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Crafting Interiority, or the Evolutionary Objectivity of Vibrating Worlds An Introduction to Adolf Behne's "Biology and Cubism" (1915)

Clemens Finkelstein

"Genes shape our [biological] structure according to a mysterious plan," mused German art historian and architectural theorist Adolf Behne (1885-1948) in an enigmatic text written within a year of the outbreak of WWI in 1914.¹ Sublimating the transgressive atrocities of modern warfare, the young Behne materialized a molecular inward gaze that took recourse with humanity by tracing the uncanny blur of essential boundaries between the human and non-human, as proliferated by contemporary theories of biology. Identifying a primordial element [*Urelement*] that – otherwise dormant in most individuals – actively shaped the instinct of "artists, scientists, [and] generals," he subtly imbricated the geopolitical and biopolitical spheres with the expressions of modern art. After all, Behne reasoned, "[t]he power of genes is also what gives rise to artworks."² The following provides a brief introduction to the author and his forceful disquisition "Biologie und Kubismus" [Biology and Cubism] (1915), complemented by its first English translation (fig. 1).

¹ Adolf Behne, "Biologie und Kubismus," *Der Sturm* 6, no. 11-12 (September 1, 1915): 68-71 (70) [slightly modified as Adolf Behne, "Biologie und Kubismus," *Die Tat* 9, no. 8 (November 1917): 694-705]. Unless otherwise noted, all translations are my own.

² Ibid., 70.

Few figures in the history of art and architecture have balanced their criticism of early-twentieth century modernity's socioeconomic and political misdirection with an active involvement in realizing its aesthetic, cultural promises. Behne notably emerged as one of these pivotal characters in the wake of the German revolution of November 1918. Sensing the immense potential for social change, the art historian sought action as a founding member of the *Arbeitsrat für Kunst* [Work Council for Art] in Berlin. This anarcho-syndicalist coalition of architects, artists, and writers pursued permanent social progress by educating a broader public about contemporary developments and tendencies in art and architecture. Its members, including architects Bruno Taut, Walter Gropius, and expressionist painter and designer César Klein, fostered strong ties to other artists' associations, such as the *Novembergruppe*³ and *Deutscher Werkbund*, who also shared their revolutionary beliefs. Behne was decisive in formulating the manifesto of the *Arbeitsrat* from March 1, 1919, emblematically echoing the art historian's lifelong convictions:

Art and people must form a unit. Art should no longer be just the enjoyment of a few but the happiness and life of the masses. The aim is to unite the arts under the wings of a great building art.⁵

This building art—architecture—pursued the union of art and people twofold. On an existential level, it addressed pragmatic concurrent demands for subsistence dwelling [Existenzminimum] by designing habitations that provided minimally-

³ Novembergruppe [November Group] was founded on December 3, 1918, as an association of German expressionist artists and architects whose common socialist values united them in the wake of the November Revolution in the pursuit of a radical national renewal by means of reformed relationships between the public and cultural producers. Initiated foremost by Max Pechstein and César Klein, many of its architect-members overlapped with the *Arbeitsrat für Kunst*, which was founded in the same month. The group disbanded in 1929. See: Helga Kliemann, *Die Novembergruppe* (Berlin: Gebr. Mann, 1969); Joan Weinstein, *The End of Expressionism: Art and the November Revolution in Germany, 1918-1919* (Chicago, IL: University of Chicago Press, 1990).

⁴ Deutscher Werkbund [German Work/Crafts Federation] formed 1907 in Munich by representatives from architecture and industry—among them Theodor Fischer, Joseph Maria Olbrich, Peter Behrens, and Hermann Muthesius—as a coalition of creatives and manufacturers seeking a closer relationship between traditional crafts and industrial mass production. See: Joan Campbell, *The German Werkbund: The Politics of Reform in the Applied Arts* (Princeton, NJ: Princeton University Press, 1978); Frederic J. Schwartz, *The Werkbund: Design Theory and Mass Culture Before the First World War* (New Haven, CT: Yale University Press, 1996).

⁵ Arbeitsrat für Kunst, leaflet, reproduced in *Arbeitsrat für Kunst Berlin 1918-1921*, exhib. cat. (Berlin: Akademie der Künste, 1980), 88-9.

acceptable floorspace or ready access to greenery, fresh air, and light. On an intellectual level, it conceived monumental cathedrals of modernism that would merge the exceptional skills of artists and artisans into transformative creations. As a fervent proponent of this expressionist architecture, Behne desired objectivity [Sachlichkeit] in cultural production. Living up to his moniker as the "Lenin of art history," he battled against conservative cultural politics and dull artistic impressionism. Yet, despite his prolific output and bellicose agency in shaping avant-garde movements in the early-twentieth century, Behne remains an underdeveloped resource in the historiography of modern art and architecture. With the notable exception of his foundational Der moderne Zweckbau [The Modern Functional Building] (1923, published 1926), scarcely any of Behne's numerous books and articles are available in English translation.

One of these neglected contributions is "Biology and Cubism," which was published in 1915 through the editorial outlet of artist-gallerist Herwarth Walden's influential syndicate of expressionism *Der Sturm* [The Storm] (1910-1932)—an eponymous journal, publishing house, and art gallery in Berlin. The text forms the final part of an ill-defined tetralogy of articles on expressionism and the so-called "new art" that appeared in the journal between 1914 and 1915. Different from the other three, "Biology and Cubism" is a manifesto-like book review of *Bausteine zu einer biologischen Weltanschauung* [Building Blocks of a Biological Worldview] (1913) (fig. 2). This collected volume of essays by German biologist Jakob Johann von Uexküll (1864-1944) investigates the uncanny thresholds between human and non-human

⁶ See: Magdalena Bushart, "Adolf Behne, 'Kunst-Theoretikus,'" in *Adolf Behne: Essays zu seiner Kunst- und Architektur-Kritik*, ed. Magdalena Bushart (Berlin: Gebr. Mann Verlag, 2000), 11-88.

⁷ Interest in Behne surged in late-1990s German-speaking academia but simmered down since. Notable exceptions in English-speaking academia include Kai K. Gutschow, "The Culture of Criticism: Adolf Behne and the Development of Modern Architecture in Germany, 1910-1914" (Ph.D. diss., Columbia University, 2005); Frederic J. Schwartz, "Form Follows Fetish: Adolf Behne and the Problem of Sachlichkeit," Oxford Art Journal 21, no. 2 (1998): 47-77; and Molly Wright Steenson's translation of a short excerpt from Adolf Behne, Eine Stunde Architektur [One Hour of Architecture] (Stuttgart: Akademischer Verlag Dr. Fritz Wedekind & Co., 1928), Pidgin 6 (Fall 2008): 246-67, as well as Spyros Papapetros, "Saint Jerome in his Modernist Study: An Afterword to Adolf Behne's Eine Stunde Architektur," Pidgin 6 (Fall 2008): 268-75.

⁸ Adolf Behne, *The Modern Functional Building*, trans. Michael Robinson (Santa Monica: The Getty Research Institute for the History of Art and the Humanities, 1996).

⁹ The journal *Der Sturm* covered the movement of Expressionism in all its various mediatic instantiations and appeared first weekly then monthly since 1914, quarterly since 1924.

¹⁰ Adolf Behne, "Zur neuen Kunst," Der Sturm 5, no. 1 (April 1, 1914): 2-3; Adolf Behne,

[&]quot;Deutsche Expressionisten," Der Sturm 5, no. 17-18 (December 1, 1914): 114-15; Adolf Behne,

[&]quot;Expressionistische Architektur," *Der Sturm* 5, no. 19-20 (January 1, 1915): 135 [excerpt from: Adolf Behne, *Zur neuen Kunst* (Sturm-Bücher VII) (Berlin: Der Sturm, 1915)]; Adolf Behne, "Biologie und Kubismus."

perception.¹¹ In "Über das Unsichtbare in der Natur" [On the Invisible in Nature], Uexküll concretizes his line of inquiry as a critique of physics and chemistry, which remain ignorantly locked into a human-centric analysis of the world and its parts.¹² Whereas physicochemical inquiries break down complex objects into smaller and simpler objects, he argued, comparative biology disentangles objects and their differential properties without losing information about their relational potential. Producing instead a "subjective anatomy of objects" that engages their form and content separately, biological inquiry builds phenomenological bridges in lieu of a shared language through which human or non-human, animate or inanimate objects, would be able to communicate their otherwise invisible worlds. Shifting focus to an analysis of the uncanny affects and effects that act across perceptual environments, Uexküll proposes to expand conceptions of life in a way that, for Behne, reconstitute the already intimate relationships he sustains to artworks or buildings in a professional capacity. Behne's "Biology and Cubism" thus draws inspiration from Uexküll's pluriversal worldview to complicate straightforward dualisms between artifice and nature. In it, he dismantles impressionist art as an external-natural [äußerlich-natürlich] parallelism to nature, merely "unnatural" copying of its appearance in the limited human perceptual sensorium. "True" art, for Behne, the art of expressionists, instead relates to the humanly invisible sphere in nature, and traces the forms and shapes that evolve organically from within these relational potentials.

Believing Uexküll's work to hold the key to unraveling reality at its core, thus providing a sound foundation for revolution, Behne meant to counter the little attention given to *Bausteine* by a generation of young artists, architects, and designers who, like him, sought to renew art and culture. Intent on revealing an intellectual kinship between the biologist's theory of environmental perception and the ideas of expressionism, Behne penned an often-polemical defense of Uexküll's biosemiotics of *Umwelt* [environment]. Focusing on cubism as the purest strand of an artistic expressionism increasingly forsaken by critics as "naked formalism, lifeless aestheticism," "Biology and Cubism" moves smoothly between speculative follies and

¹¹ Jakob von Uexküll, *Bausteine zu einer biologischen Weltanschauung. Gesammelte Aufsätze* (Munich: F. Bruckmann A.-G., 1913).

¹² Jakob von Uexküll, "Über das Unsichtbare in der Natur," in *Bausteine zu einer biologischen Weltanschauung* (Munich: F. Bruckmann A.-G., 1913), 55-66.

¹³ Biosemiotics refers to the coextensive relationship between life and sign systems, and their production and interpretation in nature as well as across species. See: Carlo Brentari, *Jakob von Uexküll: The Discovery of the Umwelt between Biosemiotics and Theoretical Biology* (New York: Springer, 2015); *Jakob von Uexku II and Philosophy: Life, Environments, Anthropology*, edited by Francesca Michelini and Kristian Köchy (London and New York: Routledge, 2020).

aesthetic judgments.¹⁴ One illustrious scene that exemplifies this stance is sketched in the article's endnotes where Behne draws comparisons between an art critic's shallow aesthetic analysis of an image by Kandinsky, and a sea urchin's poisonous tongue which similarly thrusts forward in mere reaction to a chemical stimulus in its surrounding. Materializing amid fragmented thoughts in kind, concepts such as creative *interiority* and evolutionary *objectivity* surface for the first time to reveal their ecological sources and foreshadow Behne's crucial contributions to the history of art and architecture in the 1920s and 1930s.



Figure 1 Adolf Behne, "Biologie und Kubismus," Der Sturm, vol. 6, no. 11-12 (September 1, 1915): 68-71 (68). Image public domain.

¹⁴ Behne, "Deutsche Expressionisten," 114. Emphasis in original.



Figure 2 Jakob von Uexküll, Bausteine zu einer biologischen Weltanschauung. Gesammelte Aufsätze (Munich: F. Bruckmann A.-G., 1913), title page. Image public domain.

INSIDE-OUT

Behne mentioned Uexküll in his writings as early as 1913, the year *Bausteine* was published. In "Kunst und Milieu" [Art and Milieu] (1913), the ecologist is named alongside the expressionist architect Bruno Taut and the anti-fascist novelist Heinrich Mann to outline a culture-and-science-pervading teleology that emerges from a biologically-encoded, creative *interiority*. Arguing for evolutionary objectivity, Taut, Mann, and Uexküll had recognized that "today, the path leads from the inside out again." "In all areas," Behne argued, "we stand under the sign of a new interiority [Innerlichkeit] and intellectuality [Geistigkeit]" that opposes a milieu-theory for which individuals are but the total sum of their sociocultural circumstances. 16

In a lecture given at the opening of the 29th exhibition at the Sturm Galerie in November 1914, subsequently printed in *Der Sturm* as "Deutsche Expressionisten" [German Expressionists], Behne crucially emphasized the inherent animism of art as an organism, contesting that "an inorganic work of art is a contradiction in terms." ¹⁷ The vibrancy achieved by expressionism, he reasoned, is the definite aim of modern art and opposed to the sterility of impressionistic works. Whereas the impressionists erroneously attempted to "*create* an organism" by "following half the law of formation of the inner world, half the rules of finished external formation," the expressionists, he argued, "allow it to *grow* purely from the inner capacity for form, from the power of perception, from the imagination." ¹⁸ Alongside a passing reference to Kant's grounding *Critiques*, Behne cites Uexküll again, arguing in the biologist's words that "[o]nly the machines are made, the organisms develop." ¹⁹

With "Expressionistische Architektur" [Expressionistic Architecture] (1915), Behne returned to "architecture, as the strictest and purest of the fine arts" to reinforce the operative processes that underlie his theory of interiority. In stark contrast to the impressionists who "subordinate artistic creation to a concept or idea that is not in the essence of the task," the expressionist architect:

¹⁵ Adolf Behne, "Kunst und Milieu (I)," *Die Gegenwart* 42.2, no. 38 (September 20, 1913): 599-603; Adolf Behne, "Kunst und Milieu (II)," *Die Gegenwart* 42.2, no. 39 (September 27, 1913): 616-19.

¹⁶ Behne, "Kunst und Milieu (I)," 599. Unless otherwise indicated, translations are mine.

¹⁷ Behne, "Deutsche Expressionisten," 114. Kai Gutschow has shown that Behne claimed in two letters to Walden from November 23, 1914, and August 22, 1915, to have written "Biologie und Kubismus" before "Deutsche Expressionisten," but originally submitted his proposal of an expanded version to *Die weißen Blätter*, an important monthly journal of literary expressionism, where it was rejected by its editor René Schickele. See: Gutschow, "The Culture of Criticism," 183 n149

¹⁸ Behne, "Deutsche Expressionisten," 114. Emphasis added.

