»Anerkannt oder Ruiniert«

The Intellectual Politics of Max Bense's Axiomata (1944)

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»DIE EMANZIPATION DER INTELLEKTUELLEN,« writes Max Bense in *Technische Existenz* (1949), »von ihrer armen Einsamkeit zu einer reichen Öffentlichkeit des Ernstes und der Verantwortung ist der Fortschritt zur ethischen Perfektionierung dieser Welt, die in diesem Jahrhundert in der unmittelbaren Gefahr ist, an ihren eigenen Sündenfällen zugrunde zu gehen.«¹ With the omnipresent scars of the Second World War not half a decade old, Bense stakes a claim about the role of intellectuals in the betterment of a shattered world, addressing them with an ethical imperative: find their way to a public sphere and establish a discourse of sincerity and accountability. To be an intellectual in Bense's view means to have an audience; to have an audience is, for an intellectual, to be free.

No one embodied this devotion to an intellectual audience more earnestly than Bense himself, whose prolificity—in both academic and popular texts, from the 1930s to his death in 1990—betrays a deep-seated, constant compulsion to publish. The repeated emphasis on the intellectual's relationship to the public sphere in his *Axiomata* from 1944, itself an unpublished text, is thus not without some irony. *Sed exceptio probat regulam:* locating a work of Bense's that in one form or another did not ultimately see publication is indeed a feat.

True to Bense's form, the Axiomata present intellect, Geist, as an issue inevitably entangled with the public sphere. Bense depicts the intellectual in a constant process of synthesizing material and delivering it to a public: »Wir vereinbaren, wir machen aufmerksam, wir halten fest, wir überliefern«.² Notably, what the Axiomata do not specify are the criteria by which intellectuals choose their material. No stipulation is made for what the intellectual is to deliver, or that it intuitively reflect what the public sphere believes to be the contemporary moment. In part, this is due to Bense's conviction that the »contemporary« is always a bit more temporally tangled than the surface of any one instant might suggest: more often than not, Geist manifests through unzeitgemäße Betrachtungen. This alertness to the dis-

¹ Max Bense: Technische Existenz. Essays, Stuttgart 1949, p. 74.

² Max Bense: Axiomata [Unpublished typoscript], 1944, A: Bense, Max, Deutsches Literaturarchiv Marbach, Axiom 13. Subsequent citations to be given in text.

continuities in the historical development of thought helps account for Bense's tendency to ground his more forward-looking theses—the ontological priority of technology; the development of a universal logic; the transmutability of the qualitative and quantitative; the synthesis of material, intellect, mechanics, and aesthetics—in his study of 17th-, 18th-, and 19th-century figures like Denis Diderot, René Descartes, Pierre-Simon Laplace, Georg Cantor and, above all, Gottfried Wilhelm Leibniz. Bense's thinking is distinguished by the way it elevates the forces of deep conceptual latency operative in the technological avant-garde of his day.

In step with the asynchronous thought of his intellectual heroes, Bense's own pursuits, particularly those published during the Second World War, also reveal a distinct »untimeliness.« In this regard, the *Axiomata* are paradigmatic. For these twenty-two theses—dedicated to Erwin Bücken, Goswin Peter Gath, and Heinrich Wamper, friends from his days as a student in Cologne—capture how this untimeliness reflects not only Bense's topics of study, but also his method and form.

Judging strictly by his bibliