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How Museums Make Us Feel: Affective Niche Construction and the Museum of Non-Objective Painting

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Art museums are built to elicit a wide variety of feelings, emotions, and moods from their visitors. While these effects are primarily achieved through the artworks on display, museums commonly deploy numerous other affect-inducing resources as well, including architectural solutions, audio guides, lighting fixtures, and informational texts. Art museums can thus be regarded as spaces that are designed to influence affective experiencing through multiple structures and mechanisms. At face value, this may seem like a somewhat self-evident and trivial statement to make. However, in this article, I argue that niche construction theory enables us to make several illuminating observations about the ways in which art museums are engineered to influence our feelings. To expound on this claim, I single out for discussion the Museum of Non-Objective Painting, which for its entire lifespan (1939–52)—and prior to its evolution into the Solomon R. Guggenheim Museum—was expressly organized to kindle in its visitors a special, spiritual form of aesthetic experience: a liberating feeling of cosmic rhythm and order, no less.

The argument will proceed as follows: In Part 1, I introduce the basics of niche construction theory and specify the sense in which I apply it to museums and aesthetic affective experiencing. In Part 2, I outline the origins and ethos of the Museum of Non-Objective Painting, after which I pin down the type of affective experience it fostered by drawing from visitors' self-reported reactions to the artworks on display. Then, in Part 3, I use niche construction theory to explain how the Museum consciously fashioned itself, by means of various mutually supportive resources and technologies, into a fertile setting for the specified feelings. Finally, in Part 4, I extend beyond the discussed case to assess the implications of niche construction theory for a broader understanding of how art museums make us feel. In other words, by tracing the early steps of the Museum of Non-Objective Painting towards the present-day Guggenheim, I call attention to the general variation in affective niches as regards their structure, technologies, and affective aims. Overall, the article elucidates the functioning of art museums as affective niches and furthers the conceptual development of niche construction theory in aesthetics.

1. Affective Niche Construction

The term 'niche construction' originates from biology, where it refers to activities by which organisms modify their selective environments in ways that significantly influence their own behaviour and evolution, and typically those of future generations and other species as well (Odling-Smee, Laland and Feldman, 2003; Laland, Matthews and

Feldman, 2016). When birds build nests, beavers construct dams, and earthworms alter the chemistry of their soil-based habitats, they all engage in niche-constructing activities that generate multiple evolutionary responses. Consider the feedback effects of beavers' engineering accomplishments. Their dams exert selective pressure on (a) the genes responsible for the dam-building behaviour, (b) genes that influence the expression of other species-specific traits, such as feeding behaviour, (c) future beaver generations that inherit the dams, and (d) other species inhabiting the restructured environment (Laland, Odling-Smee and Feldman, 2000, p. 135). By actively shaping their own niches, organisms thus drive genetic variation across populations, generations, and species. Humans are no different—except that, in addition to constructing physical niches, they create and employ uniquely sophisticated socio-cultural and epistemic niches that likewise impact on the course of evolution.

From this basis in natural science, niche construction theory has branched into several lines of enquiry with differing explanatory concerns. Many philosophers and cognitive scientists have focused specifically on the ways in which niches affect our mental processes and capabilities (see e.g Clark, 2008; Sterelny, 2010; Sutton et al., 2010; Colombetti and Krueger, 2015). In so doing, they have continued to build on the premise that, by shaping our environments, we humans, like other organisms, actively influence and improve the adaptive fit between our worlds and ourselves. At the same time, some 'mentally oriented' researchers have all but set aside the original concern for genetic selection and have instead focused on, for example, the enhancement of agents' occurrent cognition via personally tailored, task-specific niches (Clark, 2006) and on the ontogenetic effects of non-genetically inherited and parentally modified niches (Stotz, 2010, 2017; Portera, 2020). Thus, in certain applications of niche construction theory, evolutionary issues have been practically eclipsed by explorations into how our niche-embedded minds function in the here-and-now and what this embeddedness reveals about the constitution of mental phenomena.2 My analysis also follows this shift in focus and concentrates on the experiential implications of niche construction and utilization within a non-genetic explanatory framework. I thus use the 'niche' concept broadly to designate the sets of environmental features that people modify and exploit to influence their cognitions, affects, and behaviours. To explicate what this entails with respect to art museums and affective experience, four theoretical specifications are in order.

First, niches can be composed of a wide array of *environmental resources*. A broad distinction can be made, for instance, between *material* and *social* resources (Sutton, 2016; Krueger, 2020; Saarinen, 2020b). Material resources encompass inanimate things—including natural objects and human artefacts, instruments, and tools—and both natural and manufactured spaces and places, such as wildlife sanctuaries, private living rooms, and public libraries. Social resources, in turn, consist within the people we interact with, be they individuals, groups, or larger collectives. Granted, the suggested division

For an informative analysis of the theoretical relations between ecological niche construction and cognitive niche construction, see (Bertolotti and Magnani, 2017).

² These lines of enquiry are not mutually exclusive, of course, nor does the non-genetic emphasis apply to all uses of niche construction theory in the cognitive sciences and philosophy of mind.

is somewhat simplistic and non-exhaustive, considering that niches are often not only composed of both types of resources but also of other types that do not fit neatly into either category, such as shared cultural symbols, conceptualizations, norms, and linguistic systems. The main point is that the relevant niche resources can be practically anything as long as they serve to enable, support, enhance, or transform our mental capacities, experiential states, or actions. On the whole, then, grouping these resources into different types is useful in analyzing the characteristic structure and operation of niches.

Second, we may distinguish between niches in terms of their primary domains of influence—that is, according to the kinds of mental processes and experiences that they are perceived to impact on (Krueger, 2014; Maiese, 2016; Sutton, 2016; Saarinen, 2020b). Cognitive niche construction consists in developing and using environmental resources to aid remembering, problem solving, reasoning, and other forms of thinking. Consider the multiple ways in which online devices and their applications scaffold cognition: they help us to plan and navigate optimal routes between locations, to measure and calculate things, to store and retrieve information, and so on. Affective niche construction, in turn, consists in manipulating resources to influence the way we feel. We play and listen to music to regulate our moods, engage in therapy to manage our anxious dispositions, and organize sporting events to feel the thrill of competition. To be sure, the impact of niches on our minds and ongoing experiencing is rarely a simple either/or matter as they often influence cognition and affect together. Nor do we need to delimit the effects of niches to cognition and affect exclusively; they also enable and support all manner of conscious actions, habitual behaviours, and perceptual dispositions. Again, the given distinction is conceptually useful insofar as it helps us to identify the varying 'targets' of niche construction and to bring into focus one or the other domain, if so desired.

Third, the functioning of niches can be examined on various timescales (Griffiths and Scarantino, 2009; Colombetti and Krueger, 2015; Sutton, 2016; Saarinen 2020b). Viewed from a synchronic perspective, niches are exploited at particular points in time to influence concurrent mental states and processes. An example of this would be throwing a theme party and choosing the catering, music, and decor to create a specific affective atmosphere for the event. Alternatively, when analyzed from a diachronic point of view, niches can be seen to evolve cumulatively and to function over longer periods of time. Religious spaces, for example, are 'designed to induce a variety of feelings, such as faith, hope, awe, love, compassion, and guilt, with the aid of disparate material objects and practices' (Colombetti and Krueger, 2015, pp. 1171–1172). These niches typically operate transgenerationally and, owing to this, 'lead to culturally and socially different affective experiences and modalities of conduct' (ibid.). Historically focused analyses of niche construction thus disclose the ways in which niches are culturally created and non-genetically transmitted from one generation to the next via institutions, shared traditions and norms, accumulated expertise, and so on (see Sutton, 2016).

Fourth, niches vary along the dimension of individuality-collectivity (Sterelny, 2010; Colombetti and Krueger, 2015; Saarinen, 2020b). In this context, the terms 'individual' and 'collective' designate variation in both (a) the construction, transmittal, and exploitation of niches, and (b) the scope of their effects. Hence, on one end of the spectrum, we find individual agents building customized niches to influence their own thoughts, feelings, and actions exclusively, such as designing one's art studio to suit one's personal creative needs and dispositions. Moving along the spectrum, an individual agent can also exploit a collectively built and sustained niche—for example by visiting a favourite park to dwell in its calming atmosphere. Vice versa, agents may undergo collective experiences by interacting with each other in niches that have been designed and set up by an individual—for instance, in certain participatory forms of installation art or environmental art. Finally, on the other end of the spectrum, we find situations where agents act together within collectively structured niches to produce shared experiential effects. For example, fans at sporting events participate in chants, songs, and choreographies that are not only meant to intimidate the opposition but also to produce feelings of group cohesion and an overall 'buzz' for everyone involved.

Within this conceptual framework, the objectives of the upcoming case study can be restated as follows. The overarching aim is to analyze how the Museum of Non-Objective Painting incorporated various *environmental resources* to bring about specific effects in the *affective domain*. More specifically, the goal is to explicate how the Museum sought to influence *individual* museumgoers' *synchronic* feelings in a *collectively* operated niche. By referring to 'aesthetic affective experience', I simply mean those feelings, emotions, and moods that are induced by the artworks on display.³ As will become clear, these affective responses do not depend exclusively on the artworks themselves but on various complementary, niche-specific factors as well. In sum, I will first put forward a niche analysis of the ways in which the Museum of Non-Objective Painting was engineered to bring about a particular, spiritually accentuated form of aesthetic affective experience. I then extrapolate from this case to discuss the wider ramifications of niche construction theory for understanding how art museums make us feel.