¹⁹ Jakob von Uexküll, "Das Tropenaquarium," in *Bausteine zu einer biologischen Weltanschauung*, 103-22 (108), cit. Behne, "Deutsche Expressionisten," 114.

descends very deeply and very tensely into the essence of his tasks, yet without any idea of a particular order, a specific formation. Everything is always new to him from the ground up; he creates entirely from within. Every form is necessarily unique to him because precisely the same conditions can never recur in a new task. — He keeps away everything that could come from outside as a law of form [Formgesetz], as an influence, as a force. Since his houses are built entirely from within, such a force should act on them as a strange, artificial light would act on a growing plant. [...] Nothing may be attached from the outside; ornament [Schmuck], too, which must not be frowned upon, has to arise from within.²⁰

This dense excerpt provides precious insight into Behne's occasionally confused juxtaposition of natural and artificial creation. The analogy of a growing plant serves to underline expressionist architecture as an organism. Yet why does artificial lighting enforce this organic growth? Doesn't the expressionist rebuff all exterior manufactured stimuli to allow creative interiority to unfold unobstructed? Would this not corrupt what Behne termed the "law of form" [Formgesetz] to evolve?

Published only a few months later, "Biology and Cubism" eventually concretized this emerging line of thought on interiority, juxtaposing Uexküll's ecological postulations with Behne's art historical analyses of cubism. Deeming *Bausteine* a "suprapersonal achievement," Behne cunningly divorced the biologist—and his resistance to an intellectual alliance with expressionism—from his theoretical realizations. These biological "truths" in themselves "entitle us to tear down the wall between art and life, to connect art with life, yes, to identify it with life," Behne stressed.²¹ Throughout "Biology and Cubism," he utilizes the biologist's conceptualization of coexisting perceptual worlds to delineate the speculative experiments in cubist representations of reality:

Darwinism only knew the normal, objective world common to all beings as a world of physical and chemical causes. [...] Our worldview is different. This 'normal world' [Normalwelt] is not given at all in perception and experience. It is just a hypothesis, a construction — although most humans believe it to be the real deal. Every being has its world. There are countless subjective worlds that intersect and are placed one inside the other. Through Uexküll, we know that the worldview is not even exhausted by that. Every being has two worlds: a sense world [Merkwelt]

²⁰ Behne, "Expressionistische Architektur," 135.

²¹ Behne, "Biologie und Kubismus," 70.

and an effect world [Wirkungswelt]. The sense world is produced through the specific properties of its sensory organs. The effect world is defined by its locomotory system and other external organs. The value of Uexküll's proof is that for the same being, the sense world and the effect world only very rarely and partially match.²²

For Behne, this incongruence between perceptual worlds—sense or effect—offers expressionist artists, especially cubists, an ambiguous, obscure zone of experimentation. It both grounds their abstract representations by providing them with possible worlds of their own and fosters a duality between physical reality and psychological virtuality. An essential aspect of this environmental perception is that these worlds are never static but oscillate back and forth. They vibrate alongside, intersect, or separate. In this non-Euclidean space, dimensions can be folded, as in Otokar Kubín's "One-Dimensional-Man" (1914), or expanded to reflect the vibrational animism of Franz Marc's "Cats" (1914) in four dimensions (figs. 3-4).²³ In other words, "every being has its world."²⁴ The enclosed system of *Der Sturm*, with artworks created especially for its editorial covers, attests to this circular logic.

²² Ibid., 70.

²³ For an extensive discussion of this "vibratory modernism" of early-twentieth-century avantgarde art, see Linda Dalrymple Henderson, *The Fourth Dimension and Non-Euclidean Geometry in Modern Art*, revised and extended edition (Cambridge, MA: MIT Press, 2013 [1983]).

²⁴ Behne, "Biologie und Kubismus," 70.



Figure 3 Otakar Kubín, untitled ["One-Dimensional-Man"], original woodcut from the cover of Der Sturm, vol. 5, no. 3 (1914). Image public domain.



Figure 4 Franz Marc, Katzen [cats], on the cover of Der Sturm, vol. 5, no. 1 (1914). Image public domain.

OUTSIDE-IN

When providing a translation of "Biologie und Kubismus" more than a century after its original publication, it is crucial to contextualize and enclose a trigger warning along with critical remarks on the racist postulations that seam this historical document on a

"new biological worldview." Like many Western intellectuals of the early twentieth century, Behne is not immune to problematic interpolations of primitivism and scientific racism. While these remarks and their deplorable vocabulary are made explicit (and translated as such), the conscientious reader is likewise introduced to Behne's progressive reflections and his critical suspicions of Uexküll. The latter's positive inclinations towards the theories of the American eugenicist Herbert Spencer Jennings are made painfully evident in the text's endnotes. In conjunction with Behne's well-documented ambivalence towards a growing German nationalism during WWI, the title itself underlines a determined distancing from the nationalistic term expressionism to a less contaminated cubism.²⁵

Behne critically differentiates the concept of primitivism from its widely disseminated derogative subtext of a stunted cultural or intellectual evolution, rectifying its classification as "non-art." Extending the notion by sweepingly including the artistic production of various peoples across spatiotemporal coordinates, Behne renders primitivism as a boundary-transcending conception of art, an intellectual organism in emergence from a creative interiority.²⁶ As such, it embodies the expressionist tenets that abhor impressionistic imitation of nature as "logical making of art" and instead practice "intuitive composition" that evolves organically "to a purer conception of art."27 Far from a singular occurrence, Behne stressed this corrective again and again. In "Das Können in der primitiven Kunst" [The Skill in Primitive Art], published a few months after "Biology and Cubism," he grounded it as "absolutely necessary" to educate a dismissive public.²⁸ Prescient thoughts, considering that this same public would only a few years later escalate ignorance to full-fledged hatred fueled by Nazi propaganda that deemed the same works and artists Behne considered avant-garde degenerate [entartet] since the 1920s.²⁹ In its German original, the verb "entartet" provides a final biological link as it defines beings that somehow differ from

²⁵ See Gutschow, "The Culture of Criticism," 183.

²⁶ Behne, thus, aggregates European artists and architects of the Gothic, those of archaic Greece, Vedic India, or more contemporaneously, the indigenous tribes of Africa, America, Asia, or Oceania, as well as the art of children and Western cubists. This transhistorical approach is mobilized by the art historian in various writings, often in connection with his propagation of a move from "a naturalness that can be explained physically to a biological phenomenon." As he exclaims: "Time does not create works of art. To connect the consideration of art with the concept of time is therefore completely arbitrary. After modern impressionism, India is not a dead past, but more rightly our future"—Adolf Behne, "Wiedergeburt der Kunst," in *Die Stadtkrone*, ed. Bruno Taut (Jena: Eugen Diederichs, 1919), 113-31 (115).

²⁷ Behne, "Biologie und Kubismus," 69.

²⁸ Adolf Behne, "Das Können in der Primitiven Kunst," *Kunstgewerbeblatt* 27, no. 3 (December 1915): 44-6 (46).

²⁹ See Adolf Behne, *Entartete Kunst* (Berlin: Habel, 1947).

their original type [Art]. They have (been) de-typed. Whereas national socialists convicted modern art this way as "impure or "un-German," Behne's "Biology and Cubism" preemptively devalues these fascist delusions as there only exist multiverses in which "every being has its world."³⁰

Given its obscure motifs, which include the genetic coding of artistic genius or inter-species telecommunication, it is not surprising that the text has been marginalized as an oddity. Despite its infractions, "Biology and Cubism" offers visionary disciplinary conceptions of environmental perception that are well ahead of its time. Seeing past the eccentricities and flow-of-consciousness-like vignettes, the text presents a truly remarkable experiment in transcending limited subjectivity towards evolutionary objectivity that can fulfill its potential through art. Vividly, it portrays the broader natural-scientific shift—emulated in the arts—from a physical-chemical worldview to a biological worldview.

INTRAMURAL ORGANISMS, VIBRATING WORLDS

Influencing architectural discussions since the 1890s, the concept of *Sachlichkeit*, or objectivity, outlined a clear departure from all superficial decoration denounced as impressionistic towards scientific objectivity. The idea, argued architect and *Deutscher Werkbund* founding member Hermann Muthesius, was best represented in the functional architecture and tectonics of "giant bridges, steamships, railway cars, bicycles, and the like," whose core-form [*Kernform*] and design emerged from within derived from their purpose alone.³¹ Malleable through artistic interpretation, the concept retained certain degrees of variance, yet mainly invoked "simplicity, a rational and straightforward attention to needs as well as to materials and processes."³² Architectural historian Rosemarie Haag Bletter provides a crucial conceptual distinction in her introduction to the translation of Behne's *The Modern Functional Building*.³³ For Behne, *Sachlichkeit*, next to its matter-of-fact functionality and simplicity, retained philosophical allusions to an abstract 'thingness' [lit. *Sachlichkeit*; thing—*Sache*] that strove towards absolute essentialism in form, materiality, and actuality. As Behne remarked in the original foreword of *Der moderne Zweckbau*, the origins of

³⁰ Behne, "Biologie und Kubismus," 70.

³¹ Hermann Muthesius, *Style-Architecture and Building-Art: Transformations of Architecture in the Nineteenth Century and its Present Condition*, trans. Stanford Anderson (Santa Monica: The Getty Center for the History of Art and the Humanities, 1994), 79.

³² Stanford Anderson, "Sachlichkeit and Modernity, or Realist Architecture," in Otto Wagner: Reflections on the Raiment of Modernity, ed. Harry Francis Mallgrave (Santa Monica: The Getty Center for the History of Art and the Humanities, 1993), 323-62 (340).

³³ Rosemarie Haag Bletter, "Introduction," in Adolf Behne, *The Modern Functional Building*, 1-83.

architecture reach back to humanity's pre-architectural, "primordial reason for building," namely shelter from atmospheric conditions or hostile beings.³⁴ Form is determined by a primeval "play instinct" that establishes laws that eventually evolve into utilitarian functionalism. This evolutionary objectivity, Behne argued, is inherently revolutionary in its corrective design processes. It strives towards "the recollection of the original function, from as neutral a condition as possible" to achieve "a rejuvenated, living, breathing form."³⁵

With "Biology and Cubism," Behne addresses this re-originating drive and pushes back on the contemporaneous disciplinary tensions rooted in eighteenthcentury positivism, concretized later by architectural historian Alan Colquhoun as "a very complex intermixture of the notion of architecture as relative and evolutionary and the notion of architecture as based on natural law."36 With his enthusiastic book review, Behne treads a blurry zone between natural or cultural origins that gain agency from an essential interiority. Cubism thereby materializes—like Uexküll's Bausteine—as a suprapersonal achievement: "Its natural task," Behne stressed, "is the visible formation of our new feeling of life [Lebensgefühl]."37 As the most concrete, if seemingly abstract, geometric formulation of the expressionistic tendencies, cubists understood how to "let the form arise, [...] let it vibrate out of the whole." Biology and Cubism" is Behne's stimulating attempt to foster a bio-logic underpinning for his theoretical formulations of expressionistic Sachlichkeit. It elevates cubism to an artistic multiverse uniquely equipped to synthesize modern life process [Lebensprozeß] and law of form [Formgesetz] into experiential events—equating life and art. "The result," he writes, "is a worldview of tremendous mobility and ambiguity, a cosmos that is glorious in its abundance, an infinite, in its numerous functions, vibrating world."39

³⁴ Behne, The Modern Functional Building, 87.

³⁵ Ibid., 87.

³⁶ Alan Colquhoun, Essays in Architectural Criticism: Modern Architecture and Historical Change (Cambridge, MA: MIT Press, 1981), 21.

³⁷ Behne, "Biologie und Kubismus," 70.

³⁸ Behne, "Deutsche Expressionisten," 114.

³⁹ Behne, "Biologie und Kubismus," 70.

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Biology and Cubism

Adolf Behne

Translated by Clemens Finkelstein⁴⁰

In the past, one spoke proudly of a 'century of natural sciences.' Today, no rational mind would repeat this phrase. The 'century of natural sciences' is dead. The vitality it once possessed expired more and more through an immensely widespread popularization. The natural sciences stiffened into 'positivism,' its be-all and end-all became the

⁴⁰ Originally published as Adolf Behne, "Biologie und Kubismus," Der Sturm 6, no. 11-12 (September 1, 1915): 68-71; and slightly modified as Adolf Behne, "Biologie und Kubismus," Die Tat 9, no. 8 (November 1917): 694-705. Notes on translation: "Biology and Cubism" makes Behne's text available in English for the first time. Supplementary information and citations missing in the German original are provided as footnotes. This complimentary material aids comprehension as much as it completes the fragmentary nature of the textual bricolage, which is riddled in its initial version for Der Sturm from September 1915 by occlusive, erroneous typesetting. Thus, the following translation sources the missing content from a slightly modified version of "Biologie und Kubismus" for the monthly journal Die Tat from November 1917. Where necessary, the text stays with the idiomatic German syntax and the often-peculiar partitioning of paragraphs. Where possible, comprehension was improved by conforming to the most approximate vocabulary and grammatical constructions of (American) English. Behne's stylistic emphases are replicated, however, crucially differentiating citations ("") and emphasis (") lacking in the original, and using italics instead of typographical letter-spacing [Sperrsatz]. Terms in German are provided italicized in angular brackets if deemed essential. The four endnotes follow the original version of Der Sturm, extended by references to citations, individuals, or terminology that may be ambiguous.

experiment. Carried on like a revelation, the notion of the experiment covered—for its followers—temporarily the poverty of mind.

The 'century of natural sciences' conquered the public assemblies but encountered an equally growing lack of interest in all those thinking independently. Today, the natural sciences of [Ernst] Haeckel, [Friedrich Wilhelm] Ostwald, all monists and positivists come into the deepest possible discredit. "Yes, the experiment should also *think* for you; you can't be serious!"⁴¹

However, modern natural sciences have not lacked in experimenters, including skillful and cunning ones—to this day. But what is so pathetically missing is the ambition of thinking. The experiments of biologists have showered us with egregious material, but sadly, the overwhelming mass of this material is not wrong but meaningless, deaf and dumb for all profound knowledge.

Only from this understandable aversion to modern natural-scientific literature can it be explained that a book like *Bausteine zu einer biologischen Weltanschauung* [Building Blocks of a Biological Worldview] (1913) by Jakob von Uexküll has thus far received only so little attention.⁴² Especially among the younger generation, which is now driven by the renewal of art and culture, should this fine book receive enthusiastic reception. Maybe the title is initially misleading. One could think that it announces one of those familiar dismal attempts at amalgamating experimental truisms to an ethical, social, and artistic system. In reality, it is something completely different: the first, in its significance not to be overestimated advance against the intellectually impoverished natural sciences of today, the revolutionizing work of a thinker. Uexküll's book attains classical significance.

This book appears almost like a suprapersonal [überpersönlich] achievement. It collects wonderful material of phenomena that the consciousness of the author rejects. This fact is not in the least confusing. It would only be confusing in a system-manufacturer [System-Fabrikant⁴³]. In a 'visionary'—whose work 'becomes' and 'develops' like an artwork that is likewise ambiguous—it gives the best proof of his calling. It is easy for the system-manufacturer, like any 'maker,' to be consistent. For Uexküll, it is very much possible that the realizations that come to him are not perceived by himself in all its consequences.

⁴¹ Mynona (Salomo Friedlaender), Für Hunde und andere Menschen (Sturm-Bücher III) (Berlin: Der Sturm, 1914), 15.

⁴² Jakob von Uexküll, *Bausteine zu einer biologischen Weltanschauung. Gesammelte Aufsätze* (Munich: F. Bruckmann A.-G., 1913).

⁴³ Behne's derogative "system-manufacturer" references eighteenth-century Physiocratic critiques of so-called *system-building* in empiricist endeavors that base knowledge production modes on abstract reasoning instead of sensory evidence.

I have elsewhere (in my pamphlet *Zur neuen Kunst* [On the new Art] (1915)⁴⁴) called Uexküll an 'expressionist'—and Uexküll personally doesn't want to know anything about expressionism. But the ethos of his *work* is born entirely of the same spirit as the ethos of our young art. Biology is for Uexküll not a sum of extra-human knowledge based on experiments with monkeys, snails, and frogs, but knowledge about relationships to the living subject. "As long as a child plays with a pebble, it is a valuable object and receives, through its relationships to a living subject, itself a piece of life. If physical causes are introduced instead of biological relationships, it is even possible to beat a pebble to death."⁴⁵

Such sentences must be approved wholeheartedly. That the observation of nature has been displaced so beyond any relation to what is immediately given to the human; that as a result, every center has been taken from it and actually been handed over to the people, who can expect everything without feeling or imagination, without any valuation; that has lost it the interest of the good ones. Uexküll finds a compelling expression when he says about the common worldview of our time: it has lost the center of gravity. A worldview without a center of gravity is out of necessity impressionistic in a literal sense: it is exposed to the swaying of surging impressions. And in contrast to that, I call the worldview that is investigating from a center expressionistic. Where there is a center, there reigns a determining, shaping will; and where there is a shaping, ordering, evaluating will, there is, of itself, the force of expression. That doesn't apply only to art, and in art, it doesn't only apply to new art; moreover, it applies to all true art, not least our Gothic.

Uexküll has placed in the focus of his work the notion of the 'organic.' The organic is an elementary fact of everything living, is evident to us immediately through experience. The organic is for the biologist, thus, the given, logical center. The earlier observation of nature has turned this elementary fact into something derivative—has tried to get from the inorganic to the organic with the help of evolutionary theory, swerved with fearfulness from the recognition of the 'organic' as an elementary actuality, and stabilized chance as a basic fact, the 'dance of atoms.' Is that not impressionistic?

What characterizes the *art* of the impressionists? They thought it more important that the lines of an image met the silhouette of a tree 'correctly' than that horizontal and vertical lines are in beautiful proportions to each other. They subordinated artistic considerations to something extra-artistic, they sought to come to art through non-art, and contemporaneous aesthetics and history of art [Kunstwissenschaft] took the same tortuous path ([Hippolyte] Taine, [Wilhelm] Hausenstein). This is in attitude, the same 'peripheral' procedure as in the ordinary observation of nature. The *young artists*, in

⁴⁴ Adolf Behne, Zur neuen Kunst (Sturm-Bücher VII) (Berlin: Der Sturm, 1915).

⁴⁵ Jakob von Uexküll, "Das Weltbild der Biologie," in *Bausteine zu einer biologischen Weltanschauung. Gesammelte Aufsätze* (Munich: F. Bruckmann A.-G., 1913), 191-264 (258).

contrast, place the service to beauty instead of correctness in the focus of their creation. That is the last sense of expressionism. And the history of art should finally place value judgment, instead of the history of development with its extra-artistic standard of the 'characteristic,' at the center of its work.

How can it be explained that Uexküll is so decidedly moving away from the new art? First of all, I have reason to believe that Uexküll hardly knows the true new art which we are dealing with solely. It is very likely that he will judge otherwise if he has once (or better repeatedly) seen the works of [Robert] Delaunay, [Franz] Marc, [Carlo] Mense, [Fernand] Léger, [Marc] Chagall, [Oskar] Kokoschka, and [Jacoba van] Heemskerck. It seems to me, after his not always very fortunate remarks on artistic questions, that he knows from his point of view only that half-new, decorative kind, for example, the 'Brücke'—[Erich] Heckel, [Ernst Ludwig] Kirchner, [Max] Pechstein—and then his remarks would be true to a certain extent but did not touch—the new art!

But suppose Uexküll knows Chagall, Marc, Kokoschka. Then he would presumably motivate his negative judgment with the assertion: their works are 'made' [gemacht]. But that would be a mistake!

I find especially those sentences by Uexküll so eminently beautiful in which he reveals the chasm between the world in which everything 'is made' and the world in which everything 'evolves':

Its inhabitants are forced to live jumbled and next to each other. They never understand each other. In the world in which everything evolves, people who are engaged in the making of things are ridiculous. They are blind and don't see the essential, the coherence of the great, wonderful total-becoming [Gesamtwerden]. In the world in which everything is made, people waiting for emergence are miserable. Because from all sides, one calls out to them: "Don't be dreamers, no Faselhänse, 46 take hold and make something new!" 47

Marvelous sentences that every friend of the new art will thankfully receive. Because this is precisely the beauty of this new art, that its works 'grow' from the inside out. But Uexküll should initially be of a different opinion. He might say, like so many others who would have more right to do so: I see constructions, but constructions are not art!

No, constructions are certainly not art, but the work of art is an intellectual organism, and organization of any kind is order, discipline, solid construction, regularity, determination. The true image is nothing else. Just as in a bodily organism, where each

⁴⁶ Faselhans is an untranslatable old German term—colloquialism, negatively connoted—describing an unreliable person.

⁴⁷ Jakob von Uexküll, "Das Tropenaquarium," in *Bausteine zu einer biologischen Weltanschauung.* Gesammelte Aufsätze (Munich: F. Bruckmann A.-G., 1913), 103-22 (104).

part is in a solid, meaningful relationship with each other, it is likewise in the intellectual organism of a work of art. Each part of the pictorial surface interacts with each other—the left upper corner is designed in relation to the lower right corner. Impressionism has unfortunately taken this standard from us. But Raphael, [Matthias] Grünewald, the Indians, the archaic Greek art, Brunelleschi ... they allow, rather they *demand* this model of the organic. To criticize a work of art because it spreads its organism, that would come close to the critique of the 'naked construction' of a human joint.

And how wrong would it be to believe that in contrast to the *evolved* organism of animals, the strict structure of a Marc could only be 'calculated,' constructed, 'made.' The only difference is that even for the most naked organism of animals we *know* that it evolved, while we still cannot get rid of the narrow view of *personal production* when it comes to the intellectual organism. Yet even in intellectual matters there is only, and exclusively, one evolution—as far as things of value are in question—an evolution for which the artist is only the ground or the vessel. Only the barren artists, meaning the dilettantes, see themselves as the source, as the last and the first origin—the true artist knows himself as a transit station [*Durchgangsstation*]. [Anselm] Feuerbach paints himself as the proud prince of life: "I am the one who created all this!"—[Arnold] Böcklin, in his self-portrait with death, (paints himself) in melancholic modesty as the one who listens to infinity, to the elemental. Feuerbach's paintings are full of the unintentional resignation of the unconscious [*Ohnmächtigen*], Böcklin's paintings encompass all jubilation and all torment.

