feeling of urbanity, at least in a foreigner like me, who is visiting the Sant'Alessio Garden on a late Wednesday afternoon. In particular, the children's way of combining bodily play and high-pitched voices adds an entirely new dimension to the deep and narrow park. This place, which is a little neglected, is usually a quiet refuge for local dog-walkers or tourists on their way from central Rome to the Aventine Hill. Here, they may add a second panoramic view to the one they already had from the splendid orange garden down the street. Like Simmel in 1898, they inevitably sense the sound of the city and its traffic below the Sant'Alessio Garden along the course of the Tiber.

In this moment, however, the *Giardino di Sant'Alessio* is a public space in which the practices of playing and talking are suggestions of a vital urban culture that may, in turn, inform feelings of beauty. In fact, the somaesthetics of the young children playing and of their parents absorbed in mutual conversation are impressive, and they cannot be ignored by other visitors, local or foreign.

In retrospect, this experience in the Sant'Alessio Garden was initiated by Simmel's naming in "*Gegensatz*" of the place that he ties to the principle of contradiction in contemporary culture. Reading Simmel encouraged me to recall this particular site as well as the urban-cultural and photographic images that I have associated with it since 1976. However, an active attempt at retrieving the place itself in urban space has led me to discover a twin somaesthetic realm.

First, I practice a spatial and bodily *mimesis* of past practices to find my way back to the place itself. Along the way, my walk is enriched by elements of rephotography and sound recording. Thus the active search involving the eyes and ears of a body walking was the basis of a perceptive surprise, nearly a shock, which was released at the arrival into the Sant'Alessio Garden. In reality, this surprise or shock was informed less by my own perceptive attention than by the bodily expressions of other people. The remarkably active presence of playing children and their parents in mutual conversation profoundly affected the urban place that I, a foreign visitor, happened to share with them.

Accordingly, my individual somaesthetic *experience* was reinforced by the somaesthetic *expression* by which children and parents added a community-based dimension to a public garden and its slightly neglected physical reality. In this context, the following question arises: How may one practice an attentive analysis of place in a way that remains faithful to beauty and urbanity at the levels of both somaesthetic experience and expression?

33 Lars Gemzøe, who is an urban scholar in Copenhagen and a close colleague of Jan Gehl, the author of *Life between Buildings* (1971), once noted in passing that one discovers a whole new city when one has children, mainly because of kindergartens and schools they attend. This observation highlights the degree to which childcare institutions contribute to civic life in the contemporary city. Such institutions certainly belong to a formal and rationally managed system, as conceptualized by Jürgen Habermas in his *Theorie des kommunikativen Handelns* (Frankfurt am Main: Suhrkamp Verlag, 1981). Simultaneously, crèches, kindergartens, schools, afternoon activity clubs, etc. are sources of a *Lebenswelt*, a communicative "lifeworld" (in hermeneutical and Habermasian terms). Non-instrumental relationships between people evolve not only at the level of children (friendships for now, sometimes forever) but also among their parents, who have many things to share in addition to the life and upbringing of their children. This welfare-induced urban lifeworld should be taken into account if one wishes to understand everyday urban culture in general; my observations below attempt to do so in Rome, and they reflect the viewpoint of a foreign visitor who happens to be present in a public park during the late afternoon along with local users.

V. Presence and Representation – Beauty and Urban Culture

Elements of a reply will be provided thanks to another visitor in Rome who, unlike Simmel, considers children the opposite of a disturbing factor. Indeed, their spontaneous play in public spaces is recognized as a source of knowledge and somaesthetic learning. I refer to the Danish architectural writer and architect Steen Eiler Rasmussen, who visited Rome in the spring of 1952 and later immortalized a small group of ball-playing schoolboys in a seminal book, *Experiencing Architecture*.[34] Rasmussen may allow us to formulate the particularity of my own approach to expressive urban life in a public garden of Rome two-thirds of a century later. In his book, Rasmussen describes an improvised football game on the upper stairs outside and against the apsis of Basilica Santa Maria Maggiore in Rome. At a polite distance, he observes how the boys practice urban architecture and claims that these boys *experience* architecture to a degree that goes far beyond that of typical visitors who arrive and leave on tourist buses.

In Rasmussen's view, the children's play belongs to another order of perception that is different from that of tourists. Their active bodily expressions make the observing architect think that thanks to the children's game, he also experiences something essential and new. Accordingly, one may claim that a somaesthetic realm is established, which unites the children playing with their football and the foreign architect equipped with a sketch book and camera. In *Experiencing Architecture*, Rasmussen publishes two photographs of the boys playing football in front of the Santa Maria Maggiore apsis. These images and the story underlying them remain the most frequently remembered elements of the entire book, which is a modern treaty on architecture and in which somaesthetic components are foregrounded.[35]

Recalling Rasmussen's account in *Experiencing Architecture*, I will describe the situational components of my own experience in the Sant'Alessio Garden on that afternoon and early evening. Having arrived inside the local garden on the Aventine Hill, I feel *surrounded* by myriads of children who dynamize and accelerate the space—trees, walls, grass and paths—in such a hectic and engaged way that one would not be surprised if the branches of orange trees broke under the weight of climbing girls and boys or if plaster started peeling off the façades after being hit by a football. This scenery is not only radically opposed to the meditative silence and contemplation that Simmel associates with the Sant'Alessio Garden; it also differs from the situation in which a relatively distant observation of others, such as children, is possible during Steen Eiler Rasmussen's visit to the Santa Maria Maggiore staircase on a weekday morning.

Once inside the garden, I stand in the way of various footballs that fly around not far from my headphones, recorder, and sound-innervated body. Thus, distant observation and photographic representation become problematic. So close to the children playing ball in the Sant'Alessio Garden, photography, as practiced by Rasmussen, feels risky. More importantly, however, it appears inadequate to represent the actors in the garden in photographs. The very act of photographing the children, even casually and discreetly, may neutralize the ways in which their sounds and movements affect the visitor's perceptive presence. Intuitively, at least, the very idea of taking pictures of their bodily practices appears alien to the happy *surprise of being somaesthetically present in a place of such intense somaesthetic expression*. Here I am, surrounded by life, and in the beginning, I am not even looking at it from the secure distance that would allow it to be framed as a motif.

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34 Steen Eiler Rasmussen, *Experiencing Architecture* (Cambridge, Mass.: The MIT Press, 1959 [1957]), 16–18.

35 For a comparison of habit and experience in Steen Eiler Rasmussen, Danish architect, urban planner and writer, and Walter Benjamin, German philosopher and cultural critic, see Henrik Reeh, "Rumsansning mellem vane og oplevelse. Walter Benjamin og Steen Eiler Rasmussen" in *Fejder. Studier i stridens anatomi i det intellektuelle liv,* ed. Frederik Stjernfelt et al. (Copenhagen: Museum Tusculanums Forlag, Københavns Universitet, 2004), 233–246.

Soon, I seek refuge in the outer part of the garden, half way to the wall overlooking the Tiber and the street below. The traffic along the river gently enters the recorded soundscape, which, later, reveals little noises that stem from the pictures taken by my reflex camera. Admittedly, during my prolonged stay in the garden, I finally do take a few pictures, but I never integrate the children playing or their parents into the motifs. Consequently, I will be unable to document my observations of play and conversation in suggestive photographs as in Rasmussen's *Experiencing Architecure*. Instead, I deliberately drop the idea of making documentary photographs, and as an alternative approach to representation, I allow the sound recording to continue.

Vision is one thing and auditory representation is another. Perspectival photography is objectifying and overly referential, while a sound recording certainly leaves objective traces, but the latter are distinctly processual and more ambiguous in their rendering of the environment. Because of the recording, the auditory presence of a perceptive body is privileged and pictorial representation is abandoned.

Sitting on my bench, I listen to life; I let time pass. Listening and life are united for about an hour and a half (according to the time indications of the sound recording). It is not until that moment that I move all the way to the wall overlooking the city, and I first attempt to rephotograph the color slide motifs I took here in December 1976. Are the children and their parents about to leave? This may progressively be the case and justify my change of occupation from meditative presence to active representation by way of photography.

Nonetheless, I do not interrupt the sound recording. The voices of some tourists at the wall occasionally become audible; in the sound recording their utterances are fully distinct despite the complex noise of the traffic below, which also reaches the ears of the person standing next to the wall, which is me. Insofar as children and parents are still around, they now operate in the background both spatially and auditorily.

Recording, arriving, hearing, standing in the way, seeing, sitting down, listening, standing up, moving, looking, and photographing: all these practices, and probably more, compose my being there in the late afternoon and early evening at the same time as the children and their parents are, but I am increasingly on my own, and I am now at a certain distance. Nevertheless, the children and their intense playing continue to support my way of being present at the site.[36]

During my visit to the public garden, I have trouble believing that this scenery is real. The exceptional intensity of life in the park does not immediately fade, but I know that it will neither last the entire evening, nor come back every day. In this situation, however, I feel tempted to associate the lively somaesthetic co-presence in the park with an experience of urban beauty.

Certainly, the question remains regarding the possibility of talking about beauty in a society that is not fully just. The question echoes a short text by Siegfried Kracauer on Christmas markets in Berlin of 1932.[37] In "*Weihnachtlicher Budenzauber*" ("The Magic of the Christmas Stalls"), Kracauer concludes that however much the smooth surfaces of the rational and commercialized city are broken up and challenged by stalls and street musicians at Christmas markets, the intriguing music of a beggar playing will not sound joyful until the figures of social injustice

36 Does this temporary atmosphere correspond to a wider, shared dream of Rome, of Italy, of urban life, and of urbanity? This is a large question that one should certainly elaborate in the appropriate context.

37 Siegfried Kracauer, "Weihnachtlicher Budenzauber," published on 24 December 1932 in the *Frankfurter Zeitung*, a liberal German daily, and later in his *Straßen in Berlin und anderswo*, 1964. "Hinter einem Tannenwaldbündel sitzt ein Bettler, der sich ausdrücklich als einem »Zivilblinden« bezeichnet. Er bringt auf seinem Harmonium Melodien hervor, die das Hennengegacker und die Flötenimitationen übertönen. Sie werden erst dann lustig klingen, wenn alle diese lebensgroßen Elendsfiguren klein geworden sind wie die springenden Püppchen, mit denen wir spielen." Siegfried Kracauer, *Straßen in Berlin und anderswo* (Berlin: Das Arsenal, 1987 [1964]), 32.

have been overcome.[38]

The argument according to which urban beauty relies on social justice might be advanced vis à vis the ecstatic children and their parents in friendly conversation in the Sant'Alessio Garden, and I am inclined to interpret the very scene as *beauty informed by urban life*. However, there is one obvious difference from the situation described by Kracauer in crisis-ridden Berlin of the early 1930s. At first sight, these parents on the Aventine Hill in Rome and their children from the public school across the street do not suffer from poverty or immediate social injustice.[39]

The relationship between Steen Eiler Rasmussen's experience on the staircase of Santa Maria Maggiore and my own in the Sant'Alessio Garden may be summarized as follows. Rasmussen observes, photographs, and identifies with boys playing ball on the staircase, expecting them to have an intense experience of urban architecture, which then intensifies his own sensation of the place. My situation, however, is different. At first, I am surrounded by the children in the Sant'Alessio Garden; I see them climbing the trees and playing football while they constantly move about and emit all sorts of cries and gestures. However, I refrain from photographing them and their somaesthetic expressivity. In turn, I withdraw to a bench on which I maintain an acoustically condensed connection to the animated public garden surrounding me before turning to the project of rephotography, which is the reason for my visit. Deciding to continue the sound recording, I maintain a somaesthetic mode of experience, which I spontaneously connect to the categories of beauty and urban culture.

Hence, my approach to the environment and the practices within it differs from Rasmussen's approach. My approach is less directly objectifying, yet I remain conscious of both the children's expressive playing and my own perceptive position, which I interpret as an experience of beauty.

VI. Beauty and Children's Happiness

Undeniably, the atmosphere in the Sant'Alessio Garden is far from the integral silence and instantaneous muteness praised by Georg Simmel in his "*Gegensatz*" fragment. It is also different from Steen Eiler Rasmussen's encounter with ball-playing boys on the apsis staircase of the Santa Maria Maggiore Basilica. However, the foreign visitor's experience of being present remains in close contact with Simmel's speculative lines:

> *That was the greatest and most wonderful [quality] of Paradise, that it offered its joys ["Freuden"] without this condition – like, in a totally weak echo ["Nachklang"], the happiness ["Glück"] of children still lives without contradiction and comparison.*[40]

Simmel attempts to moderate the contradiction between silence and noise, which he previously considered an eternal condition in human life. Having acknowledged that human experience is contradictory, as it takes place after the expulsion from Paradise, Simmel

38 Siegfried Kracauer was trained as an architect, but he also cultivated wider interests in philosophy and sociology, including the writings of Georg Simmel. In fact, Kracauer finished a book manuscript, probably the first monograph on Simmel, in 1919, barely one year after Simmel's death in September 1918. The book was published in its entirety in 2004. Siegfried Kracauer, "Georg Simmel. Ein Beitrag zur Deutung des geistigen Lebens unserer Zeit," in his *Werke, Band 9: Frühe Schriften aus dem Nachlaß* (Frankfurt am Main: Suhrkamp Verlag, 2004).

39 Contemporary society in Rome still has social contradictions and shortcomings at many levels that keep reminding us of the question: Under which conditions is it possible to consider something beautiful? A reasoned answer might easily exceed the realm of aesthetics and enter that of social theory and criticism. Please note that Kracauer does not address the issue of beauty but of joy ("*sie werden erst dann lustig klingen,*" he writes in the quote above [32]). However, the issue of joy may run parallel to that of beauty; both are related to the ethical basis and implications of aesthetic judgments. On Kracauer's text, see Henrik Reeh, *Ornaments of the Metropolis, op. cit*., 142–144.

40 In German: "Das war das Größte und Wunderbarste des Paradieses, daß er seine Freuden ohne diese Bedingung bot – wie, im ganz schwachen Nachklang, noch das Glück der Kinder ohne Gegensatz und Vergleichung lebt." G. S. [Georg Simmel], "Gegensatz", *op. cit*., 381.

nonetheless cultivates a certain nostalgia toward life in its original state of non-division and non-alienation. This nostalgia seems to have a possible foundation in contemporary life, which Simmel designates "children's happiness" ("*das Glück der Kinder*"). In modernity, too, the happiness of children sometimes seems full, unreserved, and absolute: "without contradiction and comparison" ("*ohne Gegensatz und Vergleichung*").

Indeed, Simmel's understanding of children as representatives of happiness-beyond-contradiction was an external judgment formulated by an adult who no longer quite remembered, or recognized, the inner doubts and conflicts that pervade a child's existence (e.g., the subjectivity that Walter Benjamin depicted in his *Berlin Childhood around 1900*).[41] Sitting on a bench in the park next to playing children, however, I expect them to be inhabited by all sorts of alienating powers, and I would hardly consider their *Glück* unconditional nor absolute. To me as an observer and a stranger, the joyful presence of children and their parents nevertheless inspires a *surprised feeling of happiness* that is rare in a big city and in life in general, even on a late springtime afternoon in Rome.

In terms of age, I am no longer a child. In the Sant'Alessio Garden, I do not play like a child with a football or climb orange trees. Nonetheless, in my position as a somaesthetically present observer, I am struck by a feeling that I *hold onto*, assisted by Simmel's formula, "*das Glück der Kinder, ohne Gegensatz und Vergleichung*" ("the happiness of children, without contradiction and comparison"). Thus, the children present in the *Giardino di Sant'Alessio* contribute to an imaginary, perhaps illusory, yet striking *feeling of happiness*.

Conditioned by the unexpected somaesthetic presence of children, the place that I now rediscover under the sign of Simmel's naming and reading in "*Gegensatz*," takes on a new quality. The entire atmosphere here, in that very moment, adds a particular relief to the objective features and everyday functions of the Sant'Alessio Garden. Does this place suggest metaphors of an urban-cultural paradise albeit only for a brief and noisy time?

After all, the idea of an urban-cultural paradise is at stake in the associations that the Sant'Alessio Garden evokes in me, as I am back for the third time within a few months. Even if, according to Simmel, its atmosphere of *Glück* (supported by human life around me in this place) should be only a "totally weak echo" of the Garden of Eden in the *Genesis* of the *Old Testament*, my encounter with the Sant'Alessio Garden on this particular day pursues a contextual conception of beauty like the one described in Simmel's "*ästhetische Analyse*" of Rome, a conception of beauty that also permeates his observations in the "*Gegensatz*" fragment about the singular Sant'Alessio Garden.

However, differences remain. In mid-April 2018, the equivalent of Simmel's urban "noise and excitement" ("*Lärm und Unruhe*") is generated by children playing inside the garden, who effectively ascribe new meaning to this place. Far from simply disrupting a rare beauty, as in Simmel's experience of the city beyond the garden wall, the playing children in present-day reality reinforce the vital somaesthetic dimension in my experience of a contradictory beauty in Rome. In this particular context, Rome recalls its second name, *Urbs*: the city par excellence, to which this afternoon and early evening add a particular flavor.

41 See for instance Benjamin's chapter "Mummerehlen" (ca. 1938), in which mimesis and misunderstanding converge and allow for a distorted yet independant imagination in a young boy. Walter Benjamin, *Berliner Kindheit um neunzehnhundert*, in Walter Benjamin, *Gesammelte Schriften, vol. VII* (Frankfurt am Main: Suhrkamp Verlag, 1989), 417–418.

Figure 7 "Das Glück der Kinder"? Roma VII, 2018

Just before leaving the Sant'Alessio Garden, I pay tribute to a location that so far has been invisible, while it allowed me to sense the place and to orient in it.

On this bench, I line up my tools: a magnifying glass, a sound recorder (in a small cotton bag), next to two bags containing my camera equipment, a smartphone, a water bottle, a cap, and other utensils that allow me to withstand the pressure of heat and noise in unknown environments throughout the day.

*My body feels increasingly exhausted, but it is also reinvigorated by the ongoing urban exploration. In this context, the bench becomes a site of happiness—*Glück*—that, quite luckily, shows up, as I reach my destination: the sole place that Simmel names inside Rome, a place of silence and pleasure. To be sure, this public garden also implies contrasting experiences that stem from the view of movement and haste as well as from the bodily reverberations of noise and instability. However, thanks to their intense playing after school, the children that I come across in the* Giardino di Sant'Alessio *may connect us to a certain* Glück, *that is, to happiness and luck. Does not Simmel point out that the* Glück *of children is a reminiscence of unconditional pleasure in Paradise?*

The bench in the photograph invites me to be present next to the garden's playful children. After initially hearing, sensing, and seeing them so vividly thanks to their movements, I increasingly perceive them as a supportive background that animates the place in general. In the meantime, *I rephotograph pictures where I first took them in 1976. More than forty years later, I bring the original slides back to the site. They are lodged in a small box on the bench next to the magnifying glass through which I call forth some of the details in the colored emulsion of the film, such as a bench similar to the one where I now sit.*

Conclusion

Rome allowed Simmel to challenge the intimate link between big cities and the *blasé* attitude. Rome is a city of both difference and unity; it is a city of beauty and self-realization. However, it is also a city where delight is accompanied by cruelty as when silence encounters noise. In this way, Rome provides a cityscape for the rediscovery of aesthetics, including the elements of conflict and non-identity, which epitomize modernity and characterize many contemporary works of culture and art.

Returning to a singular topographical site—the Sant'Alessio Garden on the Aventine Hill—which Simmel named and interpreted, the author of the present text recognized many of the features that Simmel described more than a century earlier. However, by 2018, the Sant'Alessio Garden suddenly appears to be more than a secret and discreet place. On one occasion, it even becomes an irresistible illustration of Rome as a city in which everyday urban life makes an essential contribution to urban space, if not to Beauty itself, as well as to *Glück* (happiness and luck).

Instead of being reduced to a city of tourism, Rome continues to exist as *Urbs*, the city per se, as it did on the very spot once visited by Simmel, and on the day I happen to return to it. This garden brings together children, parents, citizens, and a foreign visitor—the author of the preceding pages—who absorbs everything around him by way of headphones and a sound recorder. I happen to have read Simmel recently and to have been in this park during my first visit to Rome. As a teenager, I photographed the Sant'Alessio Garden on the Aventine Hill in color slides, which have become visual echoes of an imaginary dialog with the memory of yellow lemons. My discovery of yellow lemons growing in winterly Rome suggested another way of urban living than in North-European cities such as Copenhagen in the mid-1970s. Is Rome still capable of contributing to a utopian conception of urbanity?

Well into the spring evening of 2018, the visitor, seated on his bench, considers that the time has come for a panoramic view from his temporary position in the *Giardino di Sant'Alessio*. Now, long after local family life has faded from the park, in which light is also fading, photography may finally be relevant. Stretching out his arm with a smartphone camera in his hand, he makes a slow 360-degree movement to retain a clockwise testimony of the site surrounding him. His somaesthetic experience in this place will soon end. Five minutes later, just before sunset, fourteen images are stored in the digital memory of his smartphone.

All photographs (1–7) are by the author.

Summary

Georg Simmel, a philosopher and sociologist in the Berlin of 1900, searched for a conception of anesthesia that was capable of addressing the reality of consumption, money, and metropolis. Based on Simmel's hypothesis, according to which the *blasé attitude* (*Blasiertheit*) pervades life in big cities, one might expect the roles of aesthetics, sensory experience, and beauty to be minimal. This observation certainly applies to Simmel's everyday environment of modernity in Northern Europe, such as in his home city of Berlin. However, modern subjects are on the move, as was Simmel during a prolonged stay in Rome in 1898, a place (*Urbs*) that invited him to reconsider the relationship between city and beauty as well as that between elements and totality in his aesthetic analysis of Rome (1898). Beauty is derived from the unity of non-beautiful elements, he claimed. An anonymously published fragment by Simmel (1899) went even further. Here,

in relating a particular experience of Rome, he revealed contrasts and fostered a principle of contradiction that inaugurates a conflictual register in the aesthetic experience of modern urban culture. Following Simmel's footsteps in Rome 120 years later, one may visit the site that Simmel visited—the Sant'Alessio Garden on the Aventine Hill—to explore and comment on it according to somaesthetic and urban-cultural guidelines. While many may expect tourism to have taken control, reality proves more complex. An urban lifeworld is unfolding and generates a surprised feeling of beauty in the foreign visitor who re-visits this site. Listening to the children's voices and sensing their playful movements in urban space thus becomes a somaesthetic experience of both beauty and city.

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Performative Somaesthetics

Interconnections of Dancers, Audiences, and Sites

Jessica Fiala and Suparna Banerjee

Abstract: *This essay contributes to the performative branch of somaesthetics through an exploration of the triangulated relationships among performers, audiences, and sites. Dancer agency, the multisensory nature of audience experiences, and embodied encounters with non-traditional dance sites provide lenses for analyzing the dynamic relationships between these elements as live performance unfolds. Through theoretical frameworks and two dance case studies—TooMortal (2012) by Shobana Jeyasingh and Dusk at Stonehenge (2009) by Nina Rajarani—the authors draw upon somaesthetics to examine the holistic comingling of embodied aesthetic appreciation and physical environments.*

Keywords: *somaesthetics, dance, site, Bharatanatyam, audience experience, rasa.*

Introduction

Situated at the intersection of philosophy, embodied practices, and the cultivation of the body to advance self-awareness, somaesthetics is a field ripe for the analysis of dance. Both combine theory and practice, cross disciplinary boundaries, and offer insights into entwined relationships between the self and the body—how embodied experiences inform (and comprise) the self and how the body can function as an active agent in philosophical practice (LaMothe, 2015; Spatz, 2015).

Richard Shusterman developed somaesthetics as a field "concerned with the sentient perceiving 'body-mind'…rather than with the body as a mere physical object or mechanism" (2007, p. 139), an orientation with direct applications to the nuanced work of dancers in practice and performance. Casting a wide net, Shusterman related somaesthetics to philosophy as an "art of living" (2018a, p. 2), outlining dual aspirations of "critical study and meliorative cultivation of the body," while situating "the body as the site of sensory appreciation (aesthesis) and creative self-fashioning" (p. 1). This scope bridges dancers and spectators, incorporating theoretical considerations of the body as both a conveyor and perceiver of aesthetics.

Shusterman's holistic approach offers a lens for viewing multiple somaesthetic elements simultaneously at play. On the side of aesthetic creativity, the dancer is a subject who expresses through honed corporeal intelligence while navigating physical, social, and situational factors. Appreciating a spectrum of vantage points, somaesthetics recognizes spectatorship as embodied,

responsive, and distinctive. Acknowledging external influences on the body, somaesthetics enables a grounded analysis, recognizing the significance of site for examinations of the somaesthetics of performance.

In this essay, we map the relationships between these three elements to propose a framework for analyzing live performance as a durational experience hinging on the triangulation of dancers, audiences, and sites. With this strategy, we seek to provide a lens for deploying somaesthetic theories within studies of performance in a manner that recognizes both the individual nature of somaesthetic awareness and the overarching contexts and dynamics that inform such experiences.[1]

To do so, we have chosen to feature choreographies staged outside of theatrical settings to tease out the array of somaesthetic qualities encountered in built space, as well as the dramatic differences that distinct sites offer. Throughout this paper, we use the term "site-based"[2] to highlight the centrality of site for our analysis, while also acknowledging the spectrum of methods of working and staging reflected in our examples. Our choice of site-based works is informed by our own backgrounds as researchers keen on investigating embodied experiences of shared spaces and navigating the borderline between theory and praxis (Banerjee, 2014, 2018; Fiala, 2014, 2016), specifically as practitioners of the classical dance form Bharatanatyam,[3] which has roots in ancient India and contemporary manifestations across the globe.

We examine two site-based choreographies as examples of the divergent somaesthetic qualities of site, choreography, and audience positioning—*TooMortal* (2012) by Shobana Jeyasingh, performed amongst the pews of historic churches, and *Dusk at Stonehenge* (2009) by Nina Rajarani, presented in the open expanse in front of Stonehenge. Our perspective takes a broad overview, sketching a theoretical blueprint for seeing intersecting and mutually influential components at play in site-based dance, with the two selected choreographies serving as examples for illustration and comparison. Prior to delving into these works, we briefly lay the groundwork for analysis—performative somaesthetics, dance as a form of knowledge, embodied audience experiences, and the influential factor of site—to form a foundation for analyzing site-based performance.

Performative Somaesthetics

In crafting a structure for somaesthetics as a discipline, Shusterman outlined three core dimensions, ranging from contextual to comparative and practical approaches. *Analytic somaesthetics* covers scientific as well as ontological, epistemological, and sociopolitical analyses, exploring the "basic nature of bodily perceptions and practices" as well as how such factors

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1 The present essay lays the theoretical groundwork for practical applications of somaesthetics, which we pursue in our companion article focused on exploring the sensory nature of audience experiences, as well as approaches for engaging dance audiences (Banerjee & Fiala, 2019). For additional analyses of relationships between site, audience, and performers, see Fischer-Lichte (2008b), Hunter (2012), and Stock (2011).

2 Our usage of "site-based" acknowledges the range of forms and processes that work with site can involve, from "site-specific" to "site-determined," "site-referenced," "site-conscious," "site-responsive," or "context-specific" (Pearson, 2010, p. 8). Alongside myriad forms of site-based work exist an array of degrees of community involvement in creation and performance, as well as a variety of methods of positioning and engaging audiences. For studies of site-based performance, see Wilkie (2002), Hunter (2005, 2015), and Pearson (2010). Co-author Suparna Banerjee (2014) has further examined site-based diasporic South Asian dance in the UK in her doctoral dissertation (see Chapter 5, pp. 184-235).

3 As a form that includes storytelling components as well as abstract dance that balances rhythm, precision, and grace, Bharatanatyam's combination of the physical, emotional, psychological, cultural, and spiritual offers an example of the abundant channels for somaesthetic analysis within the field of dance. Over the past century, Bharatanatyam has traced a path from temples to theatres, from India to diasporas, and from theatres to non-arts sites. Numerous studies have explored political, social, historical, artistic, and power ramifications of these movements. For examinations of Bharatanatyam's history over the past 150 years, see Gaston (1996), Meduri (2004), O'Shea (2007), and Soneji (2011).

"function in our knowledge and construction of reality" (1999, p. 304). *Practical somaesthetics* entails the physical practice of "disciplined body work aimed at somatic self-improvement" (p. 307). *Pragmatic somaesthetics* turns a methodical, expository eye toward such physical techniques, both individually and comparatively (p. 304).

Under the umbrella of comparative inquiry, Shusterman divided somatic practices into representational practices, concerning the body's physical appearance, and experiential disciplines, dedicated to "inner" experience aimed at improving both the quality and the acuteness of somatic awareness (p. 305). These categories serve a functional purpose, helping to isolate and identify phenomena for analysis, however, Shusterman underscored the interconnectedness of these dimensions as well, noting in particular the overlap between external and internal factors, as well as self-focused and other-focused practices, all of which influence somaesthetics on an individual level (p. 306).

While discussing representational and experiential modes of practice, Shusterman noted the possibility for a third arena, performative somaesthetics, considering this frame for disciplines such as martial arts, gymnastics, and athletics. Ultimately, Shusterman observed that such activities could fall within representational or experiential arenas, to the degree that they "aim either at the external exhibition of one's strength and health or alternatively at one's inner feelings of those powers" (1999, p. 306). These two prongs of external exhibition and internal feeling offer productive avenues for comparative somaesthetic analyses of dance, along with possibilities for dance studies across practical, pragmatic, and analytic dimensions. That said, our aim is to contribute to scholarship building out the particular arena of performative somaesthetics in terms of its applications for the performing arts generally and dance specifically.

In this essay, performative somaesthetics provides a framework for exploring a sphere of activity that exists in-between the representational and experiential—creative and intentional embodied aesthetic activity manifested in the distinctive relationships between dancers, sites, and audiences as live performance unfolds. Site-based dance is here viewed as durational, relational, and contextual. Performative somaesthetics provides a basis for analyzing site-based dance as a dynamic intersection that bleeds across representation and experience, entailing the crafting and evolution of relationships with space, audience, and one's own body.

Somaesthetics and Dance—Agency, Artistry, and Site

Shusterman's centering of the "body-mind" (2007, p. 139) provides myriad paths for exploring dance in its variety—showcased to audiences and refined alone in studios; entrenched in systems of power and symbolic of acts of resistance; a connection to history, culture, or community; a moving meditation; a means of dynamically relating to time and space; and a method of fundamentally altering the body that changes how one traverses and experiences the world. Despite the clear connection between somaesthetics and the aesthetic body-based labor of dance, the intersection of somaesthetics and dance is still gradually gaining scholarly attention.[4]

Applications have included dance education and performance (Arnold, 2005; Carter, 2015), kinesthetic awareness and strategies for refinement (Mullis, 2006, 2008), particular choreographers and practices (Ginot, 2010; Horváth, 2018), and the critique of tendencies to downplay dancer personhood in the valuation of choreographic works (Shusterman, 2019).

4 Over recent decades, somaesthetics has been incorporated into research surrounding numerous artistic disciplines, including poetry (Bartczak, 2012), literature and performance (Woźniak, Lisowska, & Budziak, 2017), visual art (Feng, 2015; Ryynänen, 2015), photography (Shusterman, 2012; Antal 2018), music (Maus, 2010; Tarvainen, 2018; Marino 2019), and architecture (Shusterman, 2011, 2012; Veres, 2018).

Peter J. Arnold posited dance as a form of somaesthetic education that provides students tools for "understanding and appraising; creating and composing; and performing and expressing" (p. 53). Taking a broad view, Curtis L. Carter proposed multiple avenues for dance somaesthetics, from dance as it is constructed by choreographers and enacted by dancers, to the embodied reception of dance in spectators, to broader possibilities provided by comparative analyses of somaesthetic qualities among different dance forms. Promoting a balanced approach to somatic practices as "*objects* of research," Isabelle Ginot foregrounded the importance of situating such work within histories, preferences, and power, noting that "sensations themselves are in no way exempt from ideology, exclusions, or disenfranchisement" (p. 25). Tying dance into larger aesthetic histories that privilege art objects over practice, Shusterman stressed the need to shift value structures toward acknowledging dancers as subjects who bring "a compound consciousness" to their work, one that includes the performance of emotion, narrative, or states of being as well as the dancer's "own somaesthetic feelings" (p. 157).

Existing work aids dance practitioners and scholars in potentially drawing upon performative somaesthetics to develop strategies for cultivating audiences' awareness and appreciation, to incorporate somatic responses into performance analysis, or to elevate dancer performance. In addition to such practical applications, performative somaesthetics enables the analysis of a coalescence of influential factors, including the immediate elements of audiences, dancers, and site; overarching layers such as histories, cultures, and power dynamics; and more personal, individually determined factors.

Singling out the dancer aspect of dancer-audience-site relationships provides a lens for viewing dance as a form of embodied knowledge reflected in artistic choices that respond to a variety of situational variables. Focusing on the durational nature of dance, Sondra Horton Fraleigh referred to dance as "a *becoming*" where "even the still points flow through time" (1987, p. 192). Dance in this vein can be seen as a process, an agential act that is constantly developed within and in response to a given situation. While dancers regularly navigate elements of choice and chance in performance and practice across studio spaces and traditional theatres, non-traditional sites provide a platform for foregrounding dancer adaptability and artistic responsiveness. Additionally, describing dance as "a *becoming*" promotes a process approach to qualitative interpretations (internal to performers and appreciated by audiences) whereby qualities such as beauty, groove, power, or the grotesque are not just identified or felt in a moment, but are experientially performed and apprehended through time.

In moving from habitual theatre or studio spaces to alternative settings, dancers step into environments that require not only new applications of technique, but also reconsiderations and modifications, at times spontaneously, to adjust to unexpected challenges. This dancer versatility can be viewed as a convergence of dance technique, performer choices, and site that can be further understood via Shobana Jeyasingh's comments on classical dance:

> *We do not want to be bound by history, but we do not want to deny it. It is desirable that one first understand classicism [i.e. classical dance, ballet, or Bharatanatyam] and then understand how to depart from it. To break rules you have to know the rules in a very deep way* (qtd. in Katrak, 2014, p. 75)

While site-based dance may "break rules" of standard dance practice, it also leans upon embodied knowledge and artistry, merging mental, physical, emotional, relational, and artistic registers. Dance in non-traditional settings is therefore more than physical adjustments to spatial

restraints; it is an artistic reworking of technique and choreography imbued with dynamic relationships to audience and site, actively wielded and transformed by dancers in real time.[5]

Sensorial Audience Experiences

Beyond somaesthetic analyses specific to dancers, there are precedents for considering the sensory-rich nature of audience experiences of performing arts. In the terrain of Indian classical arts, audience encounters have been described in the *Natyashastra*,[6] an ancient compendium on the performing arts, in terms of *rasa*.[7] Here *rasa* is explained as the cumulative, embodied, emotional outcome resulting from determining stimuli, consequential reactions, and "complementary psychological states."[8] A wealth of scholarship has explored the *Natyashastra* and *rasa*,[9] while the concept of *saundarya*—aesthetics or beauty—and the related *saundarya shastra*, or "theory of beauty," can be traced back to this seminal work (Ghosh, 1951). In addition to providing a foundation for identifying and experiencing cadences, gradations, and differences, *rasa* also lends researchers metaphors of embodied experience relevant to somaesthetics. Likened to the nuanced and layered appreciation of flavor in cuisine, the concept of *rasa* offers a framework that entwines the physical, transcendental, emotional, and personal to produce an essence that lingers with an audience.

Drawing out this metaphor, Saskia Kersenboom noted that the "tasting" of an exquisite art experience is a matter of "not only proper ingredients, but also their combination and exact timing…a chain of causes and effects that gradually build up a dominant sensory awareness" (Kersenboom, 2007, p. 211).[10] Audience experiences are here connected to sensory encounters and firmly temporal in character. This speaks to the durational nature of live performance where, even if contributing to an overarching feeling, momentary and cumulative "tastes" play out through contrasts, evolutions, repetitions, reinterpretations, shifts, pauses, and surprises that transpire through time and within a particular context.

While shifting performative journeys serve as robust fodder for analyzing audience responses, these sensations are not fully siloed from the contexts in which they occur. Audiences' experiences are enmeshed in physical environments, sociopolitical conditions, histories, and

5 In this paper, we speak broadly of dancer agency in the context of specific site-based choreographies, however, further scrutiny could explore distinctive somaesthetic aspects of choreographic practices, dancers' embodiment of choreography, elements of improvisation, and intersections of these components in site-based dance performances.

6 Attributed to Bharata Muni, the *Natyashastra* is a compendium on the performing arts written in Sanskrit dating to between roughly 200 BCE to 200 CE, although estimates vary. Comprising a total of 36 chapters, this treatise includes analyses of the nature of performance, the structure of a play, stage construction, genres of acting, body movements, the art of makeup and costuming, musical instruments, and the integration of music within dance/theatre performances. For Sanskrit words, we here use common translated formations and italics rather than diacritical markings.

7 In Sanskrit, *rasa* has connotations ranging from juice to taste, flavor, or essence, with implications varying from intoxication to the metaphysical absolute, and from concepts such as "beauty" to perceptions of "good taste" in the performing arts. For details on the evolution of meanings of *rasa*, see Thampi (1965).

8 "*vibhāva anubhāva vyabhicāri saṃyogād rasaniṣpattiḥ*" ["Now the Sentiment is produced (*rasa-niṣpattiḥ*) from a combination (*saṃyoga*) of Determinants (*vibhāva*), Consequents (*anubhāva*) and Complementary Psychological States (*vyabhicāri- bhāva*)"] (Ghosh, 1951, 6:31, p. 105). These references have been similarly translated to describe *rasa* as the "result of *vibhava* (stimulus), *anubhava* (involuntary reaction), and *vyabhicari bhava* (voluntary reaction)" (Bharata Muni, qtd. in Schechner, 2001, p. 29). This cause and effect sequence can be understood as the emotional response of an audience, moved by a performer's cultivation of a mood, with dominant moods outlined in the *Natyashastra* including love, courage, fear/shame, disgust, humor, sorrow/compassion, surprise/wonder, and rage. For additional analyses of *rasa*, see Chaudhury (1952), and Sundararajan & Raina (2016).

9 See, for example, Cuneo (2015), Dace (1963), Hogan (1996), Larson (1976), and Raghavan (1988).

10 Kersenboom connected this viewpoint to other approaches to aesthetics, commenting that "Experts in this canon are rasikas, that is 'tasters' of art, a perspective that does not deviate from the etymology of the Greek *aisthanomai*, that is, 'to taste,' for aesthetics" (2007, p. 211). Highlighting distinctions between Aristotle's *Poetics* and Bharata Muni's *Natyashastra*, Richard Schechner emphasized that, "Rasa fills space, joining the outside to the inside. Food is actively taken into the body, becomes part of the body, works from the inside…An aesthetic founded on rasa is fundamentally different than one founded on the 'theatron,' the rationally ordered, analytically distanced panoptic" (2001, p. 29).

personal intersections of culture, biography, and place. Viewing audiences within such a web of relationships and situations both highlights the sundry nature of somaesthetic stimuli at play in live performance and reveals "audience" as a role both offered and taken up through various means. As Kalpana Ram explained, *rasika* (an aesthete of performing arts in Sanskrit) is not merely descriptive, it offers audiences a category to step into; it is an "invitation to take up a distinctive way of being…to inhabit the time of the present in a very particular way" (2011, p. 161).

Outside of the specific category of *rasika*, and across genres and performance contexts, audiences are invited to inhabit roles ranging from passive to active, and to experience in an assortment of manners conveyed overtly and subtly, positioning both audiences and performers in a variety of relationships with one another. Erika Fischer-Lichte has emphasized one such distinction between theatre viewed as an art object versus theatre approached as an event (2008a, p. 36). The difference outlined is in part embodied, wherein performance as an event is "not merely interpreted by the audience but first and foremost experienced" (p. 17).

While acknowledging the interpellative power of the myriad ways in which audiences are invited to experience performances, Ram also noted the agency of audiences who, while not neutrally invited, maintain the potential to respond in unanticipated ways (2011, p. 168). Connecting such agency to somatic experience, Ketu Katrak elaborated that that "Rasa is felt—bodily, mentally, and emotionally" (2014, p. 19), bridging prevalent mind-body divisions and facilitating an understanding of the spectator's experience via bodily forms of knowing that interweave conceptual, sensory, and critical analyses (pp. 17-21).

Placing *rasa* theory in dialogue with a consideration of audience somaesthetics could provide rich layers for examining the interconnected nature of sensory stimuli and emotional responses. Yet, Shusterman has also outlined a distinction, contrasting somaesthetics with transcendent strains within the broad realm of *rasa* theory, a comparison that he related to the emplacement of art experiences.[11] On the one hand, Shusterman emphasized that "the bracketing off of art from the ordinary space of life is what affords art its feeling of lived intensity and heightened reality" (2001, p. 370). This observation particularly resonates with performing arts staged in established theatrical venues or arts institutions where attendance may entail a form of pilgrimage to a space reserved and designed for focused arts encounters. However, Shusterman balanced this perspective with an understanding of art as "a real part of life," where "our experiences of art are an important part of our real-life experiences" (2003, p. 297), proposing that, "art's apparent diversion from real life may be a needed path of indirection that directs us back to experience life more fully through the infectious intensity of aesthetic experience and the release of affective inhibitions" (2001, p. 370). Artworks such as site-based dance, public art projects, environmental/ecological art, and community-engaged art potentially bear a relationship to the transformative return described by Shusterman. Here, known places, identities, and habits can be both recognized and confronted anew via the prism of art, provoking a reorientation, however momentary, within quotidian space.

The triangulation of dancers-audiences-site is therefore more than a shift in location, potentially entailing as well a shift in relationships and in the dynamics of relating to self, others, and the choreography being performed. In this regard, we view audience encounters as simultaneously individual, relational, and contextual—embodied amalgams of personal histories and factors, performance stimuli (auditory, visual, haptic, etc.), conceptual content,

11 For an exploration of Shusterman's approach to art as dramatization in relation to *rasa* theory, see Shusterman (2001), Ghosh (2003), and Shusterman (2003).

and the site in which experiences unfold.

Somaesthetics and Site

Whether a performance is held in a theatre, restaged outside an art venue, or crafted uniquely for and in relationship with a particular place, site supports the creative development of immersive or focused encounters, and serves as an influential vessel or landscape for experience. While addressing a number of facets of dances staged in sites that are not typical art spaces, this paper focuses on just two examples of a spectrum of choreographic methods for working with site. Such projects can range from work reliant upon theatrical settings and technical capabilities, to work staged or restaged outside of such spaces, to "site-specific" projects[12] that are deeply connected to, created for, and distinctly existent within a specific site.

Somaesthetics has been used to unpack embodied relationships with site in the contexts of architecture (Shusterman, 2011, 2012; Veres, 2018), atmosphere (Shusterman, 2012), and urban environments (Shusterman, 2000). In *Thinking Through the Body*, Shusterman drew readers' attention to the visceral aspects of engaging with architecture, writing that the soma

> *enables us to appreciate not only the visual effects and structural design features that rely on perceiving distance and depth, but also the multisensorial feelings of moving through space (with their kinesthetic, tactile, proprioceptive qualities) that are crucial to the experience of living with, in, and through architecture.* (2012, p. 224)

Resonances of sounds, shades of light and shadow, linearity or circuity, feelings of warmth or cold, inviting nooks or formal spaces all engage the body in navigating and taking on distinct modes of being and behaving within designed space. Applying this approach to performance spaces, the choice of a site, the site's transformation through staging, and the logistics of welcoming an audience all set a tone before a performance begins. The body is integral to absorbing and responding to site-based stimuli, but the body is itself also situated, embedded in the site it is experiencing. As Shusterman succinctly stated, "Just as we always experience a building in terms of its background environmental framing, so we cannot feel the body alone independent of its wider *Umwelt*"[13] (2012, p. 226). This insight reveals the sensory-rich and connotation-laden environments through which audiences pass and within which they experience performance.

In addition to an immersive environment, site provides a distinctive frame—a context replete with histories, as well as formal and informal associations (which themselves inform physical responses, such as feeling at ease, intimidated, etc.)[14] As Shusterman noted in *Performing Live*, "Experience is inevitably contextual, since it involves the interaction of an experiencing subject and the environing field, both of which are in flux and are affected by their interaction" (2018b [2000], p. 96). This observation fosters an interpretation of site as a key factor that informs

12 Underscoring the difference between site-specific works and existing works restaged in nontraditional locations, Mike Pearson and Michael Shanks argued that site-specific performances are "inseparable from their sites, the only contexts within which they are intelligible" (2001, p. 23).

13 Georges Canguilhem described *Umwelt* in relation to perceived relevance, as "a voluntary sample drawn from the *Umgebung*, the geographical environment. But the environment is precisely nothing other than man's *Umwelt*, that is, the usual world of his practical perspective and experience. Like this *Umgebung*, this geographical environment that is external to the animal is, in a sense, centered, ordered, and oriented by a human subject (that is to say a creator of techniques and values)" (2000, p. 20).

14 In "Art as Dramatization," Shusterman explored art as an act of "the staging or framing of scenes" (2001, p. 367) and explained that "A frame not only concentrates but also demarcates; it is thus simultaneously not just a focus but a barrier that separates what is framed from the rest of life" (p. 370). The term "barrier" is particularly relevant to the relationship between site and audience, as it can be interpreted both as a division between spaces and a means of drawing attention to hindrances to arts access, which can range from location inconvenience to forms of invitation/welcome, physical access, degrees of community engagement or lack thereof, and financial costs of participation.

somaesthetic experiences, rather than functioning as a mere static background.

While studying site-based performance, Victoria Hunter elaborated on such an active relationship between audiences and site, describing a performance site as "metaphorically freed from its everyday." In this context, she argued that a site "holds the potential to both locate and *re-locate* the individual, drawing their attention to the site whilst simultaneously challenging pre-conceived notions of the site as the real world is shifted momentarily 'out of focus'" (2012, p. 259).

It is this perceptive and experiential shift that in part separates performative somaesthetics from activities focused primarily on improving bodily appearance or sensory awareness. While the soma is central to dance performance, audience responses, and encounters with a site, in live performance these triangulated elements go beyond their individual components, crafting a scenario that opens up the potential for interrelated somaesthetic explorations. The dance case studies below enable us to examine these intertwined elements while also offering distinct examples of somaesthetic environments—delineated as sensorium and naturescape.

TooMortal

Shobana Jeyasingh's[15] 20-minuted piece *TooMortal* was created for the unique setting of rows of church pews, and has been restaged in multiple locations since its premiere in 2012 at the Venice Biennale (including London, Stockholm, Belgrade, and Worcester). We have chosen one iteration to serve as an example of the work, the 2013 staging of *TooMortal* in St. Pancras Church,[16] a Grade I heritage building that dates back to 1819, located in Euston, London.[17] This columned Greek revivalist style church was built with bricks faced with Portland stone, topped by a stone portico and tower, and accented by red iron entrance doors bordered by decorative terracotta moldings. An external transept, supported by four female draped figures, resembles the caryatids at Erectheion, Athens (Fig. 1). Along the interior, interspersed with pews and pillars, two stories of small windows lead to an apse partially ringed by six columns raised on a marble-faced plinth backlit by stained glass (Fig. 2).

Each staging of *TooMortal*[18] has been exclusively set within the congregation's wooden box pews. Hard, angular, and orderly, the pews in *TooMortal* provided striking contrast to dancers' bodies and movement qualities while also serving as a distinctive dance setting. Critic Sanjoy Roy described the physical makeup of this performance space: "regular rows, blocked in by aisles, contained on the outside but with detailed internal features—shelves, slopes, angles" (2012). In addition to structures of support for dancers to lean on or push against, the pews offered unique choreographic possibilities. As Roy stressed, "The pews…afforded her a kind of visual 'editing' that would have been impossible on stage." This enabled Jeyasingh, in her words, "to place the body at various levels, to see it from unusual perspectives, and to erase it quickly by

15 Choreographer Shobana Jeyasingh has drawn inspiration from unconventional spaces for more than 25 years. *Duets with Automobiles* (1993), a dance for the camera, was set in a corporate office building in London. *Counterpoint* (2010) staged female bodies around a water fountain in London's Somerset House. Her recent piece *Contagion* (2018) was set in venues connected to World War I and commemorated the 1918 Spanish Flu pandemic. For more information, see shobanajeyasingh.co.uk.

16 For more on this location, see: "Church of St Pancras." Available at: https://historicengland.org.uk/listing/the-list/list-entry/1379062 Accessed July 9, 2019.

17 This iteration of *TooMortal* was organized by Dance Umbrella on October 15, 2013. Suparna Banerjee attended this performance of the work and experiential comments draw upon her notes. For an exploration of *TooMortal* that combines somaesthetics with sensory ethnography, see also our companion article, "Somaesthetics and Embodied Dance Appreciation: A Multisensory Approach" (Banerjee & Fiala, 2019).

18 Images, video clips, interviews, and additional project information are available at: https://www.shobanajeyasingh.co.uk/works/toomortal.

just dropping the dancers down" (*Church Times*, 2012, Figs. 3 and 4).

Figure 1 Exterior caryatids; **Figure 2** Interior congregational space
St. Pancras Church, London. (Photos by Mike Quinn)

Figure 3 Contrast and intimacy between body and built space, *TooMortal* (2012) by Shobana Jeyasingh, St. Mary's Old Church, London (Photo by Carole Edrich)

Inspired by the arrangement of pews, Jeyasingh imagined "a wooden, wave-rocked sea, from which humans emerge and are tossed about" (qtd. in Roy, 2012). Accordingly, the dancers' soaring and sinking between pews resembled a sea voyage, with tumultuous waves alternated with stillness. Technically pivoting on western contemporary dance idioms, and with dancers only partially visible, *TooMortal* highlighted torso bends, neck rotations, tossed hair, shaking, and suspended legs. This fluid movement vocabulary, executed by a cast of six female dancers, unevenly divided in pews on either side of the aisle, dramatically contrasted with the

site's geometric pews and pillars (Fig. 3). Commenting on this juxtaposition, Jeyasingh, who conceived of *TooMortal* as an intimate conversation of the body with built space, described the piece as "an essay on bodies in this very man-made structure." Underscoring that "The human body is…ephemeral, prone to damage," Jeyasingh emphasized the distinction and intimacy "between human body and permanent building" (*Church Times*, 2012).

Figure 4 Shifting levels, *TooMortal* (2012) by Shobana Jeyasingh, St. Swithun's Church, Worcester. (Photo by Richard Dean, Courtesy of Shobana Jeyasingh Dance)

Clad in crimson red, the female bodies could be viewed as invoking a blaze of passion within the pious church setting, which echoed with sound artist Cassiel's remixed score of chimes based on James MacMillan's *Tenebrae Responsories*. While Jeyasingh highlighted formal aspects of her choice to cast women (*Church Times*, 2012), multiple commentaries have called attention to the symbolic nature of positioning women's bodies within a church setting, alternately flung in exaggerated struggles and still, with a gaze fixed on the audience (Roy, 2012; Nijhawan, 2017). Amita Nijhawan wove together the significance of female bodies, choreography, and church site, writing that,

> *There is something acutely disturbing about seeing women's heads balanced on a row of coffins [Fig. 5], lined up, one next to the other, hair flowing and clad in red. This calls to mind, all at once, witch trials, sexual and war crimes against women, and ritual sacrifices of women—not as individuals, but as a group* (2017, p. 24)

While *TooMortal* can be interpreted as a critique of historic injustices, the piece also offered audiences the possibility to create their own myths, transforming the fixed boundaries of religiosity, gender, and history. In one sequence, dancers performed incessant, horizontal sliding movements, re-scripting the setting as a palimpsest to be reimagined by dancers, choreographer, and audiences.

Figure 5 Dancers balanced in a row, *TooMortal* (2012) by Shobana Jeyasingh, St. Mary's Old Church, London. (Photo by Carole Edrich)

Taking a step back from the dancers' embodiment of choreography, the church site can be interpreted as a sensorium for audiences, a contained built environment that serves as an immersive and focused vessel for site-based performance. Within the geometric container of the church, fashioned in stone, wood, and glass, audience members were led by a group of Dance Umbrella volunteers to stand and observe the piece in respectful silence, their comportment mirroring the formal, reserved atmosphere of the church. Quietly standing in this controlled domain, audiences, enveloped by the sound of echoing bells, took in the scene of artificial light beams scattered by odoriferous haze, watching the choreography from within a contained multisensory world.

Viewing *TooMortal* via the lens of somaesthetics, the body can be understood as a theme of the piece (women's bodies), a mode of performance (deep engagement with the site and choreography reliant on a particular setting), and a visceral means of implicating audiences. Drawing upon the work of Maurice Merleau-Ponty, Sarah B. Fowler underscored that "no sense is independent of any other, nor is the organization of our sensory experience independent of our moving through whatever world we inhabit" (1985, p. 62). In this vein, relating to the space as a sensorium refers to the enclosed, orderly site as well as staging, choreography, and the embodied positioning of audience members to experience the work. Rather than an absolute definition, this terminology serves an evocative function—a means of describing an ambiance, drawing out key themes of a case study, and providing a method of contrasting one somaesthetic scene with another.

Dusk at Stonehenge

Commissioned by the Salisbury Art Festival and choreographed by Nina Rajarani,[19] *Dusk at Stonehenge* used the metaphor of dusk to reflect the comingling of body, nature, and site.

19 Through her company Srishti – Nina Rajarani Dance Creations, Rajarani has experimented with both urban spaces and digital technologies in performances such as *Bend it…* (2009), staged on a soccer field; and the multimedia performance *Quick* (2006), staged both indoors and outdoors. For more information, see srishti.co.uk.

Recognized as a World Heritage Site by UNESCO in 1986, Stonehenge (Wiltshire, UK) is comprised of a circle of standing stones, weighing approximately 25 tons each and reaching 4.0 meters high. This prehistoric site invokes a range of associations: a Druidic Temple, an ancient astronomical instrument, a tourist attraction, a symbol of ancient Britain, and a part of England's cultural heritage (Chippindale, 1990). Architecturally, Stonehenge is celebrated for its sacredness (Darvill, 1997), as well as its sonic qualities (Till, 2011). Building on this latter feature, the site's managers organize performances for the celebration of the summer solstice, attended by nearly 20,000 people each year. It is in the context of this annual performance series that *Dusk at Stonehenge* was performed.[20]

If *TooMortal*'s site was transformed into a contained sensorium, *Dusk at Stonehenge* could, in contrast, be viewed as a naturescape, a piece set within an expansive landscape and in relation to elements, such as the setting sun and the ancient stones of Stonehenge, that span beyond human-scale physical and temporal limitations. The pieces diverged in process as well. *TooMortal* toured to numerous venues, but relied on a very specific type of structure and spatial configuration, and was rooted in an intimate connection and contact between dancers' bodies and church pews. *Dusk at Stonehenge* was created for an outdoor festival at the site, but the piece was rehearsed in a studio setting[21] and dancers were prohibited from physically interacting with the ruins.