Before moving on to these issues, however, it is worth noting that niche construction theory has already been put to use in aesthetic research for various purposes—for instance, to highlight the ecological inheritance of artistic and aesthetic behaviour (Menary, 2014); to analyze the conceptual basis and normativity of art-related activities (Richards, 2017); to examine how aesthetic capacities develop in early caretaking environments (Portera, 2020); to discuss how affects and cognitions are scaffolded by the expressive arts (Maiese, 2016); to inspect how embedded and extended cognition supports artistic creativity (Wheeler, 2018); and to show how the act of painting enables painters to achieve various desirable feelings (Saarinen, 2019, 2020a). With their differing objectives, analytic foci, and theoretical toolkits, these studies aptly reflect the diverse conceptualizations and applications of niche construction theory to date. The analysis laid out below aims to forge yet new paths in this expanding field of aesthetic enquiry by bringing it into the museum context.

2. The Museum of Non-Objective Painting and Its Affective Impact

In 1939, the Museum of Non-Objective Painting opened in a former Manhattan automobile showroom with *Art of Tomorrow*, an exhibition of paintings by Vasily Kandinsky,

³ The occurrence of such affective responses is uncontroversial, and I use the attribute 'aesthetic' to designate the artistic context of these affects rather than any type of experience sui generis. There is thus no need to discuss the sufficient or necessary conditions of aesthetic experience any further here.

Juan Gris, Rudolph Bauer, and other avant-garde artists. Established by the Solomon R. Guggenheim Foundation, the Museum initially focused on paintings from the mining magnate's personal collection, which by then held an impressive total of 725 works. However, as the Museum's name unequivocally declared, pride of place was given to so-called non-objective painting. This somewhat peculiar preference owed largely to the activities of German baroness Hilla Rebay von Ehrenwiesen, who, besides being a painter, was an exceptionally influential campaigner and strategist. Twelve years prior to the Museum's establishment, Rebay had befriended Guggenheim, and had soon after convinced him of the superiority of non-objective painting—not only as an artistic style but also as the herald of a revolutionary aesthetic philosophy (Dennison, 2003, Danzker, 2005). Eventually, Rebay became the founding director and curator of the new museum and, under the approving patronage of Guggenheim, secured free rein in implementing her exalted vision of art.

Essentially, non-objective painting eschewed all reference to the common world of perceivable objects and sought instead to create a transcendental world of self-contained spirituality. As Rebay (1937, p. 4) encapsulated it, 'there is no representation of objects... in these paintings of free invention'; rather, the paintings 'represent a unique world of their own, as creations with a lawful organization of colours, variation of forms, and rhythm of motif'. In her teleological interpretation of art history, all previous schools and '-isms' of painting served as stepping stones to the 'pure art' of non-objective painting, which itself was nothing less than 'the culmination of spiritual power made intuitively visible' (ibid., p. 7). Abstract works by Picasso, Leger, and others were also deemed 'old-fashioned', as they still drew their inspiration from 'earthly objects' (ibid., p. 7). In short, the artistic progression from objective to non-objective painting was allegedly an ascent from the material world to the highest spheres of aesthetic and spiritual purity.⁴

How did the contemporary public respond to these 'otherworldly' paintings? As it happens, the Museum documented thousands of its visitors' comments, of which nearly ninety were published in Rebay's 1946 English translation of Kandinsky's 1911 book Über Das Geistige In Der Kunst (On the Spiritual in Art). The artists whose works are explicitly mentioned in these comments are Kandinsky, Bauer, Alice Mattern, László Moholy-Nagy, Rolph Scarlett, Jean Xceron, and Rebay herself—each of whom can be said at that time to have painted in the non-objective style.

The general affective tenor of the visitors' responses is best conveyed by four recurrent and intertwined experiential *themes*, as enumerated below:

As pointed out by other scholars, the term 'non-objective' is a somewhat misleading translation by Rebay from the German 'gegenstandslos'—which literally means 'without object'—and was used by Kandinsky to describe the experience of a world without objects (see, e.g., Dennison, 2003, p. 50; Rosenblum, 2005, p. 223).

The foreword to the comments reads as follows: 'Public comments made in the Museum of Non-objective Painting in New York City (from January to April 1946) thirty-six years after Kandinsky wrote "On the Spiritual in Art". The commentators' names and addresses, together with their reactions, are on record in the Museum of Non-objective Painting owned by the Solomon R. Guggenheim Foundation, New York City.' (1946, p. 127).

- (1) Vitalization. For many visitors, the Museum provided significant uplift and reinvigoration. As one individual writes, the painting on display creates 'something so beautiful in itself that the human spirit is revived, expanded, and uplifted by looking at it' (ibid., p. 127). A visitor suffering from post-war depression in turn reveals that the Museum facilitated personal 're-admission to a balanced way of life': 'Something inside of me woke up, and I began to see and feel again. Since then I have returned many times to this reservoir of strength and come away freshened' (ibid., p. 132). Another professedly transformed viewer recounts the power of Kandinsky's and Rebay's paintings as follows: 'All of them changed my entire emotional situation and I felt alive again. Really, Non-objective painting seems to have a strong uplifting effect' (ibid., p. 133).
- (2) Inspiration. A considerable number of the commenters found the Museum and its paintings immensely inspiring. 'I cannot express to you the ecstasy in which this afternoon has passed', one proclaims. 'You don't know how much it means to me, to have found the Cathedral where my spirit can worship freely, and constantly come away newly balanced and inspired, to face my daily work' (ibid., p. 131). Some viewers reported a specific feeling of artistic inspiration: 'Every time I come here I want to rush right home and paint. These paintings seem to set fire to my spirit, I am consumed with ambition' (ibid., p. 140). Indeed, several visitors considered the Museum all but indispensable for their own artistic efforts. 'My visits here have become almost a religion for me. I do not undertake any project before I commune with these glorious works. These paintings give me that necessary lift and courage to begin a new work' (ibid., p. 127). The overall existential import of such experiences is summed up in the following admission: '[The Museum] has given me more help and inspiration than any other one thing in NewYork. In a sense, it has changed my whole life...' (ibid., p. 144).
- (3) Transcendence. The comments also portray the Museum as a gateway to a spiritual world above and beyond the mundane realm. As one visitor puts it, 'this Art is a highly pleasant antidote for the drab materialism with which people permit their lives to be filled. To be surrounded by such purity of expression is a profound experience' (ibid., p. 150). Overall, two key subthemes can be seen to emerge from the numerous descriptions of otherworldly experience. First, the experience is accompanied by feelings of emancipation. 'You don't know the sense of freedom I derive from these paintings', one visitor reveals—'A person is initiated into spiritual freedom here, which reinforces what is right in him and his best abilities, no matter what field they may lie in' (ibid., pp. 147–148). Second, the experience is described as revealing cosmic truths 'no longer bounded by a false horizon' (ibid., p. 130). As one illumined visitor asserts, 'when we discover the beauty of one of these works, it is like a great revelation. It is a rare experience as of suddenly understanding what another person is, or as identifying similar basic forms in ourselves and in the universe' (ibid., p. 142). This sentiment is supported by another, similar disclosure: 'The rhythms and forms set

- forth visually are those forces which are at work in the cosmos. No other painting has ever seemed to me important, or to state the underlying truth of the universe, as these do' (ibid., pp. 149–150).
- (4) Harmony. The museumgoers frequently mention feelings of peacefulness, completeness, and congruity in their engagements with the artworks. One viewer portrays it thus: 'The paintings are very exciting in their quiet, clearly defined harmony of colour and design. They give me a feeling of completion' (ibid., p. 131). A like-minded commenter adds:

Yet their most profound message of great beauty, and the imperceptible moulding of my own spirit into a greater sense of freedom and harmony, is what I did not expect; and which has taken time and prolonged acquaintance with these great paintings, for me to realize. (Ibid., p. 135)

The foregoing is summed up by a visitor who felt the paintings to engender 'an inward peace and tranquility of spirit such as [---] never experienced before'—'invariably', this individual continues, 'I leave feeling at peace and in harmony' (ibid., p. 149).

The overall affective ambience of the Museum is nicely encapsulated by art historian Robert Rosenblum. Having visited the Museum in his youth, Rosenblum gives a wry impression of 'the cosmic reaches' documented by its visitors:

I remember reading many of these testimonials and smirking about the holy tone of the converted, who, the scales having fallen from their eyes, could at least enter a purer, more spiritual environment suitable to their now heaven-bound souls. The reigning atmosphere was, in fact, cultist. Visiting the Museum of Non-Objective Painting felt like a serene purification rite, sealed off entirely from the coarse encounters with the harsh and noisy material world that lay outside. (Rosenblum, 2005, p. 221)

Indeed, as Rebay had envisioned it, the Museum was to be nothing less than a 'Temple of Non-Objectivity' (Danzker, 2005, p. 184). For some, and at least for a while, this seems to have become a reality.

Certainly, the documented comments could be submitted to a more comprehensive and fine-grained experiential analysis. For present purposes, however, the given review serves to highlight the distinctly gratifying nature of the visitors' experiences. It also suffices to make an important generalization: the majority of the reported feelings of vitalization, inspiration, transcendence, and harmony are permeated and tied together by a strong sense of spirituality. In short, the responses testify to the predominance of a spiritually imbued type of aesthetic affective experience.

I have no reason to question the general experiential veracity of the museumgoers' accounts. However, it would be naïve to think that the given affective responses were elicited and shaped solely by the perceived paintings—that is, by the compositions, forms, colours, and rhythms to which the comments so frequently refer. Rather, I submit that the feelings at stake can be analyzed as 'products' of an intricately engineered process of affective niche construction. Viewed in this light, the selective publication of the commendatory and spiritually accentuated visitors' comments was also a means to promote the Museum's affective agenda, and can thus be regarded as yet another mechanism of niche construction. To elaborate on this and various other pivotal ways in which the Museum of Non-Objective Painting sought to elicit the specified feelings, I now move on to detail its functioning as an affective niche.

3. The Museum of Non-Objective Painting as an Affective Niche

Besides using the account of niche construction introduced in Part 1, I build my analysis of the Museum of Non-Objective Painting on philosopher Richard A. Richards' (2017) discussion of the various 'technologies' that we use to engineer 'art niches'. Here, I take the term 'technology' to identify which resources (material, social, conceptual, etc.) are relevant to the structure of a niche and also to delineate how those resources function in the given niche to affect thought, feeling, and behaviour. On the whole, Richards (ibid., pp. 471-472) distinguishes between architectural, artefactual, cognitive, pedagogical, and institutional technologies that influence our activities in various art-specific niches, such as those pertaining to painting, music, or dance. From this relatively wide-ranging account, I set aside artefactual and institutional technologies and select for closer scrutiny the three technologies that best illuminate the affective aims and impact of the Museum of Non-Objective Painting—namely, its architectural, pedagogical, and cognitive technologies. Likewise, I do not discuss at length the various social resources and interactions that presumably affected museumgoers' experiences of the paintings. This is not to imply that the aforementioned factors are insignificant; rather, it is a matter of adjusting the explanatory parameters so as to enable a sufficiently detailed account of the selected key technologies.

Let us begin with the *architectural* technologies of niche construction, which, as Richards suggests, 'are the buildings, structures, and spaces in which we practice the arts'—such as art studios, galleries, and museums (2017, p. 472). To better suit the task in hand, I extend the concept of architectural technologies to encompass the interior designs, decorations, and other site-specific configurations that contribute to the overall affective ambience of a place. On this account, museumgoers' experiences of artworks are also conditioned by numerous micro-level architectural elements, such as the furnishings, lightings, colour schemes, and sound arrangements of the Museum.

As mentioned, Rebay envisaged a museum that would transport its visitors into a purely spiritual realm—into another world, as it were. Hence, it was under her supervision that architect William Muschenheim decorated the walls and windows of the

⁶ In this sense, 'technology' is similar to the term 'mechanism', which refers both to the apparatus or machinery of a system and to an established process by which something takes place or is brought about in that system.

To be clear, the given description of the museum concerns the space that was in use from 1939 to 1948. After moving to another location in Manhattan, it eventually found a permanent home in 1959 in Frank Lloyd Wright's iconic building. By that time, the museum was already known as the Solomon R. Guggenheim Museum.

exhibition space with pleated grey velour, effectively shutting out the outside world.⁷ Thick grey carpeting and customized lighting fixtures were also installed to augment the desired otherworldly ambience. Rosenblum (2005, p. 220) recounts that the 'atmosphere was solemn, even pious, as if one had entered a house of worship', and notes how the lighting arrangements only intensified this effect: 'Fluorescent lighting, emanating from troughs in the ceiling, produced, especially in contrast to the spotlights of the paintings, a skyward drift.' The furniture was also specifically selected and positioned to make visitors more receptive to spiritual experience. As Rosenblum puts it, the 'transcendental ambience was further enhanced by the rectangular sofas in the center of the galleries, comfortable enough to invite prolonged meditation and low enough to make one aware of the tug between body and spirit, gravity and weightlessness' (ibid., p. 220).

Perhaps the most unusual architectural arrangement was the low positioning and 'iconlike presentation' of the paintings themselves (Danzker, 2005, p. 184). Rosenblum again provides a vivid image of this set-up:

The paintings, usually in a square format that defied gravity, were enclosed like precious relics in wide silver frames, each one a shrine. Moreover, they were hung just above floor level, creating an almost physical sensation of being able to walk into cosmic dreams. The low hanging made them look as if they were miraculously beginning to levitate from the pull of the earth, poised on their way to a higher realm. (2005, p. 220.)

Finally, besides these visuospatial configurations, incense and music pervaded the exhibition rooms. Rosenblum recognized the music as J. S. Bach and Frédéric Chopin, and recalls being puzzled by what he perceived to be a mismatch between the two composers vis-à-vis the artworks on display: whereas Bach provided appropriate support for engaging with the purely objectless paintings, Chopin 'seemed to evoke an opposing aesthetic impulse and passion' (ibid., p. 221). Whatever the case, the music and incense were further architectural resources in building a niche that was meant to be conducive to spiritualaesthetic feelings.

In addition to architectural technologies, Richards (2017, p. 472) discusses various pedagogical technologies 'that function in teaching the activities associated with a particular niche'. These include, for example, the syllabi of art schools and the books, videos, and exercises that impart the expertise and comprehension critical to a given art practice. As these technologies typically aim at producing certain skills and knowledge, they tend to spotlight the behavioural and cognitive aspects of artistic activity. However, I submit that pedagogical technologies may also target affective experience, in which case they are employed to cultivate niche-pertinent feelings and affective dispositions as well. In this case, individuals are taught—more or less explicitly and through various technologies what to feel and when to feel it.

The Museum of Non-Objective Painting went to great lengths to educate its visitors on the optimal appreciation of its artworks. This effort is clearly evident, for instance, in 'The Power of Spiritual Rhythm', a short didactic essay written by Rebay and reprinted

in the Museum's opening exhibition catalogue in 1939.8 The outlook on art promulgated in this text is unabashedly non-materialistic and utopian, and, in keeping with this view, dictates how viewers should engage with non-objective paintings in the proper, spiritually oriented manner. Basically, Rebay argues that the cosmic essence of paintings is unattainable from a strictly rationalistic and analytic mindset. She writes: 'Intellectually no one can grasp what is beyond the materialistic necessities of life' (1939, p. 8). More to the point, she asserts that 'intellectual reasoning *prevents* intuitive reaction to [the paintings'] beauty' (ibid., p. 6, my italics). As suggested in this passage, only a purely intuitive attitude would suffice, for 'intuitively we feel precisely how to react to the cosmic lead' (ibid., p. 8). All in all, the gist of the matter is simple: 'if one is not quiet, and receptive to new inventions of beauty, one cannot react to their influence' (ibid., p. 5).

Thus, on the one hand, it was crucial for the Museum to establish optimal *external* conditions for spiritual receptivity. Since the paintings could not be properly appreciated 'at one glance' or 'in rush and haste while preoccupied' (ibid., p. 5), various architectural technologies were used to generate the appropriate atmosphere of enclosure and quietude (as described above). On the other hand, the Museum also aimed to cultivate in its visitors an *internal propensity*, an 'intuitive capacity to receive spiritual joy' from the paintings on display (ibid., p. 5). Since it was only by learning how to shift 'from earthly observation to cosmic vision' that the extolled feelings could be achieved, pedagogical technologies became as significant as architectural technologies in the overall construction of the affective niche. Indeed, based on the conviction that intuitive contemplation could be taught, Rebay was keen to highlight the Museum's educational achievements:

The possibility of educating everyone to intuitive reaction, instead of intellectual calculation, may seem to be Utopia. However, extraordinary as it may seem, Utopias come true. One of them is the present great Solomon R. Guggenheim Foundation to establish the power of Non-objectivity. (Ibid., p. 9.)

In effect, then, the Museum issued a straightforwardly alluring promise: 'Rhythmic action, spiritual uplift, exquisite joy, all this is given by Non-objective paintings' (ibid., p. 8)—and, accordingly, was committed to helping its visitors secure this special aesthetic experience. Besides distributing educative information through exhibition texts, visitors' comments, essays, catalogues, books, articles, and newspaper pieces, the Museum organized lectures and film viewings that disseminated and further reinforced its vision of the ideal spiritual-affective impact of non-objective paintings (Danzker, 2005, pp. 178–179). Needless to say, whether the much-vaunted feelings were actually elicited also depended

This was the last in a series of five essays on non-objective painting penned by Rebay. The essays were originally published in connection with a touring exhibition of Guggenheim's collection between 1936 and 1939, and it is therefore unclear whether all of the texts were available to read in the newly established museum. However, considering Rebay's zeal for disseminating non-objectivity, it is likely that these and/or other similar texts were at hand for visitors. Certainly, there is a striking similarity in content—and sometimes even in style—between Rebay's essays and the visitors' comments reviewed above. In any case, I will quote solely from the specified essay, as it was the only one that was undoubtedly available to the museumgoers.

on factors beyond the Museum's control, including viewers' individual preferences, dispositions, and expectations concerning art. But it was not for lack of instruction that visitors may have failed to reach the commended affective heights.

This brings us to the third and final technology under consideration: cognitive niche engineering. According to Richards (2017), cognitive technologies consist in the conceptualizations that govern and regulate our activities in particular art niches. For example, to count as a non-objective painting within its own art-specific niche (that is, within 'painting'), the painting at stake needs to satisfy certain conditions associated with the concept of 'non-objectivity' operative in that niche. The main condition in this case would obviously be the elimination of all painterly reference to the commonly perceived world of objects. Crucially, as Richards points out (ibid., p. 472), when these kinds of regulatory concepts are widely recognized and accepted, they lead to conventions that delineate what is appropriate in the niche in question. He thus argues that, together, cognitive and pedagogical technologies produce niche-specific normativity: a collective recognition of 'how we should conceive, experience, and evaluate art' in any given niche (ibid., p. 472).

Shifting again to the affective effects of niche engineering, I maintain that the conceptualizations propagated by the Museum of Non-Objective Painting not only delineated a specific painterly convention but also prescribed how individuals were to feel while viewing works painted in this style. The creation of this norm was inseparable from the pedagogical technologies discussed above, insofar as the Museum's conceptualization of appropriate aesthetic experience was imparted through various educative means. Overall, then, the Museum aimed to establish an affective convention through systematically implemented pedagogical and cognitive technologies. Its engineering of an affective niche was undeniably—and to a notable extent—normatively driven.

I have now shown how the Museum of Non-Objective Painting was engineered through various architectural, pedagogical, and cognitive technologies to produce a normatively delineated type of aesthetic experience. Although I have focused solely on the synchronic elicitation of individual visitors' feelings, it is worth noting that the Museum's affective aims were also diachronically and collectively structured. Rebay (1939, p. 9) lays down the broader scope of the Museum's ambitions: 'Its collection, its scholarships, its help to living artists is bringing to the public a height of modern culture and is not only working for the benefit of the United States of America but for the religious welfare of mankind.' Indeed, the goal was to cultivate, for the betterment of humanity, a collectively shared affective disposition:

Non-objective paintings as companions to our daily life will spread spirituality, rest, pleasure, beauty, and earthly forgetfulness, but most important a joyful subconscious influence, to develop in us the wonderful faculty of intuition with which genius has created them and which to develop [sic] increases our real value. (Ibid., p. 10.)

Like the religious spaces alluded to earlier, the Museum was ultimately expected to cultivate and advance, from one generation to the next, a spiritually imbued affective orientation to reality.

In the end, however, the Museum of Non-Objective Painting turned out to be a relatively short-lived niche, effectively coming to an end when Rebay resigned—or was forced to resign—from the position of director in 1952. By that time, the Museum had become widely criticized for its limited artistic scope and exhibition policy (Dennison, 2003, pp. 51–52). The trustees of the Museum had likewise come to regard Rebay's exclusive preference for non-objective painting as unduly biased and restrictive, and, to remedy the situation, pushed for her departure. After Rebay stepped down, the Museum's original raison d'être was abandoned, and its acquisitions and exhibitions were expanded to include non-objective art as well. Under a new name and a new vision, it was no longer the same affective niche.

4. Conclusions and Wider Implications

In the world of art museums, the Museum of Non-Objective Painting formed a rather peculiar niche. Despite having been built and operated collectively, its activities were largely orchestrated by one influential individual, Hilla Rebay von Ehrenwiesen. Informed by her spiritual-aesthetic convictions, the Museum committed itself to a particular affective agenda that aimed at personal and cultural transformation. These objectives were publicized through various channels and supported by a strict exhibition policy that endorsed only one type of painting. Arguably, these characteristics set the Museum of Non-Objective Painting apart from most other comparable art institutions—especially those of today. Indeed, most current museums accommodate artworks of differing styles without prescribing ideal ways for experiencing them. This means that present-day art museums tend to have little interest in producing fixed and tightly circumscribed affective experiences in their visitors. Whatever feelings they do bring about, they do so in less single-minded and obvious ways than the Museum of Non-Objective Painting.

This may give rise to a concern. Given its idiosyncrasy, can the presented case lead us towards a more general understanding of how art museums make us feel? I maintain that it can, in two closely interconnected ways. First, it demonstrates that the conceptual tools provided by niche construction theory can be effective in dissecting the complex ways in which affects are elicited in a museum setting. This encourages us to try out the theory on other museums as well—namely, to explore and identify their distinctive characteristics as affective niches. To this end, we may pose the following kinds of thematically clustered questions. First of all, how does the matter of affective experience figure in the museum's objectives and operations? Are its intentions in this regard explicit or implicit, manifold or restricted, changing or stable? Second, we can probe into the museum's affective engineering in terms of niche-constructing *technologies*. Which technologies does it chiefly depend on in bringing about its affective effects? How, specifically, has it employed each technology and organized these in relation to one another? Third, we can enquire into the scope and timescale of the museum's affective influence. What are its individual—collective and synchronic-diachronic effects? Finally, we may look into the normative aspects of the museum's affect elicitation. Does it involve or advance certain norms or conventions for experiencing the type of art on display? If so, what kinds and in what ways? Without doubt, the answers to these questions will vary from museum to museum.

This brings us to the second takeaway of the case study: it throws into sharp relief the divergence between museums vis-à-vis their overall affective intent, design, and functioning. Accordingly, it underscores the fact that niche construction theory needs to be sensitively adapted to the differing conditions that it is brought in to explain. I suggest that one potentially helpful way to approach the diversity of affective niches is to assess them on a spectrum of homogeneity-heterogeneity. In general, homogeneously structured niches employ mutually concordant technologies to elicit a limited set of prespecified feelings. In such cases, everything is systematically geared towards the achievement of fixed and relatively restricted affective goals. Heterogeneous niches are, in contrast, more diverse and flexible. While they, too, are engineered to arouse feelings, these feelings are not as definitely delineated in advance. Correspondingly, their technologies are not coordinated to serve a single, over-riding affective interest, but rather are utilized for more broadly conceived and possibly varying affective purposes. As indicated, most present-day museums are likely to land towards the heterogeneous end of the spectrum. Thus, any blanket attempts to analyze their affect-arousing technologies simply as means to predetermined ends would be misguided and unproductive.

In light of the above, I submit that a slightly readjusted investigative strategy will lead to a better understanding of the ways in which heterogeneously structured museums make us feel. Instead of placing whole museums as the explicanda of niche analyses, it is more productive to break them down into smaller analysable units—that is, into suitable subniches. For example, each temporary exhibition held by a museum typically calls for its own, appropriately curated, affective atmosphere. This is achieved through specifically tailored niche-constructing technologies, including the micro-level architectural coordination of lighting fixtures, colour schemes, ambient imagery, and artwork installation, and the overall conceptualization of the show in press conferences, special events, catalogues, wall texts, and even gift shop items. Alongside changing exhibitions, museums often house permanent displays as well, which adds another element into their overall 'affective mix'.

Thus, through meticulous customization, both temporary and permanent exhibitions are endowed with their own 'affective identities'—identities that, in turn, encourage and support certain feelings in response to the artworks on display. With this type of withinmuseum variation in play, it is advisable to shift the analytic spotlight onto the relevant subniches and their individual particularities. In some cases, these subniches may turn out to be more homogeneously structured than the broader museum niche that houses them. Consider, for example, the Rothko room in London's Tate Modern: its large paintings are displayed—as the artist intended—in reduced light and compact space, so that the 'subtlety of the layered surfaces slowly emerges, revealing their solemn and meditative character' (Tate Modern, 2020). In short, this one-room subniche incorporates technologies that are deliberately engineered to invoke the 'basic human emotions' that Rothko sought to express through his paintings—namely, 'tragedy, ecstasy, [and] doom' (Rothko, quoted in López-Remiro, 2006, pp. 119–120). The homogeneous affective configuration of the room becomes all the more conspicuous as one returns to the brighter, bustling atmosphere of the exhibition space outside.

To sum up, I have argued that niche construction theory can illuminate the ways in which art museums make us feel. To support this claim, I have provided a case study of the Museum of Non-Objective Painting. By doing so, I have not only demonstrated the theory's applicability in a museum setting but also called attention to the general variation between museums as affective niches. In recognition of such differences, I have underlined that niche analyses must be carried out flexibly and sensitively from case to case, especially as regards their homogeneity-heterogeneity. On that same note, I have suggested that fruitful examination of most present-day art museums will require breaking them down into smaller units-typically, into the subniches that make up their temporary and permanent exhibitions. Of course, how niches are hierarchized will depend on the scope and aims of the executed study. If, for instance, the main objective were to elaborate on the art historical distinctiveness of the Museum of Non-Objective Painting, it would be appropriate to analyze it as a subniche within the broader, culturally transmitted niches of different painterly traditions and art museum conventions. On the whole, by elucidating the functioning of art museums as affective niches, I have developed an application of niche construction theory that can be extended to our engagements with art in other contexts as well, including art fairs, galleries, and public spaces.9

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