I am told by a well-known advocate of impressionism that he said reproachfully of the old German masters: as humans, they trembled before the saints they painted. That is why their pictures are so weak. He contrasted them with a modern Frenchman, who stood proud and gracious like a god before his canvas. Anyone who speaks like this reveals that he, too, like most art viewers, considers art to be 'making.' We bless those glorious old masters who trembled before their saints.

Does the strict composition of a modern image speak against its naturally evolving emergence? That can only be assumed by ignorance. Whoever is acquainted with children's drawings, the art of primitives—for instance, the Negros—, and has feelingly absorbed it, will know that especially these works, which are as distant from the artistic calculation as possible, exhibit lines, colors, and forms in the strictest construction. That is precisely what is moving about the children's drawing, seeing how in silent, self-evident, completely naive lawfulness, colors develop mysteriously, how lines and surfaces unfold in the purest relationship, how a color necessarily allows the most beautiful and perfect scale to follow.

The art of the primitives proves unequivocally that the 'most natural' art is the most strictly constructed. The children's drawing is undoubtedly innocuous evidence for

an organic evolution from the intellect—and precisely cannot be surpassed in construction.

That is why the often-heard objection that the images of Léger and Mense are not art because they are constructed is nonsensical. They are not constructed in the sense of calculation; they have evolved according to intellectual lawfulness.

Uexküll says: "The regularity [*Planmäßigkeit*] cannot be grasped by logical thinking, but only through intuition [*Anschauung*]." This also applies in a broader sense to the creation of the new art!

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Indeed, all those artists and aesthetes that have discovered in impressionism and naturalism a comfortable resting place [Schlummerland] for their materialist way of thinking represent the opinion: the children's drawing is not art. But since we already know that these aesthetes, completely logical, mean a 'making' when they say art, there is no need to say much more about this subject. Because the art of the primitives is certainly not a making—there we are completely in agreement!

Especially the children's drawing can lead us to a purer conception of art. And with that, I come back to my starting point, Uexküll's book.

Uexküll emphasizes the "specific lawfulness of everything organic," the "autonomy of the processes of life." This theory must also be applied to everything intellectual and especially to art. (What Uexküll himself occasionally says about art is unfortunately grown on different soil.) Uexküll and his predecessors have recognized the creative and productive as the actual power of everything that emerges [Entstehendes]. This power must also be implemented in intellectual life. Those subjects in whose minds the creative, mysterious primordial element [Urelement] still functions so strongly that its products become necessarily 'organic,' are truly valuable naturals as artists, scientists, generals, etc. An argument for this provides Uexküll himself when he deals with the notion of instinct. Uexküll indicates the possibility that we also have genes in our brain, which, similar to a germ, think actively—not, of course, in all humans. The majority of humans are probably animals of experience [Erfahrungstiere] (the impressionist artist is likewise an animal of experience), animals of instinct [Instinkttiere] are surely only a few. "Who knows whether the superior position of certain geniuses over their fellow men is not based on the systematic operation of new genes?" 50

Genes shape our structure according to a mysterious plan. The stronger and prouder they unfurl their force, the 'more ingenious' is the individual, meaning it is more likely that all of its intellectual manifestations possess the regularity and the

⁴⁸ Uexküll, "Das Weltbild der Biologie," 226.

⁴⁹ Jakob von Uexküll, "Vom Wesen des Lebens," in *Bausteine zu einer biologischen Weltanschauung* (1913), 155-90 (176).

⁵⁰ Uexküll, "Das Weltbild der Biologie," 248.

determination of the organic. The power of genes is also what gives rise to artworks. It is assumed that this force of genes is still effective within the child with all virtue and fortune of youth [Schuß und Glück der Jugend]. Thus, to me, the children's drawing is not something that is 'not yet art'—because it is 'not yet made' with consciousness—but is happily still art!

I already said that a lot of what Uexküll says about art is irritating, but far more important is the fact that he provides insights [*Erkenntnisse*] that, beyond his personal opinion, stimulate a deepening of our artistic views. Uexküll's realizations entitle us to tear down the wall between art and life, to connect art with life, yes, to identify it with life. It is wonderful that we can juxtapose the insights of the biologist—that, if not himself, then at least lead his grateful readers to such an insight—with the beautiful vision of a poet, a passage from Aage von Kohl's novel *Der Weg durch die Nacht* [The Way Through the Night], or as the title in the original is better, *Det store Sköd* [The Big Lap] (1911):

In all his fibers, in every single one, there sat primordially deep [urtief] and burning this strong and joyful certainty! There sat the driving force from which he had written all his words: Life is bliss—and art is bliss! Life and art are one and the same!⁵¹

Art is the true world of humans, for whom everything 'becomes' but nothing is 'made.' "Only the machines are made, the organisms develop." ⁵²

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This realization enables us to dismantle various prejudices and errors. Life has no 'disciplines' [Fächer]. Art also has no disciplines. Anyone who feels themselves to be an 'expert' in art, and who drives and represents art as an 'expert' is worse than the worst dilettante. We prefer honest 'kitsch' a hundred times more than bad 'art.'

⁵¹ Aage Herman von Kohl, "Der Weg durch die Nacht," *Der Sturm* 5, no. 13-14 (October 1, 1914): 93-8 (97). *Der Weg durch die Nacht* was published serially in *Der Sturm* between January and December 1914: vol. 4, no. 192-193 (January 1, 1914): 154-6; vol. 4, no. 194-195 (January 15, 1914): 162-4; vol. 4, no. 196-197 (February 1, 1914): 171-3; vol. 4, no. 198-199 (February 15, 1914): 179-82; vol. 4, no. 200-201 (March 1, 1914): 196-9; vol. 4, no. 202-203 (March 15, 1914): 203-6; vol. 5, no. 1 (April 1, 1914): 4-7; vol. 5, no. 2 (April 15, 1914): 11-13; vol. 5, no. 3 (May 1, 1914): 22-3; vol. 5, no. 4 (May 15, 1914): 28-30; vol. 5, no. 5 (June 1, 1914): 39; vol. 5, no. 6 (June 15, 1914): 43-6; vol. 5, no. 7 (July 1, 1914): 53-5; vol. 5, no. 8 (July 15, 1914): 60-2; vol. 5, no. 9 (August 1, 1914): 69-71; vol. 5, no. 10-11 (August 15, 1914): 77-9; vol. 5, no. 12 (September 1, 1914): 86-7; vol. 5, no. 13-14 (October 1, 1914): 93-8; vol. 5, no. 15-16 (November 1, 1914): 110-11; vol. 5, no. 17-18 (December 1, 1914): 115-17.

⁵² Uexküll, "Das Tropenaquarium," 108.

Because art, like life, is an event, it does not allow itself to be divided into chapters either by materials or by concepts. One has departed from the materials lately, but the tailoring of concepts still flourishes.

Art is never anything other than nature! One accuses artists who do not copy the external naturalness—"nature in the sentimental sense of the audience," I called it in my Sturmbuch—of 'artistry' [Artistentum].53 In reality, artistry, meaning artificial making, rests chiefly with the external-natural [äußerlich-natürlichen] painters. 'Nature' is any true work of art according to its emergence, by evolving organically. But since its roots are in the intellect, its organism, as long as it is really natural, cannot adopt the alien forms of external organisms. Sticking to the regularity of foreign organisms, the correct copying of trees, animals, houses, and faces in the right perspective—this is in truth 'artistry' in the sense of artificial making, that is in every honest sense the unnatural [Unnatürliche]! When a critic tells a young artist to draw and paint more from nature, that he still had no right to create freely, it does not seem to make more sense to me as if a botanist said to a small fir tree [Tännchen]: "Please, first grow like an olive tree for a while, and a bit more to the right and not so fast. To grow as a fir tree, you still have no right!" Botanists are generally too clever to embarrass themselves like this. Positivist art researchers are fond of embarrassing themselves in this way, which is sincerely appreciated by the positivist public.

A few words on the subject of 'representational art.' For Uexküll—and not being the first—the 'artifact' is itself something that has been formed by us, namely by our sensory organs and our central nervous system. Now, does it make any sense that something already formed is formed again, namely artistically? As long as the artifact was viewed as something given outside of us, as something objective, absolute, the representational [Gegenständliche] might still have had some meaning in art. But it no longer has since we have recognized that the existence of every artifact is already a productive achievement, a formation of our intellect. Art will therefore look for better tasks!

It does not need to look for it!

Its natural task is the visible formation of our new feeling of life [Lebensgefühl]. This is the goal of Cubism!

What has not been written about cubism—trivial things [Belangloses] even by the best cubists! Here the phenomenon repeats itself that brilliant achievements are suprapersonal. To explain Cubism, an artist like Fernand Léger invokes the fact that today we move so fast across this earth and through the landscape in cars and express trains:

⁵³ Behne, Zur neuen Kunst, 8.

A landscape crossed and broken by a car or a fast horse loses in descriptive value but gains in synthetic value: the door of the wagons or the car's mirror has changed the usual appearance of things. Modern man records a hundred times more impressions than an artist of the eighteenth-century. [...] The condensation of the modern painting, its variety and its rupture of forms, is the result of all this. 54

Never have external, technical, economic, and mechanical innovations determined art. I don't believe that Cézanne and Rousseau drove particularly often with the car, and from the Gothics, I know it for sure. [But the car seems chosen] to play an important role in the aesthetics of modern artists; in fact, to explain the most contradicting things. In a lecture, Peter Behrens explained some time ago that the undefined [detaillos] smoothness of his building facades was motivated by the fact that modern humans usually only get to know the streets and house facades from the perspective of a fast-driving car. The car driver, however, could not possibly record any details. It remains unclear why the architect likewise dressed his interior walls in car-dress [Autodreß].

If in Léger, we have the phenomenon that the cubist provides failing information about the latest impetus of his creation, we have, on the other hand, the biologist Uexküll, who dismisses Cubism and yet provides the most valuable foundation for its significance.

One will never come closer to cubist works of art with formal tinkering, never with evolutionary deductions and interpretations. They remain makeshifts for the beginner. Cubism— in sculpture, painting, and architecture—is the *expression of a new, modern view of life*. Nowhere do I find it formulated more beautifully than in Uexküll: "Life takes a viewpoint to which we cannot follow it."

Darwinism only knew the normal, objective world common to all beings as a world of physical and chemical causes. Animals move very differently, feed very differently, and reproduce very differently, but they all live in the same world. It is possible to communicate with a rhinoceros beetle by phone.

Our worldview is different. This 'normal world' [Normalwelt] is not given at all in perception and experience. It is just a hypothesis, a construction—although most humans believe it to be the real deal. Every being has its world. There are countless subjective worlds that intersect and are placed one inside the other. Through Uexküll, we know that the worldview is not even exhausted by that. Every being has two worlds: a sense world [Merkwelt] and an effect world [Wirkungswelt]. The sense world is

⁵⁴ Fernand Léger, "Les realizations picturales actuelles," *Les Soirées de Paris* 3, no. 25 (June 15, 1914).

produced through the specific properties of its sensory organs. The *effect world* is defined by its locomotory system and other external organs. The value of Uexküll's proof is that for the *same* being, the sense world and the effect world only very rarely and partially match. The effect world of animals is much greater than their sense world.^{III}

The result is a worldview of tremendous mobility and ambiguity, a cosmos that is glorious in its abundance, an infinite, in its numerous functions *vibrating* [schwingend] world. Every rationalism and every recipe-science [Rezeptwissenschaft] shatter in contact with it. This is a world that we *experience* [erleben], that excites our imagination, speaks again to our living senses, and elevates us from the iciness of a registrar-like superiority to the warmth of a religious bond. "Life takes a viewpoint to which we cannot follow it."

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We can always follow the naturalist and impressionist. He has a very accessible and comfortable 'viewpoint' [Standpunkt]. He plants his easel somewhere in the open air and translates an impression of nature [Natureindruck] with more or less skill and taste onto a surface of specific dimensions. The main work is done with the choice of viewpoint because the character of the image essentially depends on it, so much that we can usually reconstruct the viewpoint of the model-landscape [Vorbild-Landschaft] from the art-landscape [Kunst-Landschaft]. "Here he stood!"—to be able to say that somewhere in the mountains or by the sea is for lovers of naturalistic art downright the climax of artistic appreciation.

That is the viewpoint art [Standpunktkunst] with all its banalities!

We don't only know her in painting. The *architecture* of the naturalist period was work with perspectives—in complete contrast to the art of construction [*Baukunst*] of prolific epochs. Poetry was no less perspectival; it was psychological or even political propagandistic poetry [*Tendenzdichtung*]. *All* artistic production had 'perspective,' meaning a naturalistic construction of a spatial or temporal kind, a construction that presupposed, for the artist, a fixed, immutable *viewpoint outside of bodies and events* (Weisbach⁵⁵ for the impressionists and Hildebrand⁵⁶ for his decorative art, represent the necessity of the distance-image [Fernbild] similarly!). This is just as true for the pictures of Manet as it is for the novels of Zola. For many, perspective eventually became the last resort to secure some rhythm in their creations. Incapable of *producing* the rhythm, they emulated a surrogate when, like Liebermann,⁵⁷ they favored painting the tapering trees of a straight avenue.

Cubism is the absolute antithesis to such perspectival art [Perspektivenkunst]. It does not want a banal list or a psychological interpretation of bodies and events from an external viewpoint but wants life! The Cubist artist is in the midst of things; they envelop

⁵⁵ Werner Weisbach (1873-1953), German-Swiss art historian.

⁵⁶ Adolf von Hildebrand (1847-1921), German sculptor and art theorist.

⁵⁷ Max Lieberman (1847-1935).

him all around, their abundance delights him, their never dormant, always moving, enigmatic, autonomous life is like an intoxication. There is no positivistic result, no explanation, no morality, and no practical application or teaching—but glorification, admiration, and worship. How impoverished to stay in a viewpoint that one guards anxiously and proudly at once, that one has 'achieved'! Devotion to life, immersing oneself in life, to make oneself fluid and agile, not standing in front of it like a teacher with a pointer and demonstrating: that is smoke from a chimney, that is a house, that is a bridge over a river—but being smoke and house and river and bridge, able to transform, willing to transform! Not speaking as one person, not arguing as a judge, not finding in favor of someone and not someone else—but standing amidst the fight and the movement of many forces like a tunnel, through which everything sounds: like Aage von Kohl's Der Große Schoß and Hermann Essig's Der Schweinepriester (1914). There is a great flow of life in which we swim, an embedding of all organisms in a great world process [Weltgeschehen].