Nevertheless, *Dusk at Stonehenge* choreographically referenced the site. Spatial patterns mirrored the circle of stones, themes drew upon ancient nature-based rituals and myths, and collaborators aurally embedded the work within the site through a soundscape that superimposed music on the gushing sound of the wind. Green and red costumes, heightened as the light of the setting sun fell across the performance, "were chosen to reflect the resplendence of nature," with green symbolizing the prosperity of the land, and red suggesting rich sunset hues (Subramaniam interview, 2013).

Whereas *TooMortal* drew largely from modern and postmodern dance techniques and aesthetics, *Dusk at Stonehenge* densely relied upon the clear geometry and gravitational pull of Bharatanatyam, echoing the stark architecture and dense stones of Stonehenge. Dancers' stylized walking (Fig. 6) paralleled the erect stones, while the horizontal lintel stones resembled arm extensions foundational to the form (Fig. 7). This choreographic deployment of the dance technique's angularity placed dancers' geometry in constant dialogue with the megalithic stones, while rhythmic sequences contrasted with the fluidity of the grass and expansive landscape. Simultaneously, moments of sensuousness worked to transcend the fixity of Stonehenge, balancing geometry and flow within both dance and site.

Dusk at Stonehenge's composer Kuljit Bhamra adapted the score to the site's existing aural environment through the positioning musicians, including drummers, a vocalist, and voice modulators across the stones. Alongside and through this sound installation, winds at Stonehenge collided with the stones, resonating with a low frequency hum, and adding a layer of "aural architecture"[22] to the site-based performance.[23]

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20 Research into this site-based work was conducted from afar, through video, media, interviews, and publications.

21 *Dusk at Stonehenge* dancer Sooraj Subramaniam described the process in an interview with Banerjee, explaining, "We visited the site once before just to see how we could choreograph the dance. Rehearsal was restricted to a brief run through just prior to the performance" (Facebook interview, April 29, 2013).

22 Barry Blesser and Linda Ruth Salter used the term "aural architecture" to denote the psycho-phenomenological effect cast by the sonic experience of space (2009, p. 3).

23 Dancer Sooraj Subramaniam commented on his experience of the music, recalling that "The music had an ethereal quality simply because it was outdoors, and much of it was improvised…the overall feeling was poetic…the music would resonate between the stones, so it felt as though the music was coming from the stones" (Facebook interview, April 29, 2013).

Figure 6 Stylized walking; **Figure 7** Circular patterns with arm extensions.
Dusk at Stonehenge (2009) by Nina Rajarani. (Photos by Bimala Naysmith)

In addition to physical contrasts and resonances, as well as sonic landscapes, *Dusk at Stonehenge* was thematically tied to the site, foregrounding spiritual connections between humans and nature. Dancers performed a full-bodied bowing salutation to the solar deity; spread into a circle, reinforcing the concentric ring structure of the site (Fig. 7); and utilized gestures signifying holy oblation to the land (Fig. 8). In interviews with co-author Suparna Banerjee, *Dusk at Stonehenge* dancer Sooraj Subramaniam (2013) affirmed the connection between choreography and site, noting that the choreography retraced the histories of the place, animating themes of human relationships with nature.[24] Complementing these more abstract references, the dancers depicted *ganga avatarana*[25]—a mythological tale of the descent of the river Ganga from heaven to earth—thereby symbolically bringing the holy river to Stonehenge, layering and interweaving distinct spiritual sites. The myth denotes not only embodied social life, but also the well-being of the land. By featuring the hydrological cycle (as a marker of livelihood) with its associated myths, Rajarani called attention to the longstanding link between the site and humans, cultures, and histories.

The personal, intimate aspects of human/nature relationships could in part be seen in abstracted sequences based upon the invocatory piece *alarippu*,[26] through which the choreography underlined the blossoming of the self through ritual and in relation to expansive natural referents. Highlighting an atmosphere of shared tranquility, hinging on site, dancer Jahnavi Harrison described the scene, "The sun lowered as we began, floated away as we just enjoyed dancing in the open air, surrounded by rolling fields, staring sheep, and birds circling overhead" (2009). The work concluded with dancers disappearing behind the stones, leaving the lingering sunlight to illuminate the scene. In contrast with the formality embodied by audiences of *TooMortal*, *Dusk at Stonehenge* audiences relaxed on the grass, lounging in a picnic environment caressed by the breeze and engulfed by the setting sun.

24 Subramaniam spoke of the connection of spirituality and place, and the emotion elicited for him through the particular somaesthetic experience of a Bharatanatyam performance incorporating religious myths at an ancient spiritual site: "The stones felt sacred, each…like a deity with personality and compassion" (Facebook interview, April 29, 2013).

25 In Sanskrit, *ganga avatarana* literally means the descent of the river Ganga. In this narrative, Lord Shiva (one of the major deities in the Hindu pantheon), the bearer of the river Ganga, saved the earth from devastation. For more information, see Warrier (2014, p. 41-48).

26 *Alarippu* (literally means blossoming like a lotus) is an invocatory piece of Bharatanatyam repertoire, which features precise isolations of the neck, eyes, and shoulders.

Figure 8 Paying homage to the site, *Dusk at Stonehenge* (2009) by Nina Rajarani.
(Photo by Bimala Naysmith)

Atmosphere, Performance, and *Rasa*

In drawing upon somaesthetics to study two site-based choreographies, we have sought to outline the spectrum of elements that inform performer and spectator encounters; variances between sites that influence choreography and somaesthetic experiences; and the relationships that can develop between audiences, performers, and sites in live performance. Each layer offers room for unique somaesthetic analyses—dancer articulation, spectator responses, and the influence of site on each. In combination, we argue that there is a further somaesthetic consideration at play in the durational triangulation of dancers-audiences-sites that occurs during live performance, brought into relief through the example of site-based dance, which offers a revealing lens for unpacking the simultaneous influence of multi-directional experience and response.

Applying somaesthetics to site-based performance provides an avenue for moving beyond the intimate connection between performer and spectator to a perspective that takes in the entire performance environment. In *Thinking Through the Body*, Shusterman described the architectural concept of atmosphere as

> *encompass[ing] the vast array of perceptual qualities, dominant feelings or moods, and ambient effects that emerge not only from the complexity of forms, relations, and materials of the articulated space but also from the complexity of practices, environmental factors, and experienced qualities that pervade the lived space of a building or other architectural structure* (2012, p. 232)

Acknowledging the difficulty of pinpointing a phenomenon that interweaves somatic, psychological, personal, and physically constructed qualities, Shusterman maintained the usefulness of atmosphere in the context of somaesthetics. He noted that "Atmosphere is experienced by the subject as a perceptual feeling that emerges from and pervades a situation; like other perceptual feelings, atmosphere is experienced in large part as a bodily feeling" (2012, p. 234).

Gernot Böhme brought such personal responses to atmosphere into dialogue with design-based counterparts, noting that discussions of atmosphere have spread to discourses ranging from town planning to interior design, radio, and television (2013). In highlighting the conjoined sides of reception and production, Böhme provided added layers to perceiving site-based dance as both drawing upon atmosphere crafted in built space and adding to this atmosphere through lighting, sound, and other staging techniques. Although somaesthetic impacts and personal associations may vary from person to person, Böhme's insights here bring attention to the intentionality behind architecture and staging, wherein site and staging act upon the traverser or audience member in part because they were designed to do so.[27]

Erika Fischer-Lichte underscored Böhme's larger research into atmosphere, emphasizing that atmosphere is not created by any singular element within a space, but rather by "the interplay between all of them which, in theatre productions, is usually carefully crafted" (2008b, p. 75). While *Dusk at Stonehenge* audiences were presented with a seamless outdoor performance featuring themes of human relationships with nature, as with many site-based performances, this encounter was heavily managed. Dancers worked to adjust technique to create an illusion of ease in performing in an unfamiliar environment,[28] musical elements were carefully installed to facilitate an immersion in distinct sounds, and the site was monitored and guarded to ensure preservation.

TooMortal, through the deployment of Dance Umbrella volunteers and engagement of audience bodies, made the management of space visible, while also utilizing subtle staging strategies for lighting and sound. Comparing site-based choreography to partner dancing, Jeyasingh described environments as coming with "a personality." Such personality informed *TooMortal*'s initial creation and has since turned the dance into a "site-reactive" piece, requiring adjustments with every restaging to fit within the unique configurations of each venue (qtd. in Mackrell, 2012). Considering such unseen work highlights that site-based performance goes far beyond surfacing genius loci, and requires intentional crafting, a meeting of choreographer, dancers, and site, facilitated through a spectrum of stagecraft techniques and technologies.

We have explored somaesthetics in the context of dancers via intimate physical interactions with the built environment, choreographic patterns, and dancers' post-performance reflections. These approaches are just a few methods of delving into dancers' dynamic engagement with site, which includes both dancer performance as well as dancers' aesthetic appreciation of the site and performance elements. In addition to their own embodied experiences and responses, dancers participate in the production of atmosphere through rehearsed approaches and in-the-moment responses to both site and audiences.

From the audience side, Fischer-Lichte has described the physical experience of atmosphere, noting that the performance spectator "is not confronted with an atmosphere, is not distanced from it; rather s/he is surround by it, s/he is permeated by it. In this sense, atmosphere is something which is physically sensed" (2008b, p. 76). Site-based performance therefore provides a lens for combining the somaesthetics of atmosphere with embodied experiences of live performance. Writing on *rasa*, Saskia Kersenboom noted that likening performance encounters to cooking "situates cognition in the senses, and turns understanding experiential," emphasizing the "process and physical character of experience" (2007, p. 211). Broadening this metaphor of the tasting of

27 For further examination of the influence of atmosphere, see Griffero (2014).

28 Describing the sensual discomfort involved in translating Bharatanatyam technique to a nontraditional site, Sooraj Subramaniam explained that, "We had choreographed and rehearsed in a studio, so the texture of the grass made it difficult to move initially" (Facebook interview, April 29, 2013).

art, we situate *rasa* within atmosphere to enable a view that encompasses the layers contributed by site, staging, and dancer creativity to the unique character and sensations of performance. In our analysis, this intersection of atmosphere and *rasa* can be seen in the dramatic contrast between the distinctive flavors of *TooMortal*'s sensorium and *Dusk at Stonehenge*'s naturescape.

In addition to revealing the interconnections between situational environment and embodied aesthetic experience, the comingling of atmosphere and *rasa* serves as a reminder of the complex relationships between site and multifaceted individuals. In this article, we have repeatedly written of audiences and dancers in general terms, however, it is important to stress the personal nature of somaesthetic experience as well as the inextricable connection between experience of site and "self-identity" (Proshansky, Fabian, & Kaminoff, 1983). Both sites featured here interweave cultural practices, histories, and religious themes, all of which can elicit a variety of memories and associations. These palpable pasts are complicated by elements of contemporary transcultural identities and power differentials in the UK, elements variously interpreted and felt by choreographers, dancers, and audience members.

Site-based performance may open the possibility of deepening relationships between performers, audiences, and site, yet how this is experienced across individuals is inevitably kaleidoscopic. Elements of community fostered within the delimited performance space and duration remain precarious. Discussing the shared urban landscape of multicultural cities, Shusterman noted, "These streets, through which the city's many classes, cultures, and ethnicities move and mix can create a dynamic, hybrid collective." Yet he balanced this potentiality, recognizing that the "flexibly voluntary" constitution of such collectivity means that, "the same streets can be used to walk away, not just to come together" (2018b [2000], p. 110). This imagery of paths converging and diverging provides an apt illustration of the particular coalescence of performers, audiences, and site present in live performance, intersecting for a brief experiential encounter before dispersing.

Whether cultivating a sensorium, naturescape, or other environment, site-based performance crafts an atmosphere for experience that incorporates visual, auditory, and tactile senses, as well as psychological, historical, and social layers. Rather than finite definitions, the concepts of sensorium and naturescape provide touch points and broad categorizations, examples within an extensive array of site-based somaesthetic qualities. As such they can be understood in part through comparison, both with quotidian spaces passed through beforehand and afterward, and with other performance sites and stagings that provide markedly different somaesthetic environments.

Each of the dance performances outlined above offered a distinct experiential terrain for choreographers/performers and spectators. In discussing these works, we have periodically isolated dancers, audiences, and sites to scrutinize elements of somaesthetic relationships and experiences. However, as Sondra Horton Fraleigh has emphasized, "Time, space, and movement are never separate except in analysis" (1987, p. 178). In this vein, the performative somaesthetic lens provides a framework for viewing individual components as well as their combined impact, positioning dancer, audience, and site within a dynamic relationship that unfurls in shared time/space.

Conclusion

In this paper we have considered the visceral, sensory qualities of the site-based dance performances *TooMortal* and *Dusk at Stonehenge*, which entwined sites, choreography, and

content to produce distinctive aesthetic experiences. Performative somaesthetics has provided a structure for grounding such site-based dance within webs of physical and socio-cultural phenomena, exemplified by the triangulated encounter of dancers, audiences, and sites. We have used performative somaesthetics to unpack dancer agency and artistry, audience experience as an embodied encounter, and site as a frame and immersive vessel for performance. To examine each element is to gain one vantage point on a shifting, mutually dependent, and amorphous relationship. In exploring the particular somaesthetic factors at play within each, and in their interconnection, we work to gain a richer understanding of the distinctive shared context that unfolds during live performance.

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The value of aesthetic judgements in athletic performance

John Toner and Barbara Montero

Abstract: *A considerable volume of research has explored spectators' attraction to the aesthetic aspects of sport. However, considerably less attention has been devoted to an evaluation of the aesthetic dimension of sport from the performer's perspective. We hypothesize that such evaluation can benefit athletic skill, and in the current paper substantiate and elucidate some of the types of aesthetic experiences athletes may undergo and consider their potential use in sports. We see this work as propaedeutic to future empirical work investigating the role of aesthetic self-evaluation in athletic performance.*

Keywords: *Aesthetics, bodily awareness, expertise, consciousness.*

That Rodger Federer and other great athletes move in aesthetically valuable ways, is as plain as day to the spectator. What is not apparent from the spectator's point of view, however, is whether athletes such as Federer have aesthetic experiences of their own movements. Do elite athletes' movements feel graceful to the athletes themselves? And can athletes' judgements regarding the aesthetic qualities of their own movements ever be conducive to optimal athletic performance? Although some philosophers of sport have touched on such topics, there has yet to be an extensive investigation into the role of such judgements in athletic skill. We think that there ought to be and the present paper presents some first steps in doing so, steps that, we hope, will be propaedeutic to future theoretical and empirical work investigating the role of aesthetic self-evaluation in athletic performance.

In the following sections, we draw, in part, on phenomenological evidence and in part on a wide range of empirical evidence to support the view that experts retain a keen and acute bodily awareness as they practice and perform and that such awareness facilitates the type of aesthetic judgements we see as an important feature of embodied athletic skills. We start by explaining how it might be beneficial for athletes to focus on aesthetic properties of their movement and then proceed to outline prior research into aesthetics by philosophers of sport. Next, we conceptualise aesthetic experience in sport by arguing that attending to aesthetic qualities of their movement elicits similar feelings in athletes to those they might experience when perceiving art. We then devote considerable attention to elucidating a range of aesthetic qualities that athletes might attend to, and make judgements about, during skill execution. In doing so, we will extend our previous work on the importance of mindful bodily awareness in skilled action (see Toner,

Montero, and Moran, 2016) – by arguing that one relevant type of mindful bodily awareness for athletes is an awareness of the aesthetic qualities of their own movements. We hypothesize that athletes sometimes focus on the aesthetic properties of their actions—for example, on the grace or beauty of their bodily movements— and that such a focus can be beneficial to performance. In other words, we hypothesize that, for athletes, focusing on such things as the beauty of their own movements not only offers them aesthetical pleasure, and as such is intrinsically valuable, but also proves beneficial to performance, and as such is instrumentally valuable.

For certain sports where the goal is in part to create aesthetically pleasing movement, we can take for granted that the athlete's aesthetic self-evaluation is relevant to performance outcome. For example, a figure-skater may attend to the angle of her arm to ensure that she is creating an aesthetically pleasing, gently sloping curve. This focus presumably helps skaters to determine whether their actions are producing their intended aesthetic effect in judges as well as to inform ongoing aesthetic decisions (e.g., the languid aspect of this movement might be best complemented by something stronger next; Montero, 2006). Some question whether it is possible for figure-skaters, dancers and others who aim to create movements that are judged by others to be aesthetically valuable to experience the aesthetic qualities of their own movement (McFee, 1992). However, we assume, following Montero (2006), that performing artists, figure-skaters and others who are engaged in explicit aesthetic pursuits can be aware of and evaluate their movements in terms of the beauty, grace, elegance and so forth of their own movements. Our concern here, however, is with the further question of whether aesthetic judgements may be useful in a wide variety of sports that *do not* have an explicit aesthetic component. A batter's ultimate goal, of course, is not merely to create an aesthetically pleasing swing. Baseball would look a lot more like ballet if that were the case. Nonetheless, we hypothesize that some of the proprioceptive information that baseball players and other athletes process has what seems best explained as an aesthetic component: the shoulder movements, for example, that a baseball player might be aware of when hitting a home run may be experienced as beautifully powerful or the arm swing as making the shape of a graceful curve.

If athletes experience their own movements aesthetically, interesting questions arise: might it be that one way an athlete may *judge the effectiveness* of her actions is by judging whether they embody their desired aesthetic properties? Correlatively, can a judgement that a swing has a graceful swoop to it, or that a throw exhibits a powerful streamlined beauty, for example, be conducive to achieving optimal performance? Athletes, we are assuming, focus on aesthetic properties of movements (their gracefulness, beauty, for example) when one of the goals is to produce an aesthetically pleasing form, such as in a gymnastics floor routine. But do they sometimes focus on aesthetic properties of movements when aesthetically pleasing form is not an explicit dimension of success? The hypothesis we hope to take some preliminary steps towards substantiating is that even when it does not matter in and of itself how athletes look when they make their wining moves, they still may aim for graceful, beautiful, elegant, or other such aesthetically pleasing moves. We argue that doing so might very well be one useful means for athletes to produce their desired effects. In other words, aesthetically pleasing form might matter instrumentally; it might matter since aiming at it might contribute to optimal performance. We limit ourselves to a discussion of what might be termed 'positive aesthetic experiences' whilst acknowledging that 'negative experiences' may also be of value to the athlete. For example, arguably, there could be an aesthetic dimension to the feeling of muscle exhaustion and arguably an awareness of this dimension is of use to the long-distance runner (Kupfer, 1995). However, we focus predominantly on aesthetic experiences that are associated with a positive affect, such as the experience of beauty.

Prior research into aesthetics by philosophers of sport

Although there has been little work on the question of whether athletes themselves are aware of the aesthetic properties of their own movements, some philosophers of sport have investigated the question of whether it is appropriate for spectators at a sporting event to adopt what has been referred to as an "aesthetic attitude," that is, to pay attention to the grace and elegance of an athlete's movements. On the one side, Best (1974) has argued that an aesthetic attitude is not appropriate when observing sport since sporting activities are defined by whether an individual/ team has won or lost. Thus, the fact that a certain movement looks beautiful to observers could only be a by-product of achieving ends that demand skillful means. Other philosophers of sport – like Elcombe (2012), for example - argue that sport is at its core aesthetic since, as Elcombe sees it, it is in recognizing its beauty that spectators find meaning; in his words, "art as sport's ideal embodied metaphor widens the lens and deepens the significance [of sports]' (p. 214). Thus, there has been some interest in the idea that sport, at least from the spectator's point of view is rightly evaluated in aesthetic terms.

Although Elcombe addresses sport in the most general sense, other theorists have been keen to differentiate between 'aesthetic sports' (e.g., gymnastics, diving, figure skating; activities in which the aim cannot be specified in isolation from esthetic concepts such as grace) and 'purposive sports' (baseball, track and field; sports in which the aesthetic dimension is relatively unimportant as there are a huge variety of means by which one can achieve an end/one's goal). Not all see this dichotomy as mutually exclusive. Yeomans and Holt (2015), for example, noted that sports such as boxing can have elements that are purely *purposive* (i.e., when a knockout occurs) and elements that are purely *aesthetic* (i.e., when neither fighter has been knocked out and the judges must award points based on an assessment of the quality of a boxer's performance; for example, cleaner punches, better defense). Kupfer (1995) argues that fixating on the purposive nature of sport results in an activity losing meaning for the participant. He proposes that "aesthetic expectations are satisfied when scoring and victory complete excellent play" (Kupfer, 1995, p. 396) and this allows the joining of the useful (purpose-achieving) and the aesthetic (aesthetic execution of the play).

Aesthetic Experience

We argue that skilled performers sometimes evaluate their performance – in both training and competitive situations – by judging whether their movement possesses certain aesthetic qualities. But what is an aesthetic quality? This question is the subject of much debate (Beardsley, 1970; Goldman 1990; Sibley, 1965), and we cannot hope to identify what should be the correct application of this term. However, we can specify our central (though not exclusive) focus, which is that in paying attention to the aesthetic qualities of their own movements, athletes are focusing on something analogous to the type of qualities one might find in art (beauty, grace, power, precision etc.) and that the athlete's experience in such situations is analogous to the type of experience one might have in perceiving art: a type of pleasure that is valuable in and of itself. Restricting the concept of the aesthetic in this way undoubtedly makes our task more difficult in certain respects: There is a rich body of philosophical work on how we may take aesthetic pleasure in a wide range of activities, everything from washing dishes to walking to work (Kupfer 1983; Shusterman, 2012). And we think it is likely that the aesthetic pleasure of the highly skilled athlete could be elucidated by adopting tools and concepts from this body of work.

To some extent, this has already been done. Research by Maivorsdotter and Quennerstedt (2012) explores how people 'body' the world aesthetically as part of their participation in

sport and their finding that participants' 'meaning making' (i.e., how they make sense of their involvement) was partly determined by whether they had satisfying/non-satisfying aesthetic experiences of an activity. Aesthetic events, which they understood as transactions attached with emotional quality, they thought, stood out for participants from the constant flow of ordinary experience. Maivorsdotter and Wickman (2011) propose that although many of our everyday experiences are unlikely to be savoured in this immediate way, they act as "paths where aesthetic judgements are used to communicate whether and in what ways different courses of action lead to fulfillment (or not)" (p. 617). Whilst our focus is primarily on the evocative dimension of performance, we acknowledge that everyday training routines involve a certain degree of mundanity including the struggles or displeasures that we invariably encounter as we seek to extend our embodied capacities (see Hockey, 2013). Furthermore, Shusterman's work (2008, 2012) on the body-centred discipline of "somaesthetics" has emphasized the body's complex and crucial role in aesthetic experience. This inter-disciplinary practice aims to heighten our first-person awareness of our bodies in order to identify the habitual patterns that might be compromising the efficient execution of our desired movements so that we can learn to move "more successfully and with greater ease and grace" (2008, p. 166).

However, we choose to focus more narrowly on the aesthetic experience that is characteristic of the intrinsic enjoyment we have of art for three reasons. First, we take it as relatively uncontroversial that the concept of the aesthetic applies to our experience of art and thus in employing a narrow concept of the aesthetic, we should be able to sidestep to a degree the question of whether the type of experience we are hypothesizing is both employed by and is of use to athletes is, veritably, an aesthetic experience. Second, we think that there are significant similarities between the highly skilled athletes' and the highly skilled dancers' awareness of the aesthetic qualities of their own movements and as the literature on dance that we rely on (Montero 2006, 2016) employs a narrow concept of the aesthetic, it is natural to employ the same concept. Finally, and perhaps most importantly, as we see this work as preliminary to future empirical work on aesthetic awareness in sport, we hope to be relying on a concept of the aesthetic that can be readily conveyed to study participants and we are predicting that most athletes will be able to grasp the concept of the aesthetic when it is described as the kind of pleasurable experience you might have when looking at a great painting or watching a great ballet. Thus, our narrowing of the concept of the aesthetic, though it does make our current task more exacting, will, we hope, make future empirical work easier. (That said, we would also be happy to see further empirical work exploring athletes' aesthetic awareness, where this awareness is conceived of more broadly. At these early stages of investigation, the best path forward may be to let a thousand flowers bloom.)

We propose that *aesthetic judgements* (judgements about the aesthetic qualities of actions) are an extremely common feature of highly-skilled performers' everyday training and performance regimes. . In exploring athletes' use of aesthetic judgement, we shall assume that proprioception can give rise to aesthetic experience. We acknowledge that this idea runs counter to the traditional view about aesthetic experience, according to which one cannot have an aesthetic experience of one's own body as perceived through one of the "lower senses" (any sense other than sight or hearing). This traditional view is brought out in Prall's (1929) assertion that "experience is genuinely and characteristically aesthetic only as it occurs in transactions with external objects of sense" (p. 28, 56; Hegel 1835/1975; Santayana 1896/1955). In the current paper, however, (following Korsmeyer 1999, Shusterman 2012, Montero 2016, and Smith 2015) we reject the idea that only vision and hearing lead to aesthetic experience. Indeed, we see our argument that all sports are at their core aesthetic as fodder for criticisms of the traditional view.

Bodily immersion and aesthetic judgement

One way in which aesthetic experience is facilitated is by what has been referred to as "bodily immersion" (Montero, 2016), which is the experience of being aware of, or as it is sometimes described by performers "in contact with," your entire body. Bodily immersion may not suffice for an aesthetic experience; there could be times in which one is fully aware of one's body without being aware of anything aesthetically valuable. Yet, following (Montero, 2016), we maintain that it can help enable aesthetic experience.

Physical training appears to facilitate such awareness. For example, after extended training, dancers are thought to develop a heightened awareness of their bodily movements via proprioception (Ramsay & Riddoch, 2001). In dance, where bodily movements may have aesthetic qualities (grace, power, precision and so forth), it has been argued that this type of bodily awareness is a means by which dancers can be aware of the aesthetic qualities of their bodily movements (Montero, 2016). Elite athletes are similarly thought to have (either because it has been developed or because it is innate) enhanced proprioceptive acuity, which, we would like to submit, allows for a form of bodily immersion that similarly provides a conduit to the aesthetic experience of the aesthetically valuable movements of their own bodies. Bodily awareness is also important not only for learning new skills but also for "identifying, analyzing, and rectifying our problematic bodily habits" (Shusterman, 2008, p. 13).

To be sure, athletes often focus on external factors—getting the ball in the hoop, for example. And we make no claim as to whether aesthetic experience occurs in these contexts, such as, the experience of seeing the arc of the ball as beautiful and whether athletes aim, to some to degree, to create such beauty (though we leave open these possibilities). Our present claim concerns the athletes' awareness of and judgements about aesthetic qualities of their bodily motions. And preliminary to this is the claim that athletes are in fact aware of and immersed in their own bodily movements.

There are numerous descriptions of bodily immersion in sport. For example, an elite trampolinist in Hauw and Durand's (2007) study sought to avoid injury (as a result of poor execution) by using kinaesthetic feedback to survey body position and the tautness and flexibility of the trampoline bed. Similarly, Nyberg (2015) found that elite freeskiers monitored their rotational activity during the in-flight phase of a jump so as to ascertain "whether they will be able to perform the trick the way it was intended without adjustments or whether they will need to make adjustments during the flight phase" (p. 115). In these cases, immersion is characterised by an attendance to certain cues, or kinesthetic sensations (see Ilundáin-Agurruza, 2015, for a similar argument relating to the role of 'kinesthetic attunement') during on-line movement control.

Yet are these *aesthetic* experiences? We posit that sometimes athletes are aware of the beauty, grace, and precision of their own movements and that these are aesthetic experiences because they involve an experience of an aesthetic quality. Occasionally, these qualities may be the very same qualities observers are aware of. As we pointed out, Federer's movements are often singled out as being aesthetically valuable by sports fans and the media. He seems to perfectly capture the quality of grace as understood by Herbert Spencer (1907) as movements "in which an economy of effort has been achieved" (p. 383). And, we would like to suggest that Federer, himself, when immersed in his bodily movements, may also be aware of his grace, elegance, and economy of effort. That said, it may be that, as with dance, what the spectator sees as aesthetically valuable does not overlap entirely with what is perceived as aesthetically valuable from the athlete's point of view. Not only may the athlete find faults that the spectator does not notice and that may

detract from the aesthetic value of the movement—a return in tennis may look effortlessly beautiful to a spectator but be experienced by the tennis player making the return as gruelingly difficult—but the athlete, because she has developed such a heightened awareness of her own movement, may be privy to certain valuable aesthetic properties that the spectator misses. That same tennis player, at another time, might be aware of the beautiful action of her arm powerfully moving through space, which is nonetheless occurring so quickly that the audience does not register it.

Some support for the view that skilled athletes have an awareness of aesthetic qualities during on-line action comes from Coelho, Kreft and Lacerda's (2014) phenomenological exploration of Taekwondo athletes' experiences engaged in combat. Athletes in this study emphasized the importance of performing movements in a manner which could give rise to beauty and pleasure. To do so, they sought to increase the difficulty and complexity of their attacking moves as this had the capacity to bring "great joy, it's almost a feeling of fullness… so if it's in the end of the combat it's something that endures, it's very good" (p. 85). Experiencing beauty through bodily action could only arise if they were attempting a challenging technique: "it has to be a movement that almost nobody can make, this makes it special….the mondollyo (kicks involving bodily rotations) can even lead to KO [knockout] if it is made right, and this is a beautiful movement" (p. 84). It is common practice for skilled performers to introduce obstacles during the course of their practice/training activities in an attempt to extend their current movement capacities. Nguyen (2017) argues that rock climbers often set such obstacles for aesthetic reasons. He discusses his own experience of overcoming one particularly tricky problem which required a gradual, delicate and extremely considered approach. When completed in the right manner it "feels unbelievably good – it feels like you're a thing made of pure precision, a scalpel of delicate movement, easing your way up the rock" (p. 10). Clearly, bodily immersion in skilled action can give rise to aesthetic experiences.

What, however, might be the benefit of this type of bodily immersion? Being present and focusing on what one is doing in contrast to letting one's mind wander is widely thought to be conducive to optimal performance/experience (Randall et al. 2014). Moreover, aesthetic pleasure from skilled bodily engagement, we would like to suggest, could be especially advantageous since it is likely to motivate focused attention on one's actions. This might be particularly useful during training where repetition might lead to boredom and a subsequent loss of focus. The desire to enjoy aesthetically pleasing objects, is sometimes even defined as an insatiable desire; in Bernard Bosanquet's words, "the aesthetic want is not a perishable want, which ceases in proportion as it is gratified" (1915, p. 4). Training, then, could be more readily prolonged if one never has one's fill of aesthetically satisfying experiences. A deep and powerful bodily immersion in a task/activity also characterizes the phenomenon known as 'flow'. To illustrate, Jackman et al. (2019) found that national hunt jockeys experienced altered physical perceptions during flow. These perceptions included distinct kinaesthetic feelings, lightness of touch and perceptions of balance.

The flow state is seen to represent a peak experience in which performers have a powerful sense of control over what they are doing. Not all flow involves bodily movement. A poet may experience flow when her command of the language is high and the challenge is great but not too great to make the task very difficult. However, we posit that bodily actions performed during flow are experienced as especially enjoyable when they emanate from an awareness of aesthetic properties of movement. Sometimes the body is rendered absent in accounts of flow (Dreyfus & Kelly, 2011). However, we propose that the feeling of 'absorption' typically reported

by performers experiencing this phenomenon does not mean that the body generally becomes inconspicuous or invisible. Although words may sometimes fail to retrospectively describe the bodily experience of flow, we posit that bodily self-awareness does not vanish during the flow-experience itself.

Conceptualizing flow as a state characterized by bodily awareness allows us to consider how it may lend itself to an aesthetic experience. Importantly, for both performing artists and athletes, the type of bodily immersion that facilitates awareness of the aesthetic components of one's own movements is important because one can derive a great deal of joy from executing complex skills with grace and precision; if one happened to be 'absent' during the experience this would not be possible. Coelho, Kreft and Lacerda (2014) found that Taekwondo athletes' not only concentrated on trying to successfully land complex and difficult kicks but that they sought to meet specific aesthetic criteria whilst doing so. For example, one of the athletes revealed that "with a good control of the distance, we are able to perform these more beautiful movements that are, normally, more difficult, more spectacular to perform, and, in this sense, we are much more able and, definitely, this contributes to my pleasant experiences" (p. 88). In addition, aesthetic judgements ensure that we remain present during this state and this enriches our experience 'by adding texture to it' (Colombetti, 2014, p. 130). And, as we've suggested, because aesthetic experience is particularly engaging and pleasurable, it may do this better than other experiences.

"Flying along"

According to Hockey's (2013) autophenomenographic data (i.e., findings that emerge from the detailing of one's lived experience of a phenomena), runners seem to be aware of numerous aesthetic qualities of their movements. As he explains,

> *When you have a really good run there is always plenty of push in it. There is always lots of power in the legs and you feel as if you are flying along, so it kind of builds on itself in a controlled way and you hit the rhythm and stay in it. When you are running like that the power inside gives you confidence, which gives you sort of more power to drive it forward"* (Hockey, 2013 p. 135).

Consider the judgement that the runner feels as if he is "flying along." How should we understand this? Imagine a dance critic writing in a review that claims, "the dancers seemed to be flying along across the stage." You would want to see that performance; it must be beautiful (acknowledging of course that the critic might be favourably disposed to that type of dance as, indeed, might the person who is reading the critic)! In other words, you would understand the critic to be identifying an aesthetically relevant property of the dancer's movements.[1] And, arguably, the dancers themselves could experience this as well; they could feel as if they were flying. But if the dancer's experience of flying, or, rather, seeming as if to fly, is aesthetically valuable, then there seems little reason to think that the athlete's experience is not aesthetically valuable as well.[2] The point is that with running, as with dance, feeling as if you are flying along

1 Is this an aesthetically relevant quality of the dancers' movements or is it a quality of the choreography? It could be either, though in most cases, presumably, it is both: a dancer will only look to be flying if the choreography suggests flying, but the choreography will only suggest flying if the dancer performs it in a way that makes it look as if she is flying. In either case, however, the attribution would seem to be aesthetically relevant.

2 Perhaps not all experiences of "flying along" are aesthetically relevant. Perhaps if you were to be pushed out of an airplane, then you might feel as if you were flying along as you plummeted towards death. Yet there might not be anything aesthetically valuable in that experience.. But let's put such unpleasant thoughts aside.

seems to be an experience of an aesthetic quality. It seems to be an experience similarly relevant to, if not an instance of, the experience of beauty, and as such, it seems to be an experience that is valuable in and of itself.

For an experience to count as valuable in and of itself does not mean that it can't also be practically useful. When Michelangelo observed his work on the Sistine chapel, he may have experienced it as beautiful. This was aesthetically pleasurable in and of itself. But it also may have been practically useful: working on the painting until he had achieved the desired experience could have ensured that he'd be given further commissions. And the runner's experience of seeming-to-be-flying, arguably, also serves a purpose, as it can indicate whether a run is going well, or, indeed, whether it is going well enough so that one can afford, at crucial junctures, to push beyond any remnant of pleasure. As noted above, many theorists have argued that not all successful athletic movements are aesthetically pleasing to the athlete or spectator and nor have they any need to be. Indeed, supporters of this view might point to the numerous examples of highly successful performers who possess unorthodox techniques and yet who seem perfectly capable of 'winning ugly'. However, in outlining how certain aesthetic qualities serve a purpose internal to the game, Kupfer (1995) argued that "while many who play well lack in grace, their good performance is not achieved *because* of their awkwardness. It is rather because they have compensated for the lack of grace and manage to "get the job done" (p. 394). Closing out a tightly contested basketball game with a graceful jump and throw merely "discloses the function inherent in grace" (p. 394).

Power

Another quality that runners may be aware of and which is brought out by Hockey's data, is an awareness of power. Hockey mentions "power in the legs" and claims that "there is plenty of push" and that "the power inside gives you confidence." Is the awareness of such power an aesthetic experience? It would seem so. Again, when a dance critic comments that a dancer moved powerfully, this would seem to be aesthetically relevant. Alister McCauly writes in a review of the Alvin Ailey dance company, "[t]he texture of their dancing is powerful and juicy, brilliant in speed and marvellous in slowness." Their power is part of the artistry that one pays money to see and it is something the dancer can experience from a first-person perspective as well.[3] And when dancers do, they are having an aesthetic experience. Similarly, we would like to suggest that the athlete's experience of power is also aesthetic.

Perhaps one might say that the two situations are significantly different. In the case of the dancer, but not in the athlete, creating the power is a conscious aim: the dancer aims at creating powerful arm gestures while the athlete aims at reaching the finish line and that any experience of power is simply an unintended by-product of this aim. But we do not think that this objection hits the mark. First off, even assuming that athletes do not aim at creating powerful experiences or aim to achieve a sense of flying-through-the-air, it is not clear what this shows. The objector seems to think that this would show that the experience of these qualities (power and seeming-flying) could not be aesthetic experiences. But why? When you go to an art gallery, you haven't aimed at creating experiences that have various aesthetic qualities. Rather, unless you are the artist observing your own work, you have aesthetic experiences of objects that you in no way aimed to create. Thus, it seems that one's aim is not at issue: even if the athletes did not aim

3 As with the example of seeming-flying, the power perceived from the dancer's point of view might not always line up with the power perceived from the audience's point of view. For example, sometimes one might feel very powerful as one creates a movement that is intended to look weak.

to create movements that feel powerful, their experience of power can count as an aesthetic experience.

Beyond this, we would like to suggest that sometimes athletes do aim to create such experiences. Perhaps thinking of creating a powerful swing, or stroke, or push off can be useful. For example, aiming for an aesthetically satisfying experience of power may be one way in which athletes focus on cue words. Athletes sometimes use cue-words to focus thought on important components of their skills. For example, a swimmer might think: hips. And this simple word succinctly captures a great deal of what the swimmer wants to do with her hips while swimming. A cue word, such as hips, does not specifically direct one's attention to creating aesthetic qualities in one's movement. But a cue word such as power could; it could direct one's attention to creating powerful movements. And this can be useful if powerful movements, in the context at issue, are those that work best. In this way, the aesthetic experience of power could be conducive to optimal performance.

Rhythm

The third feature of Hockey's quote that we would like to focus on concerns rhythm. Hockey tells us that in a good run: "you hit the rhythm and stay in it." And we would like to suggest that, at least at times, in being aware of the rhythm of your movement, you are aware of certain aesthetic features of the rhythm. Until recently, the topic of the aesthetics of rhythm had been largely ignored in analytic philosophy, or as Judge (2016), puts this point, Philosophers have no rhythm. However, as recent literature suggests, the idea that rhythms can have aesthetically valuable qualities is uncontroversial. If anything has aesthetic value, music does. And, arguably, for many pieces of music part of their aesthetic value depends on their rhythms: Bach's Well-Tempered Clavier, Stravinsky's Rite of Spring, Scott Joplin' Maple Leaf Rag are all aesthetically pleasing in part because of their captivating, surprising, or complex rhythms.

Perhaps just as uncontroversial is that bodies can move rhythmically. Take Kupfer's (1995, p. 403) analysis of the importance rhythm plays in the athlete's experience of movement:

> *Isolated with and within his body in its environment, the performer is free to appreciate the rhythms he makes with it. The runner, for instance, can appreciate from the "inside" the pattern his arm, leg, and breath movement creates. For him, shifting, breathing, and muscular exertion are viscerally felt and heard, whereas spectators can only infer this experience from what they see.*

Rhythm in bodily movement has been defined as the "temporal pattern apparent in a movement or set of movements and whose constituent parts are relatively stable" (MacPherson, Collins, & Obhi, 2009, p. S48) It can occur when bodily movements match the rhythm of music or create counterpoints to it. And it can also occur without the accompaniment of music. In fact, according to proponents of the Dalcroze Method (a form of music education that trains students to become attuned to the rhythm of music and to express what they hear in movement; Jaques-Dalcroze, 1967), the experience of moving rhythmically is more fundamental then our experience of auditory rhythm and, thus, should be taught to music students priori to, or at least in conjunction with, their attempts to learn to play an instrument rhythmically (Greenhead & Habron, 2015).

What, however, is the nature of athletes' awareness of the rhythm and can it be considered an awareness of an aesthetic quality of their movements? An awareness of rhythm is believed to

play a crucial role in both the acquisition and maintenance of complex motor skills. For example, athletes engaged in sports that involve running sometimes, during training, work on the rhythm of their breathing where they consciously focus on, say breathing in for three counts, out for two. But it is not clear that such awareness constitutes an awareness of any aesthetic properties. For example, one takes aesthetic pleasure in the beautifully complex rhythm of Javense Gamelan music. But could something as simple as the rhythm of breathing be aesthetically valuable for an athlete? We think it may be if one accepts that a simple, yet deliberate rhythm, such as the rhythm of hip-hop music, can be aesthetically valuable. Just as a drummer might find aesthetic pleasure when focusing on keeping a simple steady beat, we think that an athlete, too, might find aesthetic pleasure in the rhythm of breathing. And although there is invariably an automatic element to breathing, breathing is also something athletes work on and do deliberately. Indeed, many athletes devote considerable time to learning how to breathe in a manner that facilitates performance. After winning the third Olympic gold of her career at the 2016 Rio Olympics, the British cyclist Laura Trott revealed that breathing techniques helped her to think only "about what you're doing in that very moment and not allowing your mind to run away with worries about past events and those in the future (Tweedy, 2016)". There is also empirical evidence (see Xiao Ma et al. 2017) to suggest that diaphragmatic breathing can improve sustained attention, affect and reduce cortisol levels (a purportedly objective measure of physiological stress) with healthy adults.

We hypothesize that, in addition to being aware of the rhythm of their breath, athletes are aware of the aesthetic properties of the rhythm of other aspects of their movements—such as a golfer's swing or a swimmer's stroke—which can be rightly categorized as aesthetic experiences during tournaments. Again, in looking at the rhythm of swimming, one finds a simple rhythm. And again, one might wonder how the simple "one, two, one two" rhythm could be aesthetically valuable. But like the deliberate steady rhythm of breathing or of a drum beat, we think it is possible to be aesthetically aware of such a simple rhythm. Beyond this, however, we think that there is a way in which the rhythm of swimming is more complex than this since it involves a complicated interplay between all muscle groups. Thus, the type of aesthetic value at stake may be similar to that of a highly coordinated symphony. For some pieces of music, the rhythm of each musical line for the individual players might not be that dazzling but when they play together the rhythm is stunning. The athlete's body, we posit, is the symphony and, moving their arms, legs, head, hips, hands, feet and so forth in temporal synchrony as they perform complex tasks provides aesthetic pleasure.

There is some empirical evidence supporting this view. Researchers have suggested that rhythmic entrainment, or the process by which attention becomes coupled with a rhythmic stimulus, elicits affective mechanisms (McGuinness & Overy, 2011; Trost, Labbe, Grandjean, 2017). Our claim is that affect is, at times, aesthetic. Such coupling can also occur between bodies and unfold through movement. He and Ravn (2017) found that haptic sensations play an important role in developing elite sport dancers "shared intentionality" whereby moving together forms a practical way of understanding each other. These feelings of connection or entrainment proves crucial in "maintaining reciprocal engagement, but also in actively (re-) working and (re-)shaping their movements" (p.22).

We further suggest that, because the awareness of the aesthetic properties of the rhythm of their movement is pleasant, such awareness may be beneficial since it may compel athletes to maintain the rhythmicity of their movement and to develop an awareness of when they have 'lost' their rhythm. Indeed, an absence of rhythm (i.e., the presence of temporal irregularities in

movement patterns) has been proposed to characterize inefficient or sub-optimum movement performance (MacPherson et al. 2009). Karageorghis et al. (2013) found that swimmers swam faster in two experimental trials (where participants listened to motivational and oudeterous music at 130 bpm) compared to a no-music control condition and claimed that these results may be attributable to 'rhythmic entrainment' whereby the music had a metronomic effect and slightly increased the participants' stroke rate. Qualitative findings would appear to support this hypothesis as a number of the swimmers revealed that music was used as a rhythmical stimulus. This finding is in line with those from studies in ballet (e.g., Côté-Laurence, 2000) and tennis (e.g., Söğüt, Kirazci, & Korkusuz, 2012) which revealed that the processing and control of rhythmical elements of movement has a significant impact on learning and performance. Rhythmical cues may exert this effect by priming the activation of brain structures involved in movement execution. Together, this body of evidence reveals that remaining aware of one's rhythm not only has an aesthetically valuable quality but that it enhances performance proficiency.

"Feeling right"

It could be that the aesthetic qualities that athletes are aware of, outstrip those that they cannot readily describe. And we would like to suggest that sometimes athletes' claims to the effect that a certain movement "feels right" are indicative of such a situation. Ravn (2010) used this term to describe how ballet dancers evaluated whether they were felt 'placed and aligned' in their body as they performed complex moves. Similarly, Ravn and Christensen (2014) found that an elite golfer placed important emphasis on 'listening to her body' and ensuring that her movement felt right and that this was an important means of enhancing her skill during training. We argue that "feeling right" represents a general aesthetic evaluation that is commonly used by highly-skilled performers during both practice and competitive performance. It feels right, we would like to suggest, because it hits the aesthetic sweet spot. What exactly this is might not be easy to quantify because the years of training have enabled skilled athletes to chunk vast amounts of information about their skills into higher level concepts; "smooth," or "streamlined," or "like a torpedo" are aesthetic concepts that might capture a decade of information about how to perform a skill. And sometimes, though not always, the details fade away.

There appears to be a considerable volume of empirical evidence indicating that skilled performers make these types of aesthetic judgments. For example, Aggerholm and Larsen (2017) conducted a phenomenological analysis of parkour (i.e., the physical discipline of training to move over and through any terrain using only the abilities of the body) practitioners' bodily experience of practicing and performing acrobatic tricks. Their findings revealed that the manner in which movements were performed was of crucial importance to these performers. That is, if they were faced with the challenge of jumping over the gap between two roofs and landing on the edge of the target roof one way in which they would ensure their success was by focusing on an aesthetically valuable quality of the landing. For example, the participants spoke about the need to perform the movement 'cleanly' – in other words, with the level of control and ease they were striving for. Importantly, while there is a functional component to this trick 'making it clean' constitutes a subjective and bodily sense of performing the task just right.

Similarly, Hockey (2013) revealed that an important aesthetic dimension of distance running was seeing and hearing 'The Going'. Runners develop a kinaesthetic awareness of their posture and often take a fleeting glance at its reflection in house windows or shop fronts as they move past. This process involves comparing the relationship between an internal image (forged after thousands of training miles), bodily sensations and the reflected image. We would like to

hypothesize that with highly skilled runners, such judgements are sometimes, indeed, we think often, informed in part by their aesthetic experience of their posture. In other words, when the posture is judged as satisfactory, when it's judged as "feeling right," it is in part because the posture is judged as, for example, regal, or balanced or streamlined. And if an athlete notices that such desired aesthetic qualities are lacking, the athlete will take measures to embody them. Aesthetic judgements about movement "feeling right" are of particular importance when performers find themselves having to practice repetitive activities in an effort to refine or alter deeply embedded movement patterns. The training routines of any elite performer inevitably include a certain amount of repetition (e.g., as one seeks to refine a specific aspect of skill) and while these activities are vital for skill advancement they are likely to become stultifying on occasions. Making aesthetic judgments about our movement proficiency may allow us to remain interested in the performance of these relatively mundane activities. More specifically, maintaining such awareness not only brings meaning to the experience but keeps the act alive and prevents us from performing these tasks in a mechanical and unthinking manner (Dewey, 1934).

Furthermore, in seeking to improve their skill, proficient performers actively look for challenges which will create disequilibrium or put a 'wrench in the works'. As such, judgements about whether movements have the desired aesthetic qualities may serve to invigorate the performer and encourage them to test the boundaries of their performance. Although some authors have argued that performers should avoid tweaking or experimenting with their technique during practice (as this will disrupt the execution of proceduralised skills; see Masters & Maxwell, 2008) we believe this approach may inspire performers to identify affordances or opportunities for change – a prerequisite for continuous improvement in any skilled activity (see author, 2014). Aesthetic pleasure may also be gained by working through a problem – of feeling that one has improved one's technique or form and that one is capable of performing a complex skill with an increasing degree of fluency. According to Dewey, it is out of this process of adaptation and re-adaptation that an aesthetic consciousness can be formed. Moments of aesthetic joy or fulfillment are, in Dewey's words, brought about when we "punctuate experience with rhythmically enjoyed intervals". These rhythmical intervals involve periodic injections of vitality or "constant variation" and this seems to characterize the process of continuous improvement amongst athletes.

In a similar vein, Montero, Toner, and Moran (2019) argue that aesthetic judgements/experience can be in themselves pleasurable and interesting, and, as such, are conducive to longer practice sessions. Moreover, not only might they motivate continued training, but, in line with Anders Ericsson's theory of deliberate practice (Ericsson, Krampe, & Tesch-Romer, 1993), according to which excessive proceduralisation (i.e., the enemy of aesthetic experience) leads to aborted improvement, continuing to make aesthetic judgements may jumpstart an athlete, dancer or other highly skilled individual's technical or artistic development.

Conclusion

One of the goals of the current paper was to explore whether athletes have aesthetic experiences of their skills and, if they do, whether such experiences can be beneficial to the practice and performance of their skills. We have presented some evidence suggesting that athletes do experience some of their movements as aesthetically valuable and have argued that such judgements can facilitate athletic excellence (e.g., by allowing performers to identify sub-optimal features of performance or to identify when they are moving in a desirable manner). Our analysis

has focused largely on the aesthetic experience of individual-sport performers but we recognise that there is likely to be a haptic dimension to aesthetic experience (a reciprocity of movement; see He & Ravn, 2017) and that researchers should explore the role of the aesthetic in team sport. We also recommend that researchers explore aesthetic experiences of a negative valence (e.g., ugliness, graceless etc) and how these might contribute to the performer's experience.

We argued that performers are accustomed to evaluating their movement proficiency on the basis of an evaluation of the aesthetic properties of their movement. We proposed that these judgements may serve a transformative function and hold the capacity to lift us above the humdrum and routine. The phenomenological evidence presented in the current paper suggests that an exploration of aesthetic experience is important because it indicates that athletes do not necessarily consider their movement in terms of some external function or purpose it may serve and one should not assume that they evaluate its success purely in terms of whether it achieved some extrinsic end. Instead, we have argued that athletes sometimes evaluate it by determining whether it has a certain desired aesthetic quality, whether it has power, or a feeling of flying, beauty, or elegance. We realize that addressing the aesthetic quality of athletic practice from the athlete's point of view presents some challenges, as it is not readily amenable to the type of objective external measurements that one would like to ground one's theory in. However, given that, as we have argued, aesthetic evaluation can be a beneficial part of athletic skill, we think it would be worthwhile to develop new measures to test our view. And we hope that this work inspires future theoretical and empirical research investigating athletes' aesthetic experiences of actions as they seek to refine and improve their embodied capacities.

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Aesthetic Challenges in the Field of Sustainability

Art, Architectural Design, and Sustainability in the Projects of Michael Singer

Else Marie Bukdahl

Abstract: *One of the biggest issues every country has faced in the last four decades is the following: what can we do to protect our beautiful world? What have the visual arts and architectural design done to regenerate it? In the new millennium, however, the focus on the relationship between nature, architectural design, and sustainability began to occupy an increasing amount of space in both art and architecture. In the early 1970s and the following decades, several artists began to tackle this problem, notably the American artist and architectural designer Michael Singer, who placed new creations relating to the relation between art, architecture and sustainability at the top of his agenda. This became a key challenge in his small and big projects, which were "woven into nature" and were inspired by concepts of beauty in traditions, such as Shinto, Zen aesthetics, and ancient Chinese gardens. Michael Singer's teaching practice at several art and architectural schools made him realize that creating new artistic interpretations of the frequently neglected concept of nature and beauty was not sufficient. It was also important to regenerate nature and create landscape and architectural projects in which artistic and ecological goals were integrated in the construction process. An example is the large Waterfront of West Palm Beach and Sculptural Biofiltration Wall in Coconut Creek, Florida. The originality of Michael Singer's projects lies in their interconnecting art, architectural design, and sustainability.*

Keywords: *ecological art, sustainability, art and nature, regeneration of nature and urban space, landscape art, biofiltration, somaesthetics, atmospheric turn.*

One of the biggest issues every country has faced over the past four decades has concerned protection of the beautiful world, which we have polluted so profoundly. What have visual arts and architectural design done to preserve and regenerate the environment? In the past 20 years, both visual artists and architects have worked to solve these problems (Kagan & Kirchberg, 2008; McGrath, 2013). When did this development begin?

Much more than poetry has, visual art has focused on interpreting the changing aspects of nature and the complicated organic growth processes underlying it. Some of the earliest endeavors

to protect nature and demonstrate greater care in the use of its resources were conducted in the field of landscape art and in attempts to create an earthly paradise, such as in Chinese, Japanese, Arabic, and English Romantic gardens, (Bukdahl, 2011, pp. 37–41) (Figs. 17 and 18).

1. The Birth of Ecological Art

Environmental art and ecological art emerged in the 1960s. In America, environmental art or land art was founded by artists such as Robert Smithson, Michael Heizer, and Walter de Maria, who used the site as the basis of creative activity, whether on land, in the water, or in the air. Robert Smithson named the new artform "dialectical landscape" because "people are not dualistically separated from the landscape, rather they are always immersed within it." Moreover, the terms "mind" and "world" or "mind" and "body" were not opposites but "fused wholes that mirrored each other." Robert Smithson's concept was also influenced by Zen Buddhism, in which body and mind are unified (Smithson, 1979, pp. 117–128; Gondon, 1998, p. 46) and by John Dewey's notion of the "body-mind" as an essential unity (Costa, 2017). He pointed out that art is not necessarily a single object but a landscape that works in contrast to its surroundings to provide meaningful content and reveal "layers of the earth's history" (Smithson, 1979, p. 119). This idea was expressed in works such as *Spiral Jetty* (1970), where he used natural materials in the area to create an island that was shaped as a spiral, which was inspired by the growth formations of red crystals. In this project, he imbued a vast, seemingly insignificant desert with a new identity and profile. Environmental remediation was not realized in Smithson's large projects. However, like his wife, Nancy Holt and other Land artists, he "often positioned large-scale works outside the traditional gallery setting, looking to the expanses of the western United States as a terrain rich in sites for massive interventions that would call attention to ecology and natural forces."[1]

Beginning in the 1970s, two continental artists, Joseph Beuys and Friedensreich Hundertwasser, created works that inspired environmental ethics. One of Beuys' unique characteristics was his capacity for "rebuilding rather than conquering new territories, discovering rather than inventing, therapeutically improving rather than replacing."[2] An example is a project that was launched in 1982 at Documenta in Kaswsel, in which 7,000 trees were planted, which he called a "social sculpture" (Schulz, 1986, p. 32) and which he described as follows:

> *I believe that planting these oaks is necessary not only in biosphere terms, that is to say, in the context of matter and ecology, but in that it will raise ecological consciousness – raise it increasingly, in the course of the years to come because we shall never stop planting.* (Stüttgen, 1982, p. 1)

Part of the project was executed in New York on West 22nd Street between 10th and 11th Avenues, and it continues to inspire young artists today.

Friedensreich Hundertwasser worked with concepts of green architecture, ecology, and "urban gardening," particularly in the early 1980s. These were visualized in both his paintings and his installations as well as in buildings such as *The Hundertwasser House* in Vienna (1983–1986), which he described as follows: "It features undulating floors (an uneven floor is a melody to the feet), a roof covered with earth and grass and large trees growing from inside the rooms,

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1 Smithson's *Bingham Copper Mining Pit—Utah Reclamation* Project is an example. See Jennifer Padgett, "On Robert Smithson, http://notations.aboutdrawing.org/robert-smithson/

2 De Domizio Durini, L. *Who Is Joseph Beuys*; Venice International Performance Art Week: Venice, Italy, 2014. http://www.veniceperformanceart.org/index.php?page=230&lang=en

with limbs extending from the window" (Karberg & Jalvig, 2014, pp. 36–38). This building was aimed to make the world a better and greener place and to teach people to work with green technology.

After Robert Smithson's breakthrough, several other prominent American artists, such as Michael Singer, Alan Sonfist, and Newton and Helen Mayer Harrison (or "the Harrisons"), began to engage in shaping the landscape based on nature. They could be regarded as the pioneers or forerunners of *ecological art*, which was later called *sustainable art* or *green art*. As individuals, they were quite different, but they shared an interest in creating works that were in nature and/or restoring nature, changing it as little as possible. They started to deal seriously with the aesthetic and technological challenges in the field of sustainability. Some were also influenced by the "body-mind connection" in Zen Buddhism. They created a new concept of art, which they also called a new concept of beauty, which inspired artists and architects in the following decades, focusing on the problems of sustainability in the fields of art and architecture (Baker, 1983, pp. 73–84).

2. Michael Singer. Art as Process and Experience of Ritual Interaction

The artist Michael Singer was the first among seminal figures in the Environmental Art movement to create poetic projects in nature through outdoor and indoor sculptures. He later designed many major environmental projects and collaborated with several architects in the design of innovative spaces, buildings, and infrastructure, which focused on light, shadow, materiality, sustainability, and sculptural detail.

In the 1970s, Singer worked in remote and vulnerable natural areas in the US, building projects that communicated the important message of sustainability through their artistic form, their content, and "natural" materials. He described them as "woven into nature" (Hjort, 2011, p. 98). He wanted to recall what Lucy R. Lippard named "the function of art, by looking back to times where art has been inseparable from life" (Lippard, 1983, p. 4) and where "human activity wouldn't be destructive and would provide a positive interface with the natural environment" (Grande, 1998, p. 3) In 2010, he defined the following key principle of motivation:

> *Throughout my life the natural world as opposed to the human-built environment has been the inspiration and focus of my work. From my perspective western religions and cultures have evolved from their origins into dichotomy, a separation between humans and the natural world. In the western model humans have become observers, managers, as well as fearful and wishful controllers of nature. Early on in my work I searched for and studied cultures that represented a different perspective; humans as participants who are actively integrated with nature in every aspect of their lives.* (Bukdahl, 2011, p. 15)

In this excerpt, he reveals the reason that his artworks were inspired by concepts of beauty in Japanese Shinto and Zen aesthetics, Chinese gardens, and aspects of native North and South American cultural and artistic practices. He described art as a process and experience of ritual interaction. His interpretation of ritual was inspired by centuries-old views of ritual practices of native culture throughout the world, in which art, nature, and the human world were closely connected. However, there was no metaphysical perception in his concept of the ritual.

His installation, Lily Pond Ritual Series 7/75 (1975) (Fig. 1) clearly demonstrates a poetic and intimate relationship between art and nature. The finely tuned structures of the branches bend

in rhythmic sequences, and the light effects continuously change in character. They resemble calligraphic patterns. The project was constructed using thin natural elements, bamboo, and jute rope. Hence, it is so closely linked to its surroundings that it appears to be a natural extension of them. In this fragile project, we find echoes of Shintoism, which is the fountainhead of Japanese culture and aesthetics, emphasizing the unity of nature and the intimate interactions between art, nature, and humanity. These values acquired a deeper meaning when Zen Buddhism entered Japanese culture and a dialogue with Shinto was begun. The evocative project First Gate Ritual Series 5-76 (1976) (Fig. 2) was formerly located in the Nassau County Museum of Fine Art in Roslyn, New York. It resembles two rafts of oak and fieldstone. Their harmoniously tuned curvilinear rhythms create a complex tension that draws the viewer's attention both to its impressively unique character and to the surrounding landscape, particularly the contours of the trees, the movement of the wind, and the reflections on the water. Michael Singer organized this work so that its "moment of magic" appears in the late afternoon when this magic would be enhanced by "the shimmering reflections in the dark water" (Forgey, 1978, p. 67). The title of the project refers to the bowed entry portals of Japanese Shinto shrines. They are called *torii*, which means "where the birds reside." They lead people in a very welcoming way into the shrine. It symbolizes Singer's desire to create open and centerless compositions that inspire the viewer to gain a greater understanding of the close relationship between art, nature, and humankind while learning to respect nature, which also is a central value in Shintoism. He may have been alluding to the oldest existing wooden *torii*, which is *yōbu torii* at Kubō Hachiman Shrine in Yamanashi Prefecture, which was built in 1535. Michael Singer visited Japan twice in the 1980s. He said that he would never forget having had the possibility of visiting "many of the special shrines and temples all over the country….especially Shinto."[3] His poetic project, First Gate Ritual Series 5-76, also contains allusions to the Peruvian Uro Indians, who lived on floating islands made of reeds, which they continue to do today. Their traditional houses are small and skillfully braided with reeds. The Uro Indians favored the use of materials, such as reeds, which they found in the immediate vicinity to create an artificial island that functioned like a boat floating on the water and sailing at a slow pace (Fig. 3). The floating island was merged such that it appeared to be an artistic whole. It is not surprising that these constructions by the Uro Indians have been dubbed "the seventh hidden wonder of South America" (Foer, 2011).

3 Unpublished letter to E. M. Bukdahl from Michael Singer, 31 May 2020.

Figure 1 Michael Singer. *Lily Pond. Ritual Series. 7/75*. 1975. Courtesy of Michael Singer Studio

Figure 2 Michael Singer. *First Gate Ritual Series 5-.76*. 1976. Courtesy of Michael Singer Studio

Figure 3 *The Uros floating islands as seen from the air, about 5km from the coast of Puno, Peru.*
Image courtesy: Wikipedia. Org/wiki.

Since the 1980s, Michael Singer expanded his artistic concept through the creation of sculptures such as Cloud Hands Ritual Series, 80/81 (1980–1981) (Fig. 4), which represents a complex world in which all the elements are situated in a harmony of formal elements and materials—wood and stone—that are separate in nature. They have an independent presence. However, after many close studies of nature's structure, meditations on the role of materials in local culture, and artistic experiments, Michael Singer has succeeded in creating a richly faceted and simultaneously harmonious relationship between horizontal and vertical beams on one side and stones on the other. According to Øystein Hjort, "through balanced interplay the potential conflict between the two is resolved; they are independent of each other yet uphold—visually and structurally—each other" (Hjort, 2011, p. 96). Michael Singer described the harmonious interaction between the beams and the stones as follows: "The rocks develop a presence apart from their structural function. The ambiguity between that wood and stone lessens. The wood clearly supports certain stones." Concerning the symbolic value of the forms in the sculpture, he added, "I sense these stones as symbols containing references to mountain, river, clouds, natural elements" (Waldman, 1984, p. 21). Interwoven in the expressive and symbolic power of the forms in Michael Singer's sculpture is an inspiration by the Japanese ideal of beauty, *wabi-sabi*, which is characterized by simplicity, harmony, connection of body and mind, and the love of nature. *Wabi-sabi* is an ancient Japanese aesthetic philosophy rooted in Zen Buddhism, which emerged in the 14th and 15th centuries. Its central idea is that being surrounded by natural, changing, unique objects, and artworks helps connect us to our real world and to escape potentially stressful distractions. Michael Singer's sculpture resembles a Zen garden, such as Ryōan-ji (Fig. 5) in Kyoto, which is world in microcosmic form, unfolding and casting our lives in a broader perspective and introducing immersion as a central part of the way we are stimulated to experience beauty. Ryōan-ji was built in the Heian period (794–1185) when Buddhism came to Japan with Taoism. These were highly influential at that time, particularly the Buddhist concept of the link between beauty, meditation, and nature, which was also prevalent in the Zen version of Buddhism. In Ryōan-ji, which is also called "a dry garden" or "a Zen garden," the symbolism in the microcosmos is similar to that encountered in the sculptures of Michael

Singer. In this symbolism, small stones represent water, stone formations, foliage, or distant mountains and rocks represent waterfalls. In these gardens, the visitor can sit quietly while being immersed in looking at the garden and experiencing that art—in this case, the garden—can be a peaceful journey. However, Michael Singer has used Japanese Buddhist symbolism to express his own symbolic forms: "I appreciate Japanese culture and use my knowledge of it to reinforce the feelings I have in my own culture" (Hjort, 2011, p. 103). He also was inspired on a personal level by the Buddhist concept of art's ability to develop in the viewer an awareness of a harmonious relationship with nature by showing the interrelationships between humans and their surroundings. Buddha occupied natural surroundings, particularly forests that were close to lakes and flowers. Thus, in his teaching, he often described various types of people as different kinds of lotus flowers (Kabilsingh, 2010, p. 36). It is a poetic way of describing the link between humans and nature; therefore, it could have inspired Singer's artistic visualization of this connection. In Cloud Hands Ritual Series, 80/81 (1980–1981), Singer created a harmonious symbolic unit that was rooted in his own culture, particularly the remote rural environment of Vermont. This sculpture elicits the emotions and thoughts of viewers, which are marked by their own experiences.

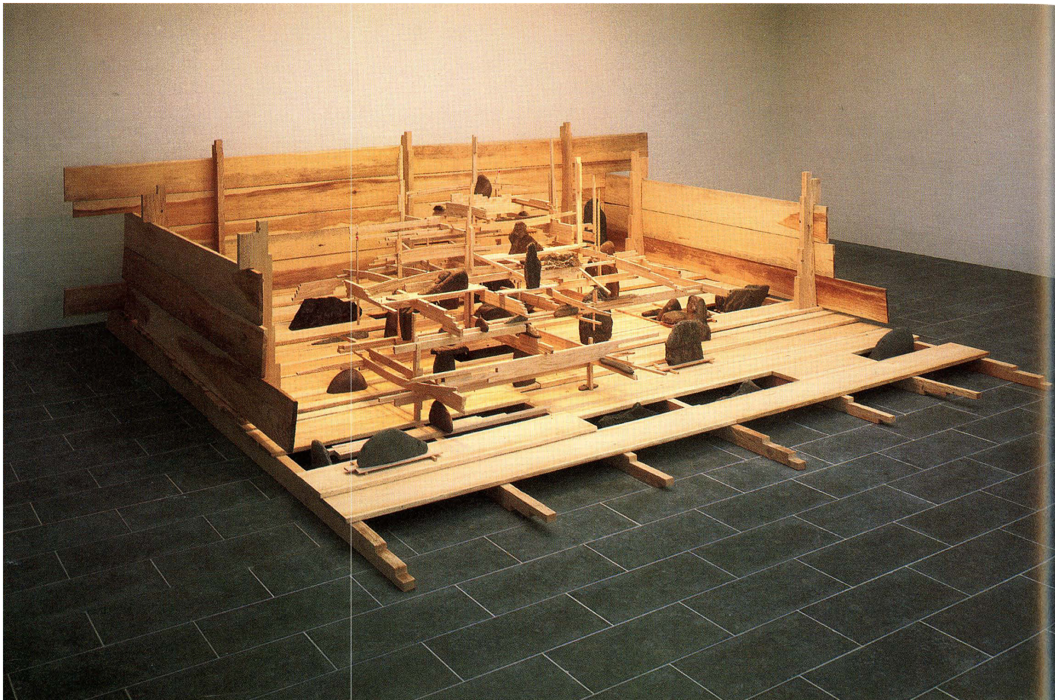


Figure 4 Michael Singer. *Cloud Hands Ritual Series. 80/81* (1980-81). Pine, ash and stone. 5.11m x 1.45m. Louisiana. Museum of Modern Art, Humlebæk, Denmark. Image courtesy: Louisiana Museum of Modern art

Figure 5 Ryōan-ji. *Zen garden*. Heian period. 794-1185. Kyoto, Japan.
Image courtesy: Wikipedia org/wiki.

Since 1981, Michael Singer has created many sculptures that are marked by an internal relationship. In these works, he developed the form that characterizes *Cloud Hands Ritual Series, 80/81*. This includes Ritual Series Map of Memory (2001–2010) (Fig. 6), which cannot be viewed from one angle but requires a multiplicity of viewpoints to be made intelligible. It therefore symbolizes our open world. The bodily experience and the way our gaze wanders across, around, and over the sculpture requires time, which potentially increases the perceptions, experiences, and insights to be gained in our encounter with it. The wood and stones tell and retell the story of Michael Singer's homeland in Vermont. However, its system of interrelationships, its many openings, and its complexity are a visualization of our surrounding world and of our folded space. The walls of the sculpture do not keep viewers out but invite them to visually enter the sculpture. Michael Singer commented that it is "like a Shinto shrine that has its fences and building moved from one sacred site to its identical neighboring site. The layers of fences invite you to imagine what lies beyond and behind."[4] This is a reference to Shinto architecture in ancient Japanese art and architecture. It also contains a parallel to the cornerstone of Richard Shusterman's somaesthetics, which he defined as "the critical, ameliorative study of one's experience and use of one's body as a locus of sensory-aesthetic appreciation and creative self-fashioning" (Shusterman, 2000, p. 144). Michael Singer found echoes of the concept of bodily experience and the close connection between body and mind in ancient Japanese culture, which occupies a central position in somaesthetics (Gongkai, 2015, p. 52, pp. 81–82).

4 Unpublished letter to E. M. Bukdahl, from Michael Singer, 13 March 2011.

Figure 6 Michael Singer. *Ritual Series Map of Memory* (2001-2010). Pine, cast concrete, bronze, copper, aluminum, lead and stone. 3,56 x 4.57 x 1.52 m. Collection of the artist. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

In encountering the sculptures and nature projects created by Michael Singer, it becomes clear that the language of form can communicate experiences and knowledge, which written and spoken words are unable to express adequately. The written word never coincides with artistic expression. Therefore, as the French philosopher Michael Serres said, sculptures "precede languages" and sculptors "lay their hands on what is not a sign, on the stable mass…. That guarantees that a thing exists that is lodged in space, that withstands time…. Radically foreign to our scheming" (Serres, 2015, p. 23, p. 52).[5]

Through his projects in nature and his sculptures, Michael Singer opens our eyes to the intricacy and beauty of the natural world. He also creates a new vision of nature and visualizes a harmonious artistic totality that echoes American Indian and Japanese art and culture through his artistic process. This could be described as a concept of beauty based on working in and with nature as well as the dream that the human and natural worlds could be woven together. He fulfills Henri Matisse's demand for artists to work with inspiration by nature: "An artist must possess nature. He must identify himself with her rhythm, by efforts that will prepare the mastery which will later enable him to express himself in his own language" (Chipp, 1968, p. 140).

5 Originally published in French as *Statues: Le second livre des fondations.* Editions Julliard, Paris 1987, p. 49 and p. 100.

3. Michael Singer: New Interactions Between Art, Nature, Urban Space, and Humanity

While teaching at various art and architectural schools, Michael Singer realized that it was not sufficient to create new artistic interpretations of frequently forgotten aspects of nature and concepts of beauty to inspire viewers to both protect endangered nature and experience its moving beauty. It was also important to regenerate the nature we had destroyed and to create small and large art, landscapes, planning, and architectural projects, in which the artistic goal was not decoration but the integration of the entire planning and construction process. He was well aware that technological problems often overshadowed the aesthetic issues that the new ecological art, projects, and buildings had raised. He thus expanded his concept of art or his concept of "aesthetic beauty" to create an organic relationship between art, architectural design, and sustainability. He stressed that his "design philosophy is intended to help our ecosystem" and "should encourage change in a positive way that can promote health and growth" (Engoren, 2010, p. 30). He connected his artistic practice to other disciplines in the fields of architecture, design, and technology. His gardens, houses, and infrastructure are, like his sculptures, the result of his intense study of the relationship between art, design, the natural environment, and the connection of these to the human world. He has always stressed that there is a close relationship between his sculptures and large projects, which have all strived to "create meaning for a place," provide it with an aesthetic quality, and, if necessary, regenerate the environment (Bukdahl, 2011, p. 32).

To apply this concept, he established an interdisciplinary institution, the Michael Singer Studio, which is a multifaceted art, design, and planning space that focused on understanding each project's environmental system and interactions. He stressed, "the projects we are working on are collaborative, integrated design processes, where professionals respectfully challenge each other. It's much richer to be challenged, and so much better for the project" (Krinke, 2005, p. 94).

He applies his concept of the close relationship between art, architecture, and sustainability in a particularly poetic way in his integrated gardens. The form of his integrated sculptural gardens must be seen from many viewpoints by observing nature's rhythm in response to diverse environmental conditions. The variations in the rhythms and in the formation of spaces within his gardens are endless. In the combination of the colors and fragrance of flowers, flowing water, and many green plants and trees, an intense atmosphere is created, which draws us into an enchanted sphere and stimulates us to experience it with all our senses and our body.

Michael Singer's combined artistic, architectural, and ecological goals in an integrated garden are realized convincingly on a large scale in the exterior and interior garden projects on which he and his Dutch, German, and American colleagues collaborated for the Alterra Institute for Environmental Research, IBN. DLO Wageningen in the Netherlands (1999). This is the Dutch Research Institute for the Environment, and it is an integral part of the partnership for European Environment Research. The Institute focuses on interdisciplinary collaborations for sustainable development in balanced ecological systems. Such projects demonstrate that the Michael Singer Studio has succeeded in redesigning an area so that it becomes marked by its aesthetic qualities, while purifying its surroundings. He has created impressive sculptural interactions with the core environmental systems of buildings. He developed a series of sculptural spaces within two core atriums of the building complex. He worked closely with the project's architectural team, Behnisch Architekten and Copjin landscape architects as well as scientists and researchers who will ultimately work in the building. Singer's atriums express the ecological principles that

characterize the work of the Institute. The realization of a sustainable practice strategy for the project was the starting point for Singer and his team. According to Singer, it became “a key to how we looked at the building and landscape being interconnected, and meaning of place flowed from there” (Krinke, 2005, p. 94). In the design, his principal aim was “to unify the outdoor and indoor architecture” by means of aesthetic interconnections with special pathways and gardens (Steiner, 2001, p. 72) as well as allowing the building’s air, temperature control, and water systems to work with the outdoor and indoor landscape. By applying these concepts, he and his team created a unified and dynamic space, in which the entrances to the atriums visibly connect the indoor gardens with the surroundings. This connection is particularly evident in Viewpoint Looking Back Through the First Atrium (Fig. 7). Here, we encounter an impressive parallel to the Islamic architecture in The Court of the Myrtles (ca. 1370) (Fig. 8) in the Alhambra, where the architect created a delicate link between indoor and outdoor spaces. The entrance to the Alterra Institute is made of glass where we encounter the connection between inner and outer spaces (Fig. 9).

Figure 7 *Viewpoint looking back through the first atrium*. Alterra Institute for Environmental Research, Wageningen, the Netherlands, 1999. Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

Figure 8 *The Court of the Myrtles* (about 1370). Alhambra, Spain. Image courtesy Wikipedia. Org/wiki.

Figure 9 The entrance to Alterra Institute. Photo Credit: David Stansbury.
Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

Michael Singer also wanted to imbue the new buildings with many of the nuances and variations in the textures of older buildings. He thus selected "patinated wood and metals for the meeting shelter and trellises, worn-looking pavers, fountain-like water channels, and pools [which] all make reference to former use and mystery" (Steiner, 2001, p. 72). An example is the worn but beautifully decorated pavers, which are marked by abrasions, evoking historical layers (Fig. 10).

Figure 10 Worn-looking, but beautifully decorated pavers. Alterra Gardens. 1999.
Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

The two gardens were nicknamed "twin green lungs and kidneys" because the plants and the watering system produce an optimal inner climate control without the need for air-conditioning as well as a water filtration system. Each garden has a uniquely aesthetic character as well as distinct dynamic air and water systems. According to Singer, "My concept was for each atrium space and its garden to have its own ambience" (Steiner, 2001, p. 72). In the Atria Gardens, the process begins with stormwater, filtered through an exterior retention pond and constructed wetland, which is then conveyed into the atria. The artwork draws water from outside the building, which is unique.

In the first atrium, which is adjacent to the library, the water moves through a series of pools and weirs containing a range of aquatic and emergent vegetation and fish that continue the filtration process. This garden has luxuriant undergrowth with indigenous flora, which imbues the location with intense colors and aromas (Fig. 11). The water in the large pool with underwater chambers flows audibly and creates rhythmic sounds. When one leaves the "pool" located at the front of the library and continues one's journey of discovery toward the large glass wall at the end of the first large atrium, one encounters fascinating walkways, winding staircases, and "trellis structures." Between these fertile green areas, a poetic "shallow water

pool" emerges, which inspires the wanderer to sit down and meditate or just enjoy the romantic surroundings and the many small and surprising artistically crafted details (Fig. 12). The small pond is reminiscent of Islamic gardens such as The Garden Bagh-I-Wafa outside Kabul (Fig. 13), where the source of life is represented by a spring in the middle. The dense and shady greenery prevents the water from evaporating. Even in this early stage, there were attempts to reconcile artistic and ecological goals (Petersen, 1995, p. 8 and p. 11).

Figure 11 The first atrium. Alterra Gardens 1999.
Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

Figure 12 The pond in the first atrium. Alterra Gardens 1999.
Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

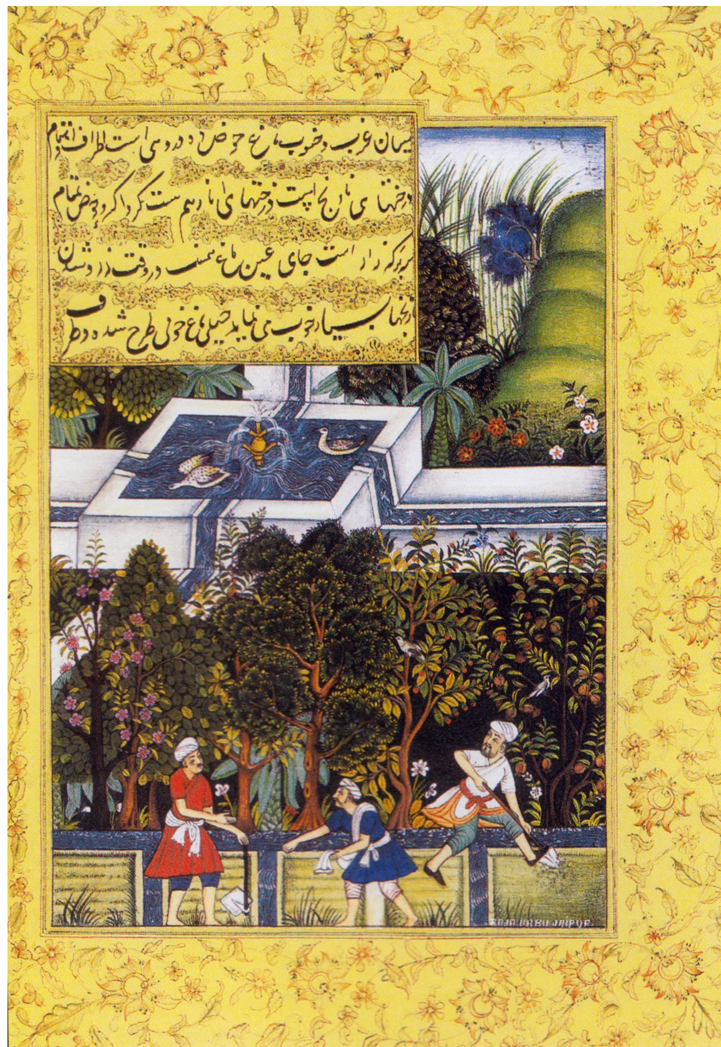


Figure 13 The garden Bagh-i-Wafa outside Kabul. 1504. Miniature. Manuscript from the Babumama (c. 1590). Photo Credit and image courtesy: Architect Steen Estvad Petersen.

Regarding "the more public [second] atrium" Singer wrote, "it has a more arid, sparer plant palette. The large shallow suspended pool in this garden has an audible flow of water that drops to the storage cistern below" (Steiner, 2001, p. 72). This water is recycled in the building's irrigation system and is reused in the toilets.

In the atria, the water features help to clean the building's greywater and stormwater systems. Singer added, "the gardens reference the integration of systems. They also really function to accomplish this integration."[6]

Below their surfaces, the pools in the atria have a variety of sculpted layers and forms that provide shelter for fish and support vegetation requiring deep water. These sculpted layers are small evocative artworks and demonstrate one of the many connections between art and architecture (Fig. 14). The multitude of green plants and flowers in the two atria reduces air pollution and imparts a wonderful fragrance, which is particularly evident in some parts of the first atrium (Fig. 15).

6 The information about the water system in the two atria was sourced from Steiner (2001, pp. 72-73) and from my own unpublished private correspondence with the Michael Singer Studio.

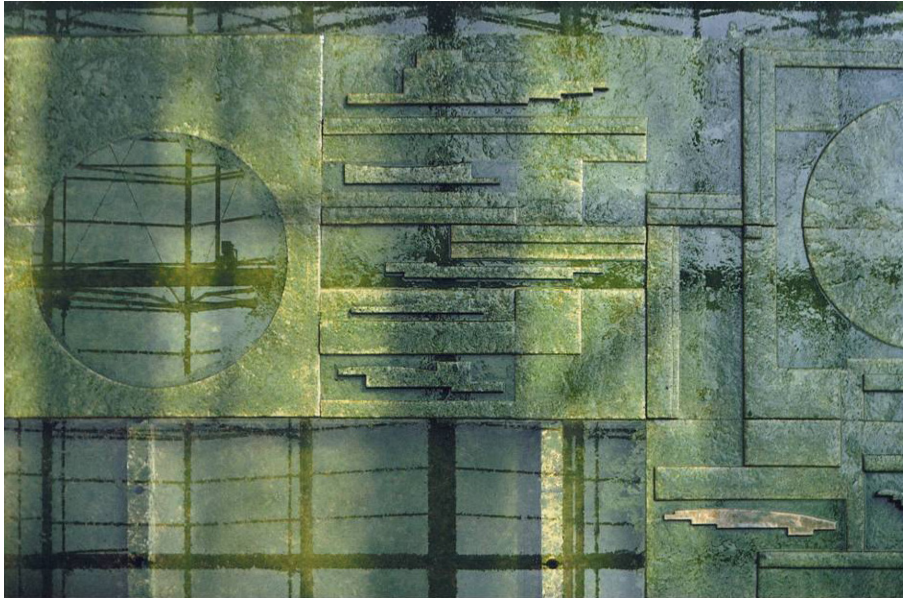


Figure 14 The sculptural patterns in one of the ponds. Alterra Gardens 1999.
Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

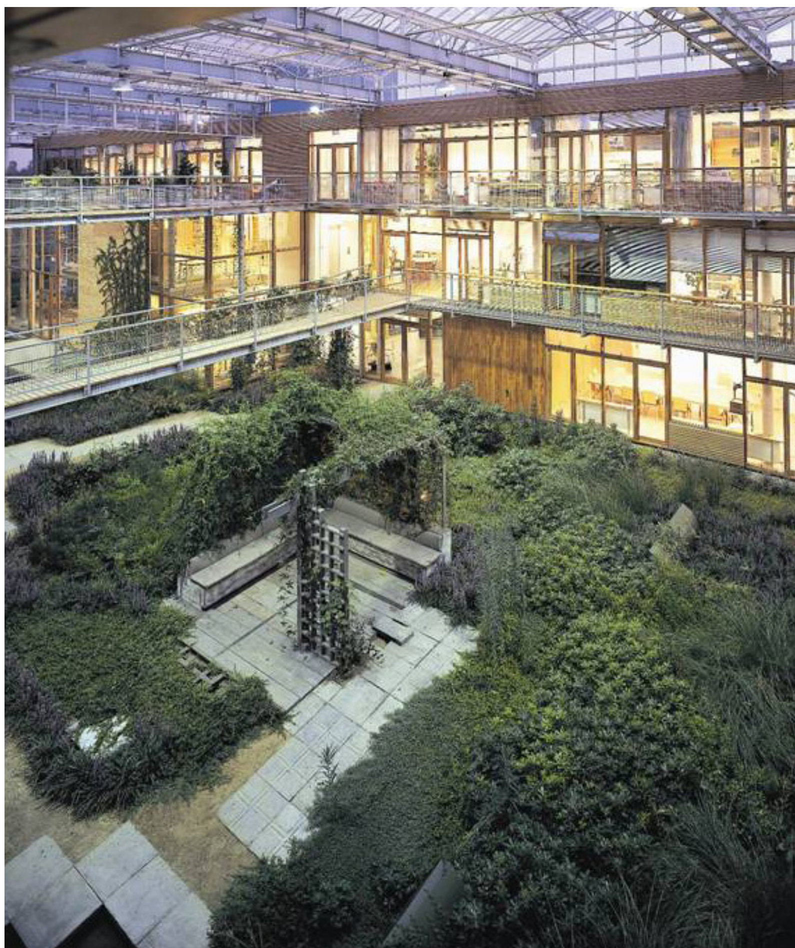


Figure 15 Green plants in the first atria. Alterra Gardens 1999.
Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

Jonathan Fogelson and his colleagues at the Michael Singer described the connections between the two atria and the relationships between the ecological and artistic goals of the project:

> *The two atria spaces form the enclosed courtyards of the E-shaped building and are the principal foundation for the building's innovative energy strategy. You can best understand the connection between the two atria and their place in the whole project when you look at the plan of it. It is a composite drawing with the base architecture sketched in black and white provided by The Behnisch Architekten and with Michael Singer's overlay in green and blue areas. The atria infuse the entire complex with natural light and allow most offices to have garden access and views. The atria help to moderate temperatures between the interior and exterior of the building. They are used for solar heat gain in the winter, reducing heating requirements within adjacent offices and rooms. In combination with sensor-activated shading devices, increased ventilation and its interior vegetation (for shade and evaporative cooling) the atria allow for the building to function comfortably in the summer with no air-conditioning except in the library and in the kitchen. The sculptural water pools were carefully integrated to combine with this innovative energy strategy, assisting with humidity levels.* (Fig.16)[7]

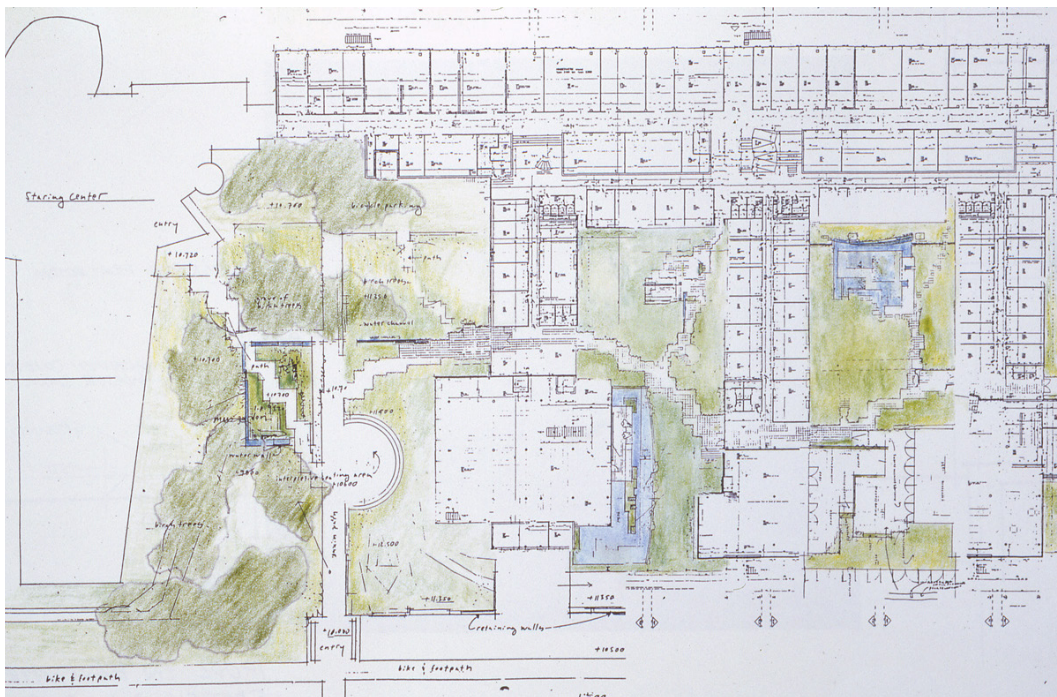


Figure 16 Michael Singer and Behnisch Architekten: *Composite drawing of the Alterra Gardens.*

Scientists also use the gardens for their research. The gardens can also be used for contemplation and quiet conferences or study. Singer remarked, "why should contemplative spaces be outside of our everyday experience?" (Krinke, 2005, p. 85). Several ecologically oriented researchers have responded to the intense visual experience provided by the gardens,

7 Unpublished letter of 30 October 2013 from Jonathan Fogelson written in collaboration with Michael Singer and the Michael Singer Studio.

emphasizing the healthy indoor climate and the beautiful connection between the exterior and interior spaces (Fig. 17) (Steiner, 2001, p. 52 and p. 73).

Figure 17 Connections between the offices and the gardens in Alterra Institute for Environmental Research. Photo Credit: Edwin Walwisch and Michael Singer. Courtesy of Michael Singer Studio

The garden in the EcoTarium (New England Science Center) (1996–2000) is another example of Michael Singer's combination of artistic and climate-improving objectives, which include responsibility for the wellbeing of the environment and the creation of a place characterized by aesthetic qualities. The Emerging Garden, which appears to invade the space and the Four Season Water Wall, which uses nature's artistic and creative forces, are the focus of the central courtyard (Fig. 18). The summer season's water wall flows gently down the patterned grid (Fig. 19), but in winter, according to Singer, "the garden and the water wall are transformed by the forming and melting of ice" (Fig. 20). The freezing and melting ice wall changes its shape and appearance throughout each day" (Bukdahl, 2011, p. 69). Nature assumes the role of technology and creates a very impressive "ice sculpture" (Fig. 21). The architect Ken Radtkey, who worked closely with Singer on the EcoTarium, emphasized that this project is an excellent example of how "Michael Singer brings his own perspective and an artist's sensitivity to place-making, the environment and culture" (Pearson, 2002, p. 3).

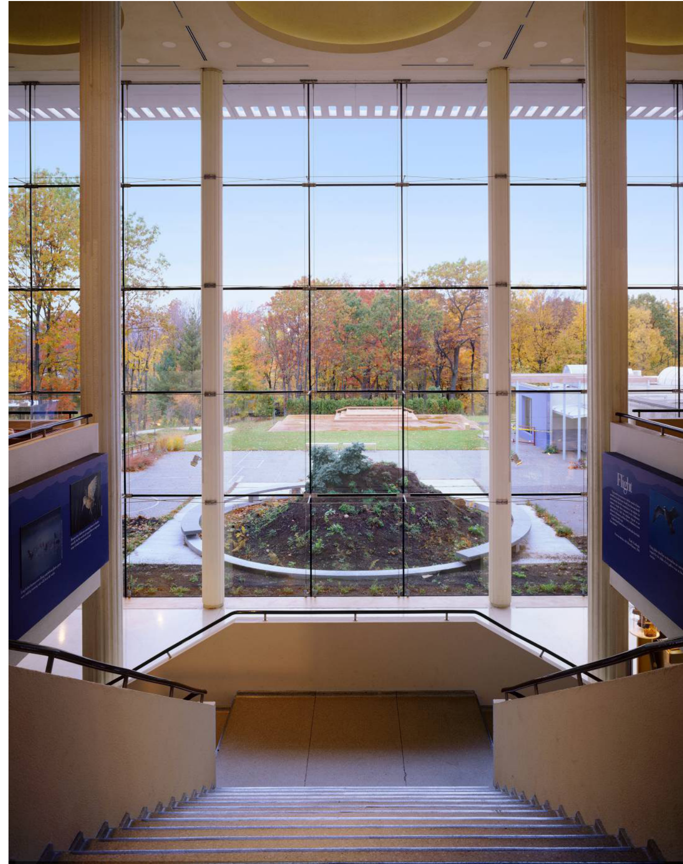


Figure 18 Emerging Garden, *EcoTarium*, New England Science Center U.S.A., 1996-2000. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

Figure 19 *Summer Season Water Wall*. 1996. EcoTarium. Photo Credit: David Stansbury.

Figure 20 *Water and Ice Wall*. 1996. *EcoTarium*. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

Figure 21 *Water and Ice Wall*. 1996. *EcoTarium*. Detail. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

The Michael Singer Studio has created new water infrastructures on both large and small scales. In "each project, artwork performs key functions such as improving water quality, storing water, and reducing water demand or regenerating eco systems" (Fox, 2018, p. 43). One of these projects is the large-scale Waterfront in West Palm Beach (2004–2010), which was based on a new and close relationship between art, architectural design, and sustainability. This project includes three new docks that allow for docking and a water-taxi to encourage visitors to visit downtown (Fig. 22). The large central dock includes shaded seating areas, and it functions as a venue for public events. The central dock is designed with in-water planters that contain native mangroves, grasses, and a visible oyster reef that set into the dock, which is perhaps the first of its kind in the nation. The boat dock and promenade function as a living system that filters water and provides small pockets of habitat within a man-made estuarine structure (Fig. 23). The regenerated and transformed West Palm Beach Waterfront is a new city park and event space. It contains not only The Living Docks but also The Waterfront Pavilion, which is a large exhibition and event space. In the project there is also an eight-kilometer long waterfront esplanade. Behind this emerge seven especially designed poetic sculptural water elements, which the Michael Singer Studio calls "discreet spaces including intimate seating areas selectively placed with small outdoor event 'rooms'" (Bukdahl, 2011, p. 89). Many of these contain sculpted fountains, each of which creates a distinctive sound. They are often surrounded by colorful flowers that emit different scents. The sounds of the water, combined with the color and fragrance of the flowers, create an atmosphere that activates the imagination and the five senses of those who walk or sit in these small romantic spaces (Fig. 24). Everywhere in the different sections of the Waterfront in West Palm Beach, flowers, trees, and sculptures cover the purification systems, transforming the entire waterfront into a dynamic, artistic place. Michael Singer and his team succeeded in transforming a typical 1960s autocentric and anonymous waterfront into an urban paradise. In the last part of this project, The South Ecological Regeneration Project, he and his colleagues added three large artificial islands with saltwater filtering plants to regenerate the polluted waters and thousands of oysters to purify the ocean, creating a new aesthetic space with an artistic profile (Fig. 25).[8] During the first ten years of its existence, the seawater became observably cleaner, the fish population increased considerably, and the biodiversity and ecosystem in the area improved astonishingly quickly. At sunrise, the waterfront and the three green islands appear as romantic scenery, appealing to the emotional states of viewers (Fig. 26).

8 For additional information on the West Palm Beach Waterfront, please visit www,wpbwaterfrontpark.com and Bukdahl (2011, pp. 74–75).

Figure 22 West Palm Beach Waterfront Commons. Aerial View. 2004-2010.
Image Courtesy of Catalfumo Construction.

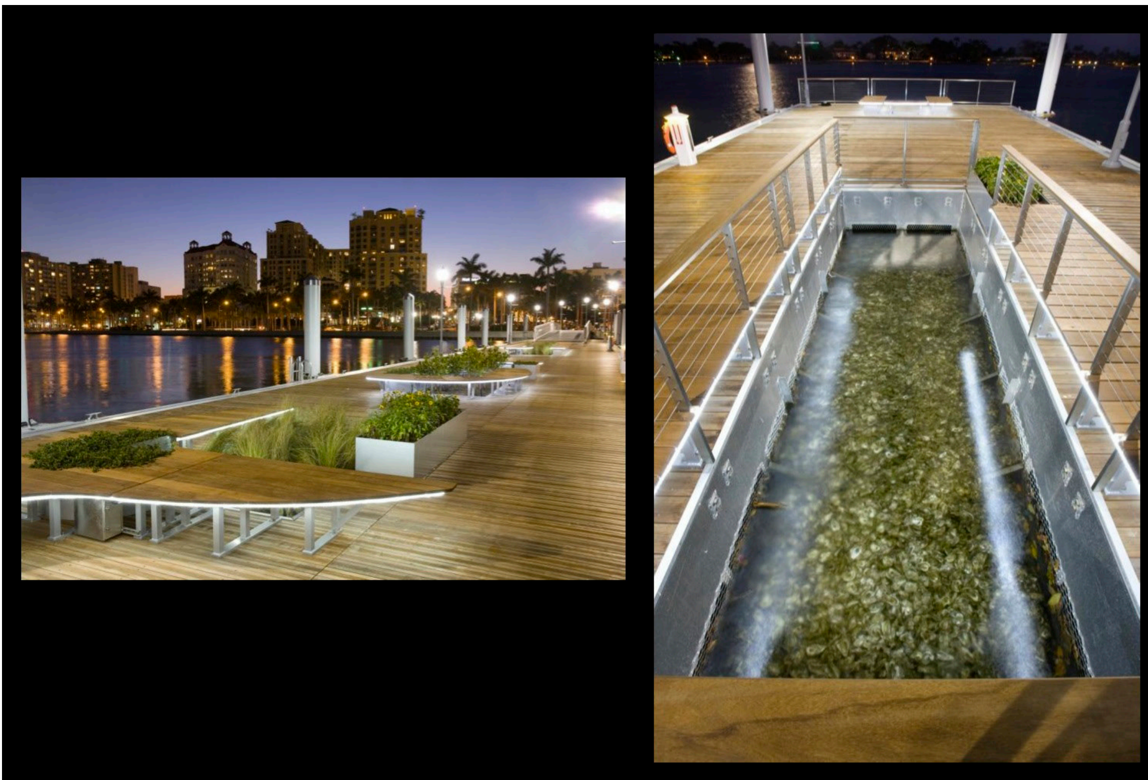


Figure 23 The central dock in West Palm Beach Waterfront Commons with seating areas oyster bed. 2004-2010.
Photo Credit: Tom Hurst. Courtesy of Michael Singer Studio

Figure 24 *Water Garden with sculptural elements and Fountains.*
Photo Credit: Michael Singer. Courtesy of Michael Singer Studio

Figure 25 *The Waterfront and the South Cove Regeneration Project*. 2012. West Palm Beach, Florida
Image Courtesy of PBC ERM.

Figure 26 The South Cove with the Three Islands at Sunrise.
Photo Credit: John Marshall. Courtesy of Michael Singer Studio

What is the difference between this project and projects such as Robert Smithson *Spiral Jetty*, a remarkable coil of rock that gave the anonymous desert landscape new artistic qualities and revealed new layers of its geological and historical past? Singer regenerated a dreary, polluted waterfront and the surrounding water. The result was the creation of a poetic contemporary urban regeneration project. According to Singer, "When seeing the progression of the islands we designed for the West Palm Beach Waterfront South Cove Regeneration project, I was amazed how my work reflects a 21st-century environmental renewal of Smithson's *Spiral Jetty.*"

The Michael Singer Studio also created smaller projects in places that were devoid of aesthetic qualities, such as parking structures, where the surroundings were heavily polluted. They designed a project that transformed the new parking structure for the casino in the town of Coconut Creek in Florida, which is owned by the Native American Seminoles tribe.[9] The surroundings were nondescript, and the two lakes adjacent to the parking structure were polluted (Fig. 27). Michael Singer and his colleagues aptly called the project a new contribution to his interpretation of public art and to eco art. The project combines art and green technology in an artistically and scientifically convincing manner. The fundamental characteristic of Michael Singer Studio's concept of eco art is that it focuses on a variety of regenerative systems and that the indigenous flora and fauna are regenerated at the same time as new vegetation grows. It also repairs and renews the environment through sculptural and other artistic strategies by what the Michael Singer Studio calls "sculpting renewal through public art." Finally, the project also generates energy (Fig. 28.1). The integrated central system in The Sculptural Biofiltration Wall purifies the water. The collection and purification of water are the most important functions of this wall. Polluted water from the ponds is channeled through the solar-operated pump system and then poured into biofiltration aquatic planters. From there, it is pumped vertically into the

9 The Seminoles are an American tribe in Florida.

biofiltration chambers. Finally, it returns as clean water to the lakes, which are gradually purified. The aquatic biofiltration gardens contain a range of potted aquatic plants that further purify the water (Fig. 28.2). With this regeneration and cleaning system, the Michael Singer Studio created a new and impressive relationship between art, architectural design, the urban environment, and sustainability. All the pipes and other objects that are required by the cleansing system are hidden by sculptural forms of various sizes, colors, and textures created by Michael Singer (Fig. 29). The finished sculptural wall is a complex pattern of high and low reliefs and sculptural forms (Fig. 30). The varied depth effects in the reliefs create an intense play of light. Copper inserts are embedded in the various sculptural elements. The copper and concrete surfaces will patinate over time, thus creating intense light and color effects (Fig. 31). The vines that have started to grow on the custom screening provide an interplay of dark greens, creating an effective contrast to the light-filled reliefs. The walls thus appear as a living green sculpted wall where both light and the shifting seasons create transformations. This poetic "green carpet" and the different sculptural forms cover the filtration equipment and the entire wall, resembling a multifaceted living work of art (Fig. 32). The solar canopies on the roof are finely processed. They provide enough energy to supply a couple of average Florida homes (Fig. 33). Visitors to the site are surrounded by butterflies and fragrant flowers, which create a special atmosphere. At the base of the "sculptural wall" is a small sculpted bench and a small "lily pond" where green plants cover the machines in the water, which is the first step in the purification system (Fig. 34). This sculpture garden has aesthetic qualities that create a space for meditation and the opportunity to enjoy undisturbed time in a world dominated by rationality and noise. It alludes to poetic Chinese gardens, such as *Yu Yuan (Yu Garden), Shanghai Shi* (Fig. 35), which creates a connection between humans and nature as well as providing space for quietness and contemplation. At night, The Sculptural Biofiltration Wall is a particularly poetic scene in which the rays of the setting sun create a golden atmosphere (Fig. 36).

Figure 27 Analysis of the water cleansing System. 2011. Drawing The Seminole Coconut Creek Casino, Florida. Courtesy of Michael Singer Studio

THE SEMINOLE COCONUT CREEK CASINO

SCULPTURAL BIOFILTRATION WALL

A LIVING WORK OF ART

The Sculptural Biofiltration Wall by artist Michael Singer is conceived as a living system designed to regenerate the surrounding environment by improving water quality, enhancing habitat viability and informing and inspiring the public about ecological systems. Intended as an exemplary EcoArt project for South Florida, this work of public art functions to cleanse, restore and ultimately regenerate the environment through the following integrated systems:

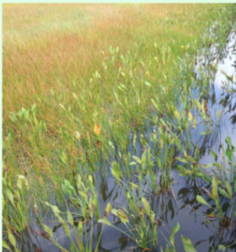
CLEANSING WATER

This Sculptural Biofiltration Wall filters approximately **150,000 gallons of water a day**, improving the water quality of the retention ponds.

The sculpture filters on-site retention pond water which is used for irrigating all of the vegetation on site, including the parking structure green walls and may be used for future plaza water elements, reducing the use of potable water.

Harvested rainwater supplements the water system with up to 10,000 gallons of water storage capacity. The rainwater is harvested and filtered within the four storage tanks along the east wall of the parking structure.

REGENERATING THE ENVIRONMENT



The sculpture fosters biological systems including plants, fish, and beneficial bacteria that naturally cleanse water. Improving water quality in the retention ponds helps improve the habitat viability and biodiversity of the ponds and the surrounding landscapes.

The Sculptural Biofiltration Wall supports a range of vegetation to attract avian wildlife, especially hummingbirds, and of course, butterflies - Coconut Creek being the "The Butterfly Capital of the World".

SCULPTING RENEWAL THROUGH PUBLIC ART

This EcoArt project merges public art, science and engineering to regenerate damaged ecosystems. While most public art is object based and often static, this Sculptural Biofiltration Wall fosters a living system that functions *within* the environment to filter water and restore habitat.

GENERATING ENERGY

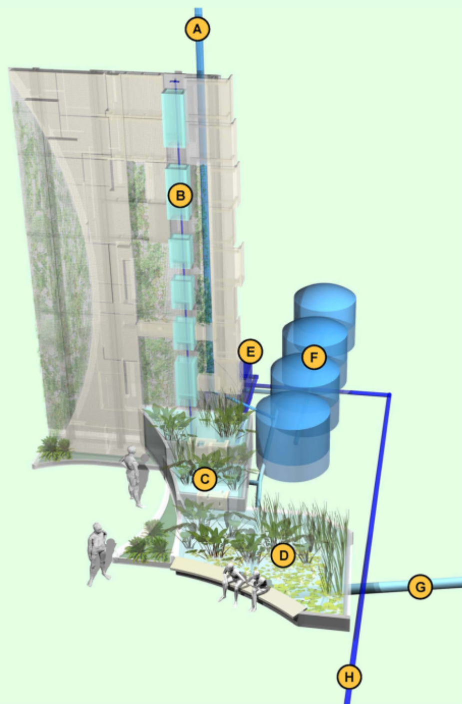
Solar Canopy system (and image credit) by Advanced Roofing

The 23kW parking roof deck solar photovoltaic canopy arrays provide enough power to supply 2 to 3 average Florida homes. This renewable energy source provides many times the energy needed to power the pumps, filters and lighting for the Sculptural Biofiltration Wall. The remaining electricity helps to power lighting and elevators within the parking structure or is fed to the grid. The solar canopies are also collecting the harvested rainwater.

Figure 28a *The Sculptural Biofiltration Wall. A Living Work of Art.* Overview.

THE SEMINOLE COCONUT CREEK CASINO

SCULPTURAL BIOFILTRATION WALL



HOW IT WORKS

- (A) Rainwater harvesting from solar rooftop canopies
- (B) Sculptural biofiltration chambers
- (C) Biofiltration aquatic gardens
- (D) Biofiltration aquatic gardens and lily pond
- (E) Pump room and filtration equipment powered by solar photovoltaic array on roof
- (F) Four 2,500 gallon rainwater harvesting tanks
- (G) Cleansed water returns to the retention ponds via stormwater drains
- (H) Retention pond water in-take from pond to the south east

The primary water system functions continuously to cleanse up to 100 gallons per minute from the existing interconnected water retention ponds on site (connections marked H and G above). The secondary system collects rainwater from the rooftop solar canopies and utilizes this relatively clean water to help flush the system (A and F above).

The biological water treatment through the Sculptural Biofiltration Wall occurs through the sculptural biofiltration chambers and aquatic gardens (B, C and D above) which foster the growth of aerobic beneficial bacteria for the cleansing of water. These systems filter water by breaking down organic matter, providing aeration and absorbing nutrients. The biological filtration system is supplemented by a UV filter and mechanical filters associated with the pump equipment (E above).

Project Credits

Public Artist: Michael Singer

Michael Singer Studio Team: Jason Bregman, Jonathan Fogelson and Alan Chapman. Sam Thomas, Emily Pinyard, Calen Colby, Adam Greenlaw and Brian Beaulieu at Colby Co Engineering. Shawn Walters and Victor Vallejo at FAP. Dana Kent at AAS and Patrick Faehnle at ASR.

SELECTED PLANT LIST

Jacquemontia pentanthos Blue Cluster Vine. Native. Small purple flowers. Provides nectar for butterflies.

Lonicera sempervirens Coral Honeysuckle Vine. Native. Pink conical flowers. Provides nectar for birds, butterflies and hummingbirds.

Passiflora suberosa Corkystem Passion Vine. Native. Small passionflowers. Host species for many butterflies including the Florida State Butterfly Zebra Heliconian.

Zamia Pumila Coontie. Native small shrub. Roots were used traditionally by the Seminoles as a source of flour for bread. Larval food for endangered Atala butterfly.

Mimosa strigillosa Mimosa/ Powderpuff. Native groundcover. Host plant for small yellow *Eurema lisa* butterflies. Sensitive plant to touch (try touching it and see it react).

Typha latifolia Cattail/ Bulrush. Native aquatic. A known and important bioremediation plant for filtering water. Was a food source for Native peoples of the Americas.

Sagittaria lancifolia Wapato/ Indian Potato / Duck Potato. Native aquatic. A known and important bioremediation plant for filtering water. Was a food source for Native peoples of the Americas.

Canna flaccida Golden Canna. Native aquatic. Has been studied for effectiveness in removing nutrients from nutrient rich stormwater.

Nymphaea Odorata American White Lily. Native aquatic. White fragrant blooms.

Nymphaea Mexicana Yellow Water Lily. Native aquatic. Small yellow blooms.

There is also one species of non-native night blooming lily in the lily pond.

Figure 28b *The Sculptural Biofiltration Wall. A Living Work of Art.* Overview.

THE SEMINOLE COCONUT CREEK CASINO

SCULPTURAL BIOFILTRATION WALL

THE SCULPTURAL ELEMENTS

The Sculptural Biofiltration Wall is comprised of 38 sculpted pre-cast concrete elements ranging in size and complexity. These sculpted concrete elements are crafted through a multi-form mould process at Michael Singer's North Studio in Wilmington, Vermont and then cast in Florida. The level of texture and pattern will vary from element to element, with some pieces having partially smooth surfaces to some areas with segments of deep relief or whole pieces cut a-away. Copper inserts will be embedded in various elements, with the expectation that the copper and concrete will both patina over time.

Each sculpted piece is a 'canvas' to be shaped and sculpted by Michael Singer, as such the images shown here are only an indication of what the final pieces may look like. All material colors, textures, patterns, and placements will be finalized by the artist during fabrication.

Figure 29a *The Sculptural Biofiltration Wall.* 2011. Sculptural precast concrete elements. Drawing.

Sculptural precast curved wall, one of four segments shown. Each wall segment is 10' high, 10" thick and up to 10' wide. Final sculptural configuration will have a specially engineered set of shop draw-

Sculptural wall panel canvasses (2 shown) are each nominally 2' wide by 4' tall and 2.5" thick. Panels may vary in texture and pattern or via orientation and place-

The Sculptural biofiltration chambers are detailed to ensure the proper placement and function of the packing media. The nominal dimensions are 2' wide and 1.5' in depth with 5' and 3' height elements.

Sculptural wall panel corner wrap canvasses (2 shown) are each nominally 2' to 3' wide by 4' tall and 2.5" thick. The corner wrap to the east is 2' wide.

SCULPTURAL DETAILS (Selected)

- **A** Sculptural precast curved wall (One of four segments is highlighted)
- **B** Sculptural wall panel canvasses (2 highlighted)
- **C** Sculptural biofiltration chambers (A 5' element is highlighted)
- **D** Sculptural corner wrap wall panel canvasses (2 highlighted)
- **E** Sculpted hanging planters
- **F** Sculptural weir cap element

There are 3 sculptural hanging planters that will be crafted to relate visually to the other sculptural elements. These elements vary in dimension but retain a minimum planter depth of 15". Irrigation is provided from behind the planter.

There are 2 sculptural weir cap elements, a larger one for the highest aquatic garden and a slightly smaller one for the lower aquatic garden. These elements allow for glimpses of the flowing water from garden to garden.

Figure 29b *The Sculptural Biofiltration Wall*. 2011. Sculptural precast concrete elements. Drawing.

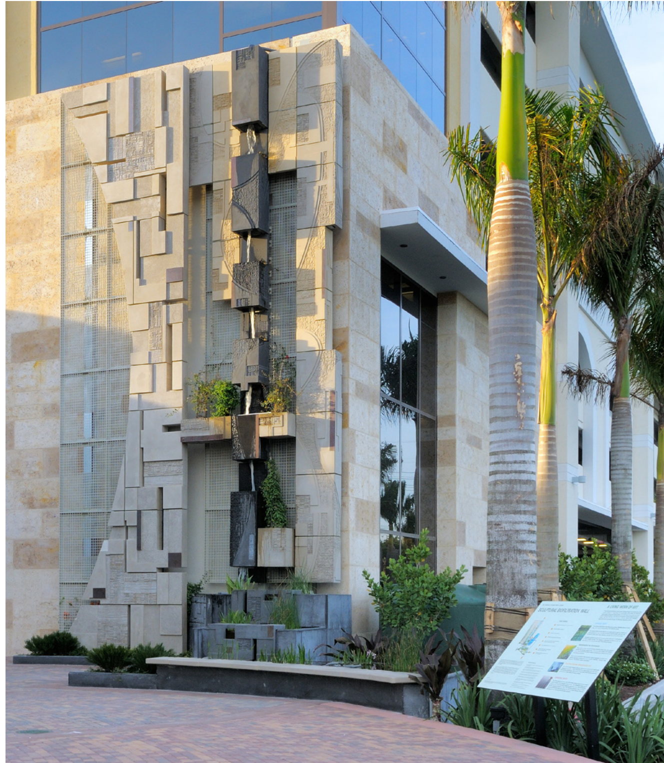


Figure 30 *The Sculptural Biofiltration Wall*. 2012. The whole finished complex of the relief and the surroundings. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

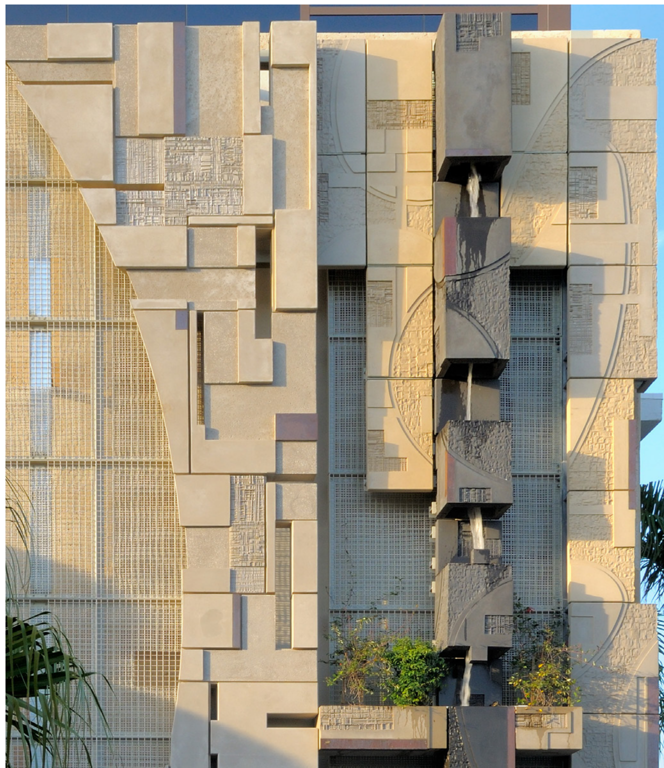


Figure 31 *The Sculptural Biofiltration Wall*. 2012. The different patterns in the reliefs. Detail. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

Figure 32 *The Sculptural Biofiltration Wall*. 2012. "The green carpet" created by *ficus repens*. Photo credit: David Stansbury. Courtesy of Michael Singer Studio

Figure 33 *The Sculptural Biofiltration Wall*, 2012. The solar canopies on the roof. Image Courtesy of Advanced Roofing.

Figure 34 *Sculptural Biofiltration Wall*. 2012. *Lily Pond*. Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

Figure 35 *Yu Yuan (Yu Garden). Shanghai Shi* .1709. China. Image courtesy. *En.m. Wikipedia org.*

Figure 36 *The Sculptural Biofiltration Wall*. 2012. View at night.
Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

4. Parallels to Somaesthetics and “the Conception of Atmospheres” in the Projects of Michael Singer and the Michael Singer Studio

The viewer is often drawn into the experiential spaces in the projects of the Michael Singer Studio, providing rich opportunities for a bodily experience. Rebecca Krinke noted that Singer “engages the body in unconventional ways and in unconventional places to wake us up to the experience of having/being a body of the moment” (Krinke, 2005, p. 85)..Her statement about Michael Singer’s work echoes a focus in Richard Shusterman’s somaesthetics, which is “the living, feeling, sentient, intelligently perceiving and performing body” (Shusterman, 2011, p. 280). He has emphasized that an artwork cannot be complete until the viewer has experienced and interpreted its particular qualities. It is important that there is a manifold and intense interplay between the artwork and the viewer (Shusterman, 2002, p. 31). Michael Singer has always believed that his gardens and his major infrastructure projects are completed only when visitors have walked through them and experienced their different aspects:

> *Actually, I am interested in how people move through a space and how architecture choreographs our movement through space, as well as the power architecture has in bringing meaning to a site.* (Grande, 1998, p. 13)

There are many examples of Michael Singer and his partners’ buildings, gardens, waterfronts, houses, and infrastructures, which become organic parts of the environment and create an interplay between indoors and outdoors. Their indoor and outdoor projects were created so that the people who live and work in them or walk around them could discover the many fresh nuances and perspectives they contain and experience the colors and fragrances of the flowers and the sounds that continuously change character, depending on the effects of lighting, the weather, and the seasons. The olfactory, acoustic, and visual aspects of the projects have been important in the Michael Singer Studio.[10] In describing the large garden he created for Concourse C. Denver International Airport (1994) (Fig. 37), Michael Singer remarked that he “took what would have been a usually sterile airport zone, made it smell, made it wet, and made it grow; and gave life that you don’t get in places like an airport” (Krinke, 2005, p. 85). In this very large garden, Michael Singer brought nature into the gray sterile airport setting by creating a vast indoor garden, in which climbing plants creep up the walls and across the sculpted concrete surface. The garden is a living ecosystem and an artwork. Michael Singer pointed out the important elements in the “atmospheric turn” or “architectural atmospheres.” This concept is currently widely discussed and visible in architectural practice and theory.

10 See below, pp. 9–10.

Figure 37 *Garden in Concourse C. Denver International Airport.* 1994.
Photo Credit: David Stansbury. Courtesy of Michael Singer Studio

However, Professor of Political Sociology Christian Borch asked, "What do 'atmospheres' refer to and, more precisely – how do they move us"? His answer was the following:

> *According to the (Swiss architect Peter) Zumthor two things are important. One relates to how we perceive or experience spaces (...) "(w)e perceive atmosphere through our emotional sensibility." Zumthor emphasized that the second feature is that encounters with buildings are very much bodily. We innately sense buildings, feel their material-haptic qualities, hear their sounds, see their lights, sense their temperature and smell, etc.* (Borch, 2014, p. 7)

Genot Böhme, a founder of the "concept of atmospheres," added, "aesthetics of atmosphere must also mediate between the aesthetics of reception and the aesthetics of the product or of production." Therefore, "atmospheres are in fact manifestations of the co-presence of subject and object" (Böhme, 2014, p. 43). Finally, an important part of "the conception of atmospheres" is that "architectural atmospheres are not just about bodily engagement with the building itself." They also "refer to how the building relates to its environment, or rather how it '*becomes part* of its surroundings'" (Borch, 2014, p. 8). Unlike other representatives of the concept of atmospheres, Singer has interpreted this relationship in a unique way. The reason is that the visual-artistic interpretation of parts of the works serves as an essential and new element to strengthen and intensify this relationship. The projects are also generally structured such that they affect the entire body of the viewer. The entire sensory experience is activated.

Conclusion: The originality and essence of Michael Singer's own works and the projects of the Michael Singer Studio

The unique character of Singer's installations and sculptures is that it expresses human experiences in nature, which verbal language is unable to communicate. His personal visual language was developed through his deep explorations of personal and cultural experiences, which, in today's "only of our moment" Western societies, have been relegated to the sidelines. The originality of many of his small and large projects is due to the very close relationship between art, architectural design, and sustainability and their intense ability to develop our awareness of harmonious nature and reveal the relationship between humankind and its surroundings. He has continued to make new works that convey these dynamic relationships and to practice his holistic and creative approach to art, architecture, and infrastructure. He and his colleagues at the Michael Singer Studio have created design solutions that fulfill both aesthetic and ecological purposes. His unconventional and inventive viewpoint, creative thinking, and evocative projects at all scales motivate us to evaluate our environments and our connections in a new way. Aspects of ancient Japanese, Arabic, and Chinese aesthetics linked with the concept of the full involvement of artists throughout the planning and construction process of projects are elements of the aesthetics, or "concept of beauty," that Singer and his Studio have realized. Their large and small works reflect a new visualization of both Richard Shusterman's somaesthetics, with its cornerstone of the mind-body relation, and a new parallel to the atmospheric approach as seen in the works of Peter Zumthor and Christian Borch as well as in the writings of Gernot Böhme on this subject. In the search for the often-concealed past, The Michael Singer Studio is shaping the future in a unique way.

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The Aesthetic Enchantment Approach

From "Troubled" to "Engaged" Beauty

Sue Spaid

Abstract: *Aestheticians routinely wrestle with the asymmetry between aesthetic appreciation and "natural" beauty. In these pages, I develop the Aesthetic Enchantment Approach (AEA), which avoids "aesthetic disillusionment" while augmenting aesthetic enchantment, even for degraded sites. AEA's main claim is that people, whether citizen scientists counting species or stakeholders working alongside scientists to reclaim environments, boost their wellbeing, while cultivating environmental melioration. AEA advances an "engaged" beauty grounded in wellbeing such that environments constantly permeate and shape human somas, which in turn penetrate and reshape environments. By urging people to protect* all *of nature, AEA greatly expands upon scientific cognitivism's territory.*

Keywords: *beauty, wellbeing, reclamation, degraded land, biodiversity.*

1. Introduction: "Troubled" Beauty

With every passing year, the very wildlife or unspoilt nature that people routinely describe as beautiful becomes rarer and rarer: tropical forests give way to palm plantations, wetlands become farmland, and farmers cultivate monocultures. Moreover, manmade disasters render land fruitless owing to desertification, flooding, deforestation, water contamination, soil erosion, drought, leaching and spills. Given such widespread devastation, there must be a way to inspire people both to avert manmade environmental catastrophes (at home and abroad) (Spaid, 2020) and to value such sites' unimaginable potential. Otherwise, degraded lands are readily dismissed as *ugly*, or worse still, beyond hope, leading to further degradation. That land degradation currently threatens the wellbeing of 3.2 billion people magnifies the urgency to amend both degraded sites and people's attitudes toward them (Leahy, 2018).

In 2019, the Nordic Society for Aesthetics issued a call for papers concerning "The Place of Beauty in the Contemporary World." Recognizing that 75% of Earth's terrain is substantially degraded (Leahy, 2018), I wondered how one could reflect upon these four points –place, beauty, contemporary, and world- in a manner that inspires people to protect nature, no matter how degraded. Underlying these terms are rather weighty philosophical notions such as space, judgment, time, and cognition, which have characterized aesthetical judgments since Immanuel Kant. If degraded lands could be appreciated for their beauty, inhabitants might feel determined

to resuscitate them, granting future generations greater access to natural beauty, rather than less, as is the current trend. I'm immediately reminded of artist Aviva Rahmani whose neighbor took her to court because he found her project to reclaim the local "town dump" suspect. He must have been pleasantly surprised when an "ecologically thriving salt marsh, surrounded by a successional forest, meadows, and uplands" sprouted up a decade later (Spaid, 2000, p. 115). The Aesthetic Enhancement Approach (AEA) developed in these pages aim to engage stakeholders in habitat regeneration on nature's behalf (Spaid, 2016).

People tend to appreciate their immediate environment, since it provides them habitat, as well as access to renewable resources that offer them sustenance and strengthen their capacity for *eudaimonia* (Spaid, 2019, p. 7). As Richard Shusterman has observed, "[T]he self's action, will, and thinking are governed by habit, and if habits necessarily incorporate environmental elements, then the self essentially relies on such environmental elements" (Shusterman, 2008, p. 214). Moreover, an environment's capacity to sustain inhabitants' wellbeing reflects "somatic efficacy," which blends "a desire to live better" with "pluralist individualism" (Shusterman, 2000b, p. 215). By contrast, people tend to flee lands that no longer support their livelihoods. Dislocation causes extreme stress and instability, rendering self-mastery a non-starter. Mass migrations due to environmental degradation, currently underway in sub-Saharan Africa, Southeast Asia and Central America, are expected to affect 50-700 million people by 2050.[1] The Harrison Studio's *Peninsula Europe IV* (sextych) (2017) anticipates droughts forcing 23 million Europeans to migrate by 2070 (Spaid, 2017, pp. 250-252).

Even people whose environments have yet to be directly impacted suffer the psychological harm/trauma known as "climate surprise," caused by unpredictable meteorological swings, and the concomitant dread/fear known as "ecological grief," afflicting scientists witnessing climate change (Glantz et al., 1998). Such stressful predicaments significantly diminish people's wellbeing, even if their lives remain physically unaffected. Finally, most conceptions of beauty are entirely human-centered, and are thus visually biased; better yet, visually impaired, since ecosystem features used by scientists to evaluate ecosystem functioning are not necessarily accessible to trained eyes, let alone the "naked eye." Ecosystem functioning refers to "'the joint effects of all processes (fluxes of energy and matter) that sustain an ecosystem' over time and space through biological activities" (Truchy et al., 2015).

To defeat "troubled" beauty, this paper offers eight frames for evaluating a site's beauty. I begin by reviewing statistics culled from EU environmental reports that paint a rather grim picture, and thus demonstrate that Europe's "natural" beauty is largely illusory. To my lights, this picture frustrates scientific cognitivists' characterization of nature as exhibiting "scenic or conventional beauty," especially since its adherents admit that "scientific" beauty fails to inspire people to protect "those parts of nature that are deemed ugly or unsightly" (Carlson and Lintott, 2008, p. 205). Building on science's current method for "gauging" ecosystem functioning, AEA advances "engaged" beauty, whose track record of mobilizing stakeholders to reclaim degraded sites has enhanced human and nonhuman wellbeing alike. I next offer four case studies that demonstrate the ramifications of "biodiverse" beauty. This sets the stage for a "values-oriented" beauty aimed at countering the way "cognitive states" distort "perceived" beauty, further jeopardizing scientific cognitivism's reliance on science. Lastly, I explore reasons to appreciate, and therefore protect urban wastelands; leaving "abandoned" beauty *as is*.

1 https://ipbes.net/news/media-release-worsening-worldwide-land-degradation-now-%E2%80%98critical%E2%80%99-undermining-well-being-32

2. The Buzz Kill: "Natural" Beauty

Let's return to that 2019 NSA conference. From the onset, I worried that this assembly of aestheticians decamped to the Hanaholmen Cultural Centre (on an idyllic island in Espoo, FI near Aalto University) and sustained by sumptuous seasonal buffets, might lack the requisite exposure to environmental precarity. Imagining that these participants inhabit similarly idyllic campuses, far from genuine environmental harm, I pestered listeners with EU statistics. I must admit, I felt a little guilty painting such a horrid scene, while astonishing harbor vistas loomed beneath Helsinki's stark sky. Most horrific was the statistic citing that European animal populations fell on average 60% between 1970 and 2014 (the latest data available).[2] Not surprisingly, the habitats suffering the greatest damage were rivers and lakes, where wildlife populations fell 83% owing to agriculture's enormous thirst and the large number of dams.[3]

Consider that in 2011 the EU estimated that sprinkled among its 39 member and co-operating countries there were potentially 2.5 million sites with contaminated soil. By 2019, 45% of these sites were identified, yet only 51,300 sites had been remediated.[4] Since 95% of identified sites remain, the beauty potential proves enormous. Regarding top soil erosion, 20% of Europe's land area [are] subject to wind and water erosion. "At EU level, soil erosion affects over 12 million hectares of land – about 7.2% of the total agricultural land – and leads to €1.25 billion loss in crop productivity."[5]

Only 43% of reported freshwater bodies have achieved a good ecological status, which was expected to rise to 53% by 2015.[6] Consider that 7% of groundwater stations report excessive levels of pesticides leached into the water,[7] while "toxic blue-green algal blooms in Europe [are] a growing problem."[8] Since implementing the Convention on Transboundary Pollution in 1979, "sulphur emissions across Europe have fallen significantly, but with the increase in vehicle traffic nitrogen oxides emissions have been reduced only slowly. Acid rain in Europe will therefore continue to be a problem in Europe until these emissions can be dramatically reduced."[9] In Spain, "practically all the mining leachates exceeded the maximum concentrations established by Directive 98/83/CE for Fe and Cd [and] almost 90% exceeded the limit for Mn and 82% for Al. Likewise, Fe, Cd, and Mn caused 'extremely high' degradation in most sampled leachates."[10]

The EU considers deforestation an "international" problem, since the production of logs and agriculture imported between 1990 and 2008 required non-EU nations to clear land masses the size of Portugal.[11] In 2018, the EU conducted a feasibility study to step up actions against international deforestation.[12] To drive home deforestation's impact, I reminded the audience that even though Finland is widely recognized as one of the world's most environment friendly countries, it too is an offender. In 2009, Finnish artists Sanni Seppo and Ritva Kovalainen

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2 https://www.theguardian.com/environment/2018/oct/30/humanity-wiped-out-animals-since-1970-major-report-finds

3 https://www.theguardian.com/environment/2018/oct/30/humanity-wiped-out-animals-since-1970-major-report-finds

4 https://www.eea.europa.eu/data-and-maps/indicators/progress-in-management-of-contaminated-sites-3/assessment

5 https://ec.europa.eu/jrc/en/news/soil-erosion-costs-european-farmers-125-billion-year

6 https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52012DC0673

7 https://ec.europa.eu/eurostat/statistics-explained/index.php/Archive:Agri-environmental_indicator_-_pesticide_pollution_of_water

8 https://www.researchgate.net/publication/279889378_Toxic_blue-green_algal_blooms_in_Europe_a_growing_problem

9 http://www.enviropedia.org.uk/Acid_Rain/Europe.php

10 https://www.ncbi.nlm.nih.gov/pubmed/29448194

11 http://ec.europa.eu/environment/forests/studies_EUaction_deforestation_palm_oil.htm

12 http://ec.europa.eu/environment/forests/pdf/KH0418199ENN2.pdf

documented the widespread destruction of the Finnish forests thanks to the forestry industry. Their 2011 exhibition "Koltainen Metsä" (Golden Forest) at Helsinki's Taidemuseum Tennispalatsi made a lasting impression on me, since it cast Finnish forests as far less pristine than their reputations, framing "sights unseen" as utopia and "unsightly scenes" as dystopia.

3. Scientific Cognitivism: "Scientific" Beauty

In their introductory essay "Nature and Positive Aesthetics," Allen Carlson and Sheila Lintott note that "environmentalists find meeting the goal of protecting nature relatively straightforward for those parts of nature that traditionally have been seen as scenic or conventionally beautiful. On the other hand, they have difficulty with those parts of nature that are deemed ugly or unsightly" (Carlson and Lintott, 2008, p. 205). To solve this dilemma, they posit that since "all nature has positive aesthetic value," one will eventually acknowledge that nature is *essentially* beautiful, and therefore deserving of protection. Doing so requires an "appropriate appreciative stance," specifically one informed by scientific knowledge (p. 205).

Scientific cognitivists claim that greater scientific knowledge informs people's perception and opinions regarding nature, and thus stands to augment their appreciation for aspects of nature that are not obviously beautiful. Scientific cognitivism's primary beneficiaries include "pristine nature" (p. 205), such that species or places *ordinarily* considered loathsome such as insect populations (though not those framed as "pests"), lizards, swamps, mole hills, weeds, wastelands, wild flowers, compost, soil (dirt), spider webs, animal faeces, termite hills, wolves, bears, poison ivy/stinging nettles, scavengers/carrion, and lands ravaged by natural disasters, though not necessarily lands that spur people to flee.

I realize that scientific cognitivists can adapt their view to accommodate whatever science has to say about the potential of degraded lands, but doing so would require them to characterize degraded lands as having "positive aesthetic values," leaving one to wonder to which sites they would attribute "negative" aesthetic values. The position defended here denies the possibility of nature having negative aesthetic values, since whatever makes it negative is due to negligence. What's "negative" is ethical not aesthetic, but this is another paper altogether. Since nature provides habitat, it exhibits "positive somaesthetic values."

In light of the surfeit of environmental degradation, scientific cognitivists' premise that nature is "*essentially* beautiful" strikes me as misguided, especially since they admit that nature's deserving of protection hinges on human beings appreciating it. Homelands that people are fleeing in droves have failed to elicit the appropriate appreciative stance. With so many sites for human beings to deem "unsightly," I worry that scientific cognitivism justifies people's abandoning or neglecting degraded sites, should science lack the wherewithal to identify such sites' potential, let alone remedy them.

To be fair, I imagine Carlson and Lintott defining nature narrowly. That is, they view nature as primarily *wild*, if not free from human incursion, which spurs degradation. For my purposes here, I conceive of nature more broadly, such that nature refers to all living species, native or not, and their current habitats. Thus farms, urban green spaces, zoos, and pioneer plants are no less nature than the far reaches of Yosemite National Park, which incidentally hosts 275 invasive plant species. Since ecology is a particularly human occupation, and ecology is concerned with nature's conservation, human beings are in constant contact with nature, even when people opt for "benign neglect." As we shall see, "benign neglect" *is* still action, since it is both willful and routinely monitored.

Truth be told, *all* of nature, sightly or not, deserves human protection and/or reclamation, especially those swathes of land whose *essential* beauty has been lost to species depletion, deforestation, soil erosion, drought, salinity, desertification, flooding, dumping, wetland destruction, acid rain, and air pollution. If the “appropriate appreciative stance” is needed to compel protection, as Carlson and Lintott claim, what will motivate people to protect degraded sites? Even if scientific knowledge stands to inform people, science alone cannot motivate the appropriate appreciative stance, since greater knowledge rarely shifts people’s values. This point has been proven time and again, every time evolution deniers capably explain the process of evolution. Something similar happens among climate change deniers and believers, who regularly demonstrate their knowledge and ignorance, respectively; regarding carbon dioxide’s role in increasing Earth’s atmospheric temperature (Kahan, 2015). Even when the former have their facts straight, their beliefs don’t change since their underlying values remain the same. Beliefs about what counts as beautiful or a site’s potential remain intact until some earth-shattering experience shifts people’s values, which is ultimately what motivates the appropriate appreciative stance.

Most importantly, the strategies that people consider to reclaim a site are mostly hunches, lacking in scientific proof regarding their success. The question is, then: what inspires people to imagine some alternative environment, to believe change is possible, and to take actions previously not undertaken in order to reclaim degraded sites that others presumably deem unworthy of protection? I say *presumably* because human negligence causes degradation, yet it’s not unusual for degradation to be the outcome of a power struggle between foreign (corporate) interests and local inhabitants, whose ancestors have carefully protected their environment for centuries, yet their progeny proved powerless in the struggle over land rights.

4. “Deemed Ugly or Unsightly”: “Gauging” Beauty

Because somaesthetics cannot single-handedly tackle such issues that crucially constrain human flourishing, AEA advances a science-based, values-oriented approach for gauging the beauty of sites ordinarily deemed unworthy of protection. Appreciating degraded lands requires a heightened imagination, such that recognizing a site’s beauty extends beyond sight to include one’s “vision” for such sites. To evaluate ecosystem functioning, scientists measure biodiversity, entropy levels, soil fertility/organic life, sustainability/growth, and habitat/food. Scientists use the term biodiversity to describe variations “among taxa at multiple levels of ecological organization: between and within populations, species, phylogenies, functional groups, trophic levels, food web levels, food wed compartments, and even habitat patches that explain landscape diversity” (Hines et al., 2015).

So long as biologists, such as Michael Scherer-Lorenzen, correlate ecosystem functioning with biodiversity, biodiversity doubles as a bio-indicator of a place’s beauty (Scherer-Lorenzen, 2005). As it turns out, this view is not so farfetched since even biodiversity’s staunchest critics deride it as having greater aesthetic than scientific value, so long as it’s just a feature for human beings to enumerate. Scientists who employ biodiversity to gauge ecosystem functioning typically tap citizen scientists to count species, an action that participants report makes them feel “connected to nature” and motivates them to “learn more about nature” (Ganzevoort et al., 2017). Thanks to regularly held Conference of the Parties to the Convention of Biological Diversity (15 meetings since 1994), UN member nations regularly report biodiversity figures, so species counts are conducted across the globe.

On its face, AEA appears to offer a functionalist account of beauty, since it frames beauty as ecosystem functioning. However, AEA not only "engages" stakeholders with nature, but species counts effectively track an environment's wellbeing. AEA thus expands somaesthetics' goal of human flourishing to include nonhuman flourishing. Most relevant for somaesthetics is the way biologists and policy makers explicitly link "biodiversity (i.e. genes, traits, species and other dimensions) and human wellbeing (HWB; i.e. health, wealth, security and other dimensions)" (Naeem et al., 2016). Since inhabitants tend to feel pride in species count results, counts used to assess degraded sites are also likely to attract stakeholders. Since sustainable environments enable people to foster self-cultivation, species counts not only hold the key to human wellbeing (Russell et al., 2013), but they unlock the "place of beauty in the contemporary world." Since scientists regularly refine their positions and change their recommendations, biodiversity is hardly some panacea. Even so, AEA's account of "engaged" beauty motivates inhabitants to "gauge" the beauty of sites historically dismissed as blights and to envision ways to boost their wellbeing.

5. The Aesthetic Enhancement Approach: "Engaged" Beauty

Since the millennium, ecologists have primarily focused on ecosystem services, whose human-centered approaches are designed to appeal to policy makers and thus provide ecologists greater resources to conduct research (Kremen, 2005). In contrast to ecosystems servicing, I prefer the stronger target of ecosystem functioning, which is nature-oriented.

Stakeholders willingly work on nature's behalf, because they view themselves in kinship relationships with nature, such that all lives are mutually-interdependent (Spaid, 2016). Stakeholders include eco-artists (like the Harrison Studio and Aviva Rahmani mentioned above), citizen scientists, community members, or environmental activists working alongside scientists to reclaim degraded sites that often double as open-air laboratories for testing novel reclamation strategies.

Terms like restore, conserve, preserve, remediate, and reclaim all have specific meanings. I rather employ reclamation more generally to cover strategies meant to improve ecosystem functioning and enhance human wellbeing without having to restore sites to their original conditions, which is rarely feasible and not necessarily desirable (O'Neill et al., 2008). Reclamation concerns an environment's meliorative cultivation, yet human actors simultaneously undergo melioration, both as participants with shared goals and future beneficiaries of said efforts.