Uexküll said: "Life does not merely oversee the *effect world* but also the *sense world*. This we cannot imitate; if we are in our subject, we cannot stand outside at the same time." ⁵⁹

We certainly cannot 'imitate' but we can design this sense of life—insofar as we are artists.

Franz Marc's animals! Should not Uexküll understand them first of all, who writes the lines: "The essence of the animal is not its form but the transformation [Umformung], not the structure but the life process [Lebensprozeß]. An animal is a pure event [bloßes Geschehnis]! ""60

Impressionism had a fixed viewpoint, but its forms grew hazy in the nuanced and allusive painting [Nuancen- und Andeutungsmalerei]. This is the most perfect and most consequent materialism, the artistic expression for the conception of the world as a 'dance of atoms.' The cubist world feeling [Weltgefühl] does not know the point-like fixation of the viewpoint; its forms likewise loathe the atmospheric evaporation; they are stable, essential, and explicit. The antithesis could be formulated like this: impressionism is vague in its insights, but its viewpoint is unambiguous and evident.

Cubism is ambiguous in its position, but its insights are profound. The elements of a cubist image are essential, pure, and explicit; as a whole, it is one movement and non-rigid. The impressionist image as a whole is rigid, fixed by perspective, illumination, etc.; its elements are trembling and floating.

⁵⁸ Hermann Essig, *Der Schweinepriester: Lustspiel in Vier Aufzügen* (Berlin: Egon Fleischel & Co., 1914).

⁵⁹ Uexküll, "Vom Wesen des Lebens," 187.

⁶⁰ Jakob von Uexküll, "Neue Fragen," in *Bausteine zu einer biologischen Weltanschauung* (1913), 2-34 (29).

Uexküll rejects such a worldview that only knows a 'dance of atoms,' a process that no human *experiences* [*erleben*], and which we should believe as a conceptual system. As we have seen, his world is the infinite life of countless sense worlds [*Merkwelten*] that interlock, touch, and frequently intersect each other. However, it should be noted: the individual subject, with its sense world, is withdrawn from all approximation and all wavering—the subject and its sense world are a firmly joined construction [*Bau*]. After all this, should Uexküll not be the first to appreciate Cubist painting, which places instead of the vibrating nuance of 'being' and a trivial perspective a many-living [*viel-lebendigen*] cosmos?

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"The epoch of a physical-chemical worldview that led to materialism is now naturally followed by a biological worldview. It is, however, the direct path to idealism!" ⁶¹ The idealism in modern art is Cubism.

⁶¹ Jakob von Uexküll, "Die Umrisse einer kommenden Weltanschauung," in *Bausteine zu einer biologischen Weltanschauung* (1913), 123-54 (141).

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Some quotes may be permitted at this point, which will make my remarks about 'Impressionism' clearer: "Not everyone could conceal certain holy shudders in the face of this now event-becoming fantastic hubris, which had borrowed from the resurrection of Jesus [Christ] an unmistakable radiance. Thus, the whole ... village was suddenly filled with religious life." [Gerhart Hauptmann, Der Narr in Christo: Emanuel Quint (Berlin: S. Fischer, 1910), 16.]. "This space is one of my favorites at the Prado, although I do not underestimate the one-sidedness of this choice. I never visit right away in the morning, but at last, when I am becoming a little tired. And that does not improve the logic of my ability to choose. Because it is a tired hall...." [Julius Meier-Gräfe, Spanische Reise (Berlin: S. Fischer, 1910), 304-305]; "On one such occasion I came to Dulwich, and when I had

enough of frolicking around with an Englishwoman, which I almost had seduced, under almost green trees and almost blue sky, I went to the Dulwich gallery as a faithful creature of habit and saw the pictures by Poussin. I never liked them as much as I did that day [...] Since that day I know the best time for Poussin. He is not for the morning hour of enjoyment [...]." [Julius Meier-Gräfe, Spanische Reise (Berlin: S. Fischer, 1910), 310]; "I confess that I prefer Poussin. In the beginning, I took it for my preference for afternoon hours, for a question of taste, that was not to be discussed...." [Julius Meier-Gräfe, Spanische Reise (Berlin: S. Fischer, 1910), 311]. The same praises the impressionists: "There is no witchcraft to it." For me, a splendid caricature of "impressionistic humans" are Alfred Döblin's "Lobensteiner" [see Alfred Döblin, Die Lobensteiner reisen nach Böhmen: Zwölf Novellen und Geschichten (München: Georg Müller, 1917)].

"Let me quote the passage in connection: "The eyed-hawk-moth, a butterfly with beautiful eye marks on its wings, frightens with these marks its pursuers, the little birds, by imitating with them the eyes of little predators, though he himself never catches sight of these marks. Us humans it does not deceive with that, for us there is no predator that has such eyes. But the little birds, who are always on their guard against cats, weasels, and similar predators, have to flee from any eye-like structure that moves in order to escape in time. Life uses this circumstance to protect the eyed-hawk-moth.—Here it is revealed that life is not hindered by the subjective barriers that it itself builds up. Life takes a viewpoint to which we cannot follow it. While the genes of the eyed-hawk-moth form, life is in the forming germ and can be destroyed by any grossly mechanical damage to the germ. At the same time, life stands outside the germ and overlooks not only the effect world [Wirkungswelt], but also the sense world [Merkwelten]. This we cannot imitate; if we are in our subject, we cannot stand outside at the same time." [Jakob von Uexküll, "Vom Wesen des Lebens," in Bausteine zu einer biologischen Weltanschauung (1913), 155-190 (186-187)].

iii Is not the intellectual life [Geistesleben] completely analogous in this point too? In it, too, I find an effect world [Wirkungswelt] that is much larger than the sense world [Merkwelt]. It works mechanically and 'solves problems,' it assesses, tests, and shapes. Example: Someone sees an image by Kandinsky. The person is able to give long logical, psychological, aesthetic speeches, but has not 'seen' the image yet. Thus, can one not apply to many critics of modern art what Uexküll writes about sea urchins? "The sea urchins know how to strike their poison tongs with certainty into the skin of the enemy. But what are the traits that their receptors absorb as the enemy approaches? A simple stimulus chain: weak chemical stimulus—strong chemical stimulus—thrust!" [Jakob von Uexküll, "Vom Wesen des Lebens," in Bausteine zu einer biologischen Weltanschauung (1913), 155-190 (182)] Who does not think of the audience when reading: "Any excitement emanating from the eye evokes an escape reflex or defensive stance." [Jakob von Uexküll, "Das Weltbild der Biologie," in Bausteine zu einer biologischen Weltanschauung. Gesammelte Aufsätze (Munich: F. Bruckmann A.-G., 1913), 191-264 (240)] In this, our exhibition visitors have not yet "evolved" much beyond the state of the sea anemone.

^{iv} However, with these words, Uexküll reflects the view of another researcher, the American Jennings [the eugenicist Herbert Spencer Jennings (1868-1947)]. But he adds that he finds something "undeniably rich" in his theory.