When seeking to reclaim a site, I imagine stakeholders asking themselves: "Whose wellbeing takes priority here? Why? How can this be achieved?" And of course, there are probably numerous proposed solutions, but only some stand to optimize ecosystem functioning. Consider Aldo Leopold's oft-quoted "double" haiku- "A thing is right when it tends/ to preserve the integrity,/ stability, and beauty/ of the biotic/ community. It is wrong/ when it tends otherwise" (Leopold, 1966, p. 262). Here, the biotic community, not Leopold nor any stakeholder, is designated the beneficiary for whom "integrity, stability, and beauty" are optimized, if not maximized. One can easily recognize Leopold's vision of "integrity, stability, and beauty" as exemplary of a site's wellbeing. AEA thus shares his core value.

People who ask such questions might come to realize that the grandeur and magnificence of those spectacular sunsets that they admire are at odds with the underlying pollution facilitating vermilion swirls and rosy streaks (Ballantyne, 2007); or the other way around, "a Godforsaken mosquito-infested swamp shrouded in frozen darkness half the year" is likely to be teeming with

diversity, complexity, and habitat for myriad co-existing (some man-eating) species (Hettinger, 2008, p. 415). In other words, the "whose" of "Whose wellbeing?" rarely addresses those with the power to green light reclamation efforts, since individual preferences are likely to clash with strategies that improve ecosystem functioning. Once stakeholders agree upon "whose," they can delimit the ecosystem and identify appropriate strategies to make it "whole" (a term some scientists actually use) again.

Such an approach coheres with somaesthetics' notion of soma, the conscious body that "reaches so far 'beyond the conventional boundaries of the epidermis'" (Shusterman, 2008, p. 214) in its perpetual exchange of energies and substances with other somas as well as non-sentient bodies. As John Dewey recognized, we always live "as much in processes 'across', and 'through' skins as in processes 'within' skins" (214). According to Wojciech Małecki and Simon Schleusener, "human somas are 'transactional', that is, they are being constantly permeated and reshaped by their environment, which they in turn reshape and penetrate, something that happens both on the evolutionary scale and on the scale of the life of a single specimen of homo sapiens sapiens" (221).

It's difficult to compel people to clean up messes made by others. However, those who sue guilty parties for damages with the express goal to apply reparations toward reclamation are most likely to feel impelled to remake such sites to support their livelihoods. Problem is, envisioning a positive outcome first requires believing in plausible strategies, which takes imagination and sheer will to implement. Those stakeholders who are so disturbed by a site's degradation that they do everything in their power to reclaim it justify scientific cognitivists' impression of nature as "scenic or conventionally beautiful." However, one uses different tools to assess whether reclaimed nature is "scenic or conventionally beautiful." Since extreme restorations are rarely necessary or economically feasible, some reclaimed sites remain visibly "ugly," so people rely on "health stats" to determine "conventional beauty."

Even if scientific knowledge fails to alter people's beliefs, people who *believe* in its value rely upon it to identify salient signs of ecosystem malfunctioning, especially when degradation is suspected, though not yet obvious. Just as people exhibit signs of poor health, nature too exhibits ill-health such as species loss, hydric stress, thermal stress, biological colonization, etc.; salient symptoms that warrant human attention. Identifying an environment's beauty thus requires stakeholders who capably identify relevant symptoms, recognize those aspects of nature that are in distress, and enact proven or prospective strategies for alleviating said stress.

As Section 6 case studies demonstrate, when a site's problems are framed in terms that appeal to people's core values, they feel motivated to take actions that optimize the presence of life, even for unsightly sites that lack scenic appeal. Apparently, people's appreciation for either reclaimed or potentially reclaimable sites reflects their belief that ecosystem functioning matters more than optics, not their knowledge of what constitutes *normal* biological states as some scientific cognitivists claim. Consider Patricia Matthews' view, "Empirical knowledge does not tell us what is aesthetically valuable about an object, but by allowing us to perceive *normal states* [emphasis mine] of objects, empirical knowledge helps to reveal aesthetic properties and aesthetic value" (Matthews, 2002, pp. 38-39).

With degraded sites, not only is normal long gone, but scientists increasingly doubt that some "normal" ever existed. There is thus no "steady state" or equilibrium to serve as a benchmark against which one can compare an ecosystem's current entropy levels (Briske et al., 2017). Since even healthy ecosystems are dynamic, constantly changing; the idea of "normal" biological states proves more fiction than real. Absent handy benchmarks, scientists invite citizen scientists to

count species, which reveal species numbers whose total picture is imperceptible to the naked eye, since hundreds of counters are needed to generate it.

6. Four Case Studies: "Biodiverse" Beauty

Given the aforementioned relationships between biodiversity and human wellbeing, "biodiverse" beauty belongs more to somaesthetics than to environmental aesthetics. In fact, species counts are a kind of human action, a viable response to degradation whose results reflect inhabitants' real-time, lived experiential gains, rather than moral retribution (Ryan and Riordan, 2000). What's more, freely performed and self-concordant actions, such as counting species and reporting one's results have been shown to boost citizen scientists' feelings of "attachment to place" (Ganzevoort et al., 2017, p. 2824). Citizen scientists consider themselves custodians, rather than owners of the data they've collected (Ganzevoort et al., 2017, p. 2821). Such experiences positively impact wellbeing, since they enhance participants' capacities, as in skill sets, and engender access to the scientific community.

I even imagine that one's role in providing scientists crucial data sets could assuage the ecological grief that so many people seem to be suffering these days (Vince, 2020). If the stakeholder's wellbeing is improved, then counting and/or reclamation activities exemplify Shusterman's point, following Aristotle, that practical action (*praxis*) trumps poetic activity (*poiēsis*), since the former is "derive[d] from the agent's inner character and reciprocally helps shape it. While art's making has its end outside itself and its maker (its end and value being in the object made), action has its end both in itself and in its agent, who is affected by how he acts, though allegedly not by what he makes" (Shusterman, 2000a, pp. 53-54).

As briefly noted, ecologists tend to monitor biodiversity, because they consider it shorthand for ecosystem functioning (Scherer-Lorenzen, 2005). A tree-biologist, Scherer-Lorenzen offers the example of plotted forest data that captures growth rising rapidly (asymptotically) as the number of *different* trees in the canopy increase. Ecology-oriented biologists consider biodiversity an independent variable, whose inputs are greater resource exploitation and productivity, in contrast to theories that treat biodiversity as an input (dependent variable). Fortunately, data-collection knowhow is widely available, since 193 UN-member nations, as well as 114 cities, have submitted National Biodiversity Strategy and Action Plans to the UN Conference of the Parties to the Convention on Biological Diversity.

Moreover, Scherer-Lorenzen and others argue that ecosystem functioning depends on biodiversity, as opposed to biodiversity depending on some combination of climate, nutrient, and disturbance (Scherer-Lorenzen, 2005). Species depletion, however, is typically caused by some combination of reduced access to nutrients (such as water and light), competition from invasive species, and human contributions such as soil erosion, desertification, fertilizer runoff, and development (Spaid, 2015, p. 119). Finally, Scherer-Lorenzen and zoologist Shahid Naeem note that maximized productivity and resource exploitation not only improve biodiversity, but they hinder invasive species. Elsewhere, I've noted that biodiversity serves as a bio-indicator for human cultural engagement, making it relevant for both somaesthetics' focus on meliorative practices and even more classical notions of beauty (Spaid, 2015).

Although the ensuing case studies exemplify "biodiverse" beauty, AEA's success doesn't hinge on ecosystem functioning being linked to biodiversity, in *perpetuity*. For all I know, scientists will next tie ecosystem functioning to molecular energy diversity or polar wind patterns. It's difficult to know whether species counts are just another passing fad, no different than the

"invasive species wars" a generation ago. And since science endures leaps and reversals, it's safe to assume "fad status," such that scientists are already hard at work, hypothesizing even better tools for detecting salient symptoms of ecosystem malfunctioning.

As Jari-Pekka Naulapää points out, however, the "systems" part of an ecosystem is extremely difficult to define, making the identification of a particular system's boundaries, let alone the quantification of its inputs and outputs, nigh impossible (Spaid, 2017, p. 110). That said, I leave it to stakeholders to demarcate some particular ecosystem on whose behalf they aim to act. It could be as massive as a watershed, as large as a protective reserve, or as modest as a bird's nest. Since it is quite difficult to switch scales midstream, participants typically agree upon the territory's scale before thoroughly researching a particular strategy. The following case studies focus on biodiversity and demonstrate a range of approaches, several of which yield counter-intuitive outcomes. One could say that complexity itself produces a "ripple of direct and indirect consequences throughout the ecosystem" (Farquhar, 2019).

Área Conservación de Guanacaste. Novelist Jonathan Franzen actually despises the term biodiversity, yet he also credits its distinct role in inspiring Costa Ricans to protect 4% of the world's species, even though their country covers only .03% of the Earth's land surface. As I have shown elsewhere, when biodiversity becomes a shared value, it galvanizes community members (Spaid, 2016). As Franzen explains:

> *Biodiversity is an abstraction, but the hundreds of drawers of pinned and named Guanacastean moth specimens, in an air-conditioned room at Santa Rosa National Park, are not. …If you spent a week in the dry forest as a child, examining chrysalides and ocelot droppings, you might, as an adult, see the forest as something other than a purely economic resource. Finally, and perhaps most important, the parataxonomists create a sense of local* ownership [emphasis mine]. *Some of them are husband-and-wife teams, and many live at the research stations that dot the [Área Conservación de Guanacaste](A.C.G.), where they exert a* more powerful protective influence [emphasis mine] *than armed guards ever could, because their neighbors are their friends and family* (Franzen, 2015).

When used as a tool for gauging environmental wellbeing, biodiversity offers stakeholders quantifiable factors that signal ecosystem changes, numbers that heretofore went unnoticed until it was way too late, that is, until people started feeling the effects of entropy upticks (Spaid, 2016, p. 82). Since 1985, tropical ecologists Daniel Janzen and Winnie Hallwachs have been running A.C.G., which Franzen considers the "most audacious and successful conservation project in the New World tropics" (Franzen, 2015).

> *Janzen and some farsighted Costa Rican policymakers recognized that, in a country where economic opportunities were limited, the amount of protected land enormous, and funding for protection strictly finite, defending parks filled with timber and game and minerals was like defending mansions in a ghetto. The A.C.G. experimented with a new approach: the national parks and the reserves within it were exempted from the park administration's policy of rotation, which allowed their personnel to put down roots and develop allegiance to the land and the conservation concept, and all employees, including the police, were expected to do meaningful conservation or scientific work* (Franzen, 2015).

During the first years, the biggest issue was managing wildfires. "Janzen experimented with planting seedlings of native tree species, but he quickly concluded that natural reforestation, with seeds carried by wind and animal droppings, worked better. Once the new forest took hold, and the fire risk diminished, he developed a more ambitious mission for the A.C.G.'s employees: creating a complete inventory of the estimated three hundred and seventy-five thousand plant and animal species that occur within its boundaries (Franzen, 2015)." As one can see, A.C.G. privileges ownership and a conservation allegiance grounded in maximizing biodiversity.

Yellowstone National Park. In 1995, YNP reintroduced gray wolves, which had disappeared in the 1920s due to hunting. With the wolves gone, the elk population initially exploded, leading to over-grazing, far fewer beavers, increased erosion risks, and eventually fewer elks. Twenty-five years later, the elk population has shrunk, which disappoints hunters; but it is still three times what it was in 1968, because the park itself is healthier. Wildlife biologist Doug Smith remarks, "It is like kicking a pebble down a mountain slope where conditions were right that a falling pebble could trigger an avalanche of change" (Farquhar). Apparently, wolves' predatory nature keeps elks on the move, thus reducing the over-grazing of willow, used by beavers to build dams. The reintroduction of wolves spawned a "trophic cascade," whereby nine beaver colonies (up from one in 1995) led to: increased songbird and amphibian habitat, recharged water tables, and cold, shaded water for fish. Exemplary of scientists treating biodiversity as indicative of environmental wellbeing, wolves have enabled YNP to host larger populations of many more species.

Bavarian Forest National Park. Since the 1990s, European spruce forests have been ravaged by bark beetles. While most government experts think the solution is to fell and remove infested trees, scientists who conducted research in the BFNP found that "benign neglect" resulted in more biodiverse forests, whose greater genetic diversity is more likely to resist future infestations, making it increasingly healthier. Although benign neglect sounds like "doing nothing," it is rather teams deciding not to intervene the way they've done before, though of course scientists closely monitor outcomes. Exemplary of another trophic cascade, Bässler et al. remark: "The most obvious and ecologically meaningful habitat feature changed after [beetle bark] disturbance was the rapid enrichment of dead wood along with the openness of the canopy (Moning & Müller, 2008)….The availability of resources subsequently led to the restoration of species communities, which has been shown for saproxylic beetles (Müller et al., 2010), wood-inhabiting fungi (Bässler et al., 2010b), bryophytes (Raabe et al., 2010), lichens (Moning et al., 2009), and birds (Moning & Müller, 2008)" (Bässler et al., 2015). Letting dead trees serve as nurse logs that attract woodworms (beetle larvae), fungi, mosses, lichens, birds, and eventually seeds has not only helped to regenerate BFNP, but its greater biodiversity improves ecosystem functioning, since tree species' diversity boosts immunity against future infestations.

Halikonlahti Bird Pools. Given the abundance of migrating birds flying over Finland's Salo Municipal Sewage plant, the community decided to transform several of its former sewage lagoons into a wildlife park known now as Halikonlahti Bird Pools. To provide waterfowl habitat, artist Jackie Brookner worked with the local community to construct three "fake" islands from scratch; two to clean the spoiled lagoon using phytoremediation and a third to provide bird-nesting sites. Being an experimental approach to wastewater reclamation, Brookner engaged scientists to develop, measure, and test the impact of her *ecovention* ("artist-initiated practical action with ecological intent") on this ecosystem. "To figure out 'how, what, where', [Brookner] relied on local hydrologists, ecologists, and limnologists (lake specialists). Most important, the

work is being monitored so that its successes/failures are quantifiable" (Spaid, 2017, p. 157).

Even though scientists use this data to grasp ecosystem functioning (and malfunctioning), this data never produces black and white outcomes, since "bad news" tends to spur protection, while "good news" ensures progress. People's appreciation for such sites hinges more on their recognizing the value of ecosystem functioning than on their knowledge of what constitutes normal biological states as Matthews claims. Moreover, once a site's health is assessed, I imagine many more stakeholders feeling inspired to "engage" it. Ongoing "works in process," stakeholders' actions taken to enhance a site's health need not be perfect, conclusive, or fixed. These case studies are exemplary of AEA, since they are science-based, values-oriented approaches that inspire *contemporaries* to envision *world*, including degraded sites, as befitting *beauty*, thus guiding stakeholders to safeguard *place*. As one can see, "engaged" beauty entails far more than scientific knowledge and perception.

7. The Cognitive States Problem: "Perceived" Beauty

As briefly noted, scientific cognitivists claim that "a serious, appropriate… aesthetic appreciation of nature requires a knowledge of natural history: the knowledge provided by the natural sciences, especially geology, biology, and ecology. To appreciate nature 'as nature' or 'on its own terms', therefore, is to appreciate it as it is characterized by natural science" (Carlson and Lintott, 2008, p. 9). Carlson and Lintott note, however, that *other* "cognitive approaches emphasize different kinds of knowledge and information, claiming that appreciating nature 'on its own terms' may involve experiencing it in light of various local, folk or historical traditions. Thus, for appropriate aesthetic appreciation, local narratives and folkloric, or even mythological stories about nature are endorsed as either complementary or alternative to scientific understanding" (Carlson and Lintott, 2008, p. 9). Those who uphold scientific cognitivism argue that it is the preferred approach since it supports neither a "disrespectful attitude toward nature" nor a "utilitarian application of scientific knowledge" (Saito, 1998, p. 157). As already noted, the numerous reclamation examples thus far provided serve as scientific evidence, but they weren't initially scientifically-based strategies.

Moreover, scientific cognitivism fails to account for cognitive penetration, whereby cognitive states such as beliefs, desires, and emotions, and by extension values tend to influence cognition, and thus routinely impair perception (Raftopoulos and Zeimbekus, 2015). In fact, the availability of scientific evidence itself is driven by whatever questions scientists have felt motivated to ask (and found funding to study), which largely reflects researchers' personal attitudes toward nature and beliefs about its propensities. For example, scientists keen to research what animals learn and teach one another are likely motivated by animal experiences that resemble "instruction." Scientists seeking to understand whether birds learn to fly or do so instinctively carried out one such experiment. They restrained young birds from flying until they reached a certain age. The birds flew "immediately and normally," which scientists attributed to neuromuscular maturation, rather than learning or sheer instinct (Campbell and Reece, 2002, p. 1166).

Even a reclaimed site's success, expressed scientifically as ecosystem functioning, is hardly immune to errors, especially since ecologists risk erring on the side of overstating biodiversity's positive impact. In fact, biodiversity's critics likely consider the above case studies flawed, since they paint such rosy pictures of biodiversity as facile success stories. And no doubt, more research regarding biodiversity as a shorthand for ecosystem functioning must be undertaken. Even so, these cases demonstrate stakeholders intervening on nature's behalf, not because they

appreciate nature "on its own terms," terms that they may or may not one day adopt *as their own*; but because they *value* a site's health and are eager to do what they can to make it whole again.

I imagine stakeholders appreciating degraded sites even more once they are reclaimed, but this is simply a bonus, otherwise human beings could justify reclaiming sites in ways that primarily serve their own interests, such as planting lawns instead of protecting wastelands. When stakeholders privilege environmental wellbeing over what they normally find aesthetically pleasing, they not only take responsibility for nature suffering neglect, but they take actions whose impending outcomes are unlikely to match their ordinary preferences. Stakeholders who value environmental wellbeing may even end up appreciating signs of wellbeing that they once deemed ugly or unsightly. Fires in pine forests that foresters let burn because they avail seeds are one common example.

To demonstrate how the debate concerning the cognitive penetrability hypothesis intersects scientific cognitivism, I turn to Susanna Siegel's discussion of "pine-tree seeing" in her 2010 book *The Contents of Visual Experience*. She juxtaposes 1) the case of seeing a pine tree, but not recognizing it as a pine tree because one is unable to discriminate between different trees, and 2) seeing a pine tree because one has the requisite skill. Using a strategy familiar to scientific cognitivists, she claims that one sees the pine tree because one "sees (and therefore represents) the property of being a pine tree" (Siegel, 2010, p. 115). She effectively describes "perceiving under a concept." Absent pine-tree concepts, none are seen. And the more one knows about pine trees, the more one notices, and thus appreciates. Siegel's view that knowledge enhances cognition proves central to scientific cognitivism, yet scientific cognitivists fail to account for cognitive penetrability such that beliefs, desires and values typically skew cognition, and therefore aesthetic judgments.

This distinction creates an asymmetry between people's conceptions of "conventional" beauty and their assessment of nature's wellbeing, such that how people perceive the former tends to alter their awareness of the latter. For example, viewers who find nature pleasing often overlook its health, while those focused on nature's health have difficulties finding it pleasing. Moreover, scientific cognitivists claim that "even the devastation caused by floods and earthquakes or the ravages of disease and death can have positive aesthetic value if they are approached appropriately (Carlson, 2008, p. viii)." But as we have seen, this rosy view not only renders a distorted picture, but it hardly paints a traumatic scene requiring urgent action.

If the Cognitive Penetrability Hypothesis is true, then scientific cognitivism actually faces a far higher hurdle than previously acknowledged. I term this the "Cognitive States Problem." How can we expect those who neither share our beliefs nor care about our values to recognize, let alone admit that symptoms we find salient are material? The only way to change people's minds is to expose them to strategies that have succeeded elsewhere. In the most experimental cases, artists implementing ecoventions could not appeal to scientific knowledge, since none was extant (Spaid 2002, Spaid 2017). Even so, they have proven especially successful at motivating naysayers not only to view degraded sites as deserving of protection, but to do something to reclaim them.

8. Shifting Values: "Values-Oriented" Beauty

Recall Matthews' claim that "empirical knowledge helps to reveal aesthetic properties and aesthetic values" (Matthews, 2002, p. 39). Empirical knowledge rather helps stakeholders determine which aesthetic properties, whether biodiversity or other scientifically measurable

features, best capture nature's wellbeing. I worry that her use of "reveal" smacks of Platonism, as if aesthetic properties are *constitutive properties*. If I correctly understand her view, she denies a connection between "normal states of objects" and "aesthetic properties and values" in order to avoid the "fact/value problem," such that values are improved by (and thus derived from) scientific facts, as J. Baird Callicott claims. Aesthetic properties and values are not only dynamic, but they are situated, or perspectival, requiring one to select the appropriate perspective, the "whose wellbeing?" asked above.

My main reason for rejecting Matthews' appeal to empirical knowledge is that when nature is degraded, there really are no "normal states of objects," but this doesn't mean that scientific knowledge is unhelpful. As noted above, teams engaged in reclamation work alongside scientists to evaluate nature's health and assess its wellbeing in order to monitor ecosystem functioning. Although we expect relevant information to alter people's values, people tend to hold on to core values for as long as possible, even when they admit to irrationality. This is known as the "illusory truth effect," such that people believe things in line with their existing understanding of the world (Duffy, 2019, p. 132).

As long as appeals to scientific knowledge prove insufficiently persuasive, as the above evolution and climate denier cases demonstrate, nature's advocates must frame tactics that maximize ecosystem wellbeing such that they appeal to people's core values (values that shape their identities). For example, passersby who only ever notice "pathetic" weeds when scanning prairies from car windows must be persuaded that "weed values" are also "passersby values," since weeds not only reduce human maintenance (require less watering, seeding, mulching, and fertilizer), but they improve the environment's health (enriches soil, attracts pollinators, provides critter habitat, and absorbs excess nitrates), which is why scientists deem them "sustainable." Scientific facts repackaged to appeal to passersby's preferences (convenience, healthy soil, less costly water bills, etc.) are more likely to impress naysayers.

More recently, Lintott and Carlson reframed their view to account for the way values influence values. To do so, they emphasize how "scientific cognitivism embeds, as it were, ecological knowledge within appropriate aesthetic appreciation, resulting in a judgment of aesthetic value from which there is…a clear link to a judgment concerning the imperative of preservation" (Lintott and Carlson, 2014, p. 133). Contrary to Callicott's view that scientific facts correct false values, Lintott and Carlson derive "the imperative of preservation" from a "judgment of aesthetic value." They continue, "The link here is between two judgments of value, the judgment that something has aesthetic value and the judgment that it should be preserved, in other words, the judgment that we have certain obligations regarding it. We move from aesthetic value to another evaluation of worth" (Lintott and Carlson, 2014, p. 127). It's not clear, however, how aesthetic values alone prompt people to opine, "We now have certain obligations." Moreover, their newer view fails for sites lacking obvious aesthetic value, which AEA amends by tying aesthetic value to "biodiverse" beauty.

Lintott and Carlson's reframing of scientific cognitivism in terms of aesthetic values addresses one of my concerns regarding their position, since it prioritizes values, but their claim fails to explain how this chain of events transpires. Regarding the aforementioned "weed values," they take it at face value that publicizing weeds' advantages in terms of aesthetic values (maintenance free, enriches soil, attracts pollinators, provides habitat, etc.) will sufficiently inspire people to protect prairies from becoming gardens. Although they rightly view aesthetic values as more compelling than scientific facts, I don't imagine aesthetic values alone persuading people to prize prairies, let alone wastelands, over gardens. What is needed are witnesses, those

people who themselves have been transformed as a result of registering thriving ecosystems. Finally, Carlson and Callicott credit the "good" (both ecologically and ethically) to scientific cognitivism's being rooted in science (Lintott and Carlson, 2011, p. 101). AEA credits the "good" to "engaged" beauty, whereby stakeholders boost their wellbeing, while defending, protecting, or reclaiming sites whose aesthetic values are not widely valued.

9. *Tier Paysages*: "Abandoned" Beauty

I now turn to the most controversial of sites, what French landscape architect Gilles Clément calls *tier paysages* (wastelands), those overgrown, abandoned sites that flourish when buildings are raised or brownfields arise following factory closures. Real estate developers hate them, decrying them as "ugly" when they threaten lucrative deals. The higher the land value, the more buyers deride such sites as "ugly" so as to push prices down. As already noted, scientific cognitivism cannot motivate people to protect sites suffering environmental *illbeing*. Since people tend not to appreciate *tier paysages* "as nature" or "on its own terms," they are routinely considered "blights." Unfortunately, deriding *tier paysages* as unsightly tends to encourage their becoming a dumpsite. Just as boarded-up buildings unwittingly hasten graffiti, undervaluing *tier paysages* invites unwelcomed human incursions. Even if scientific knowledge enables people to appreciate aspects of nature that they ordinarily dismiss as "ugly," wastelands are not known to have aesthetic value. In fact, there's nothing to prevent scientific cognitivists from siding with real estate developers' generous offers to replace abandoned lots with pocket parks, whose flowers and lawns are likely to become entropic madhouses.

Frankly, it's difficult to discern offhand whether a *tier paysage* is fine as is or requires reclamation. Once again, I imagine stakeholders, such as some Neighborhood Beautification Committee (NBC) and scientists equipped to evaluate ecosystem functioning coming in handy. More potently, NBC members who value animal habitat, urban bees, biodiversity, low entropy, butterfly food, shade, transpiration, and minimal maintenance (no water required) sometimes opt to buy *tier paysages* in order to preserve them *as is* (habitat for birds, insects, and urban wildlife) or go to court to prevent such sites from becoming pretty pocket parks.

Most controversial of all, there may be good reasons for preventing *tier paysages* from becoming pocket parks (*tier paysage* values=people values), which NBC members apparently recognize. It turns out that the average front yard offers wildlife hardly any habitat, let alone food. Imported ornamentals support only 3% the number of species that indigenous trees support. Some trees support up to 500 different caterpillar species and 40 different bird species. When contrasted with pocket parks admired by drivers whizzing by, biodiverse hotspots remain largely invisible to the naked eye, yet they *sound* amazing, even to untrained ears. Not surprisingly, degraded sites discourage human encroachment, enabling myriad plants and animals to thrive, so long as the public grasps its value in terms of "biodiverse" beauty and protects it from becoming a dumpsite.

Oftentimes, a little reclamation goes a long way. Most important is the presence of clean water sources, so a brownfield that is an abandoned mine, whose metals/chemicals continue to leach into surface and groundwater, must be properly reclaimed to stabilize this problem. Even if such sites need a boost (reclamation), they are hardly "ugly," so long as they provide habitat for many more species than ordinary gardens, something that is not the case for a drain pipe or hole, leaching chemicals that kill or maim spawning species.

One positive benefit of sprinkling *tier paysages* (a.k.a. "habitat corridors") around towns

is that they provide vivid alternatives to ordinary front yards, enabling people to quickly grasp their greater attraction for animals. I imagine that once people recognize the greater biodiversity present in *tier paysages*, they will become witnesses to the way "biodiverse" beauty signals an environment's wellbeing. If their values change, they will start to act differently, acquiring new habits, preferences, and beliefs. Cheryl Foster terms "aesthetic disillusionment" the way an object or event diminishes in value once one recognizes how it "militates against the peaceful continuance of planetary life" (Foster, 1992, p. 206). As more people realize how little habitat manicured lawns provide, they will value wilder front yards.

To my lights, the above discussion not only characterizes the "appropriate appreciative stance" for evaluating degraded lands, but it proposes numerous reasons why degraded land must be protected, if not reclaimed. In addition to offering stakeholders strategies for working on nature's behalf, gauging a site's health, assessing the situation's urgency, and imagining *what* must be done, AEA substantially transforms stakeholders and inhabitants along the way.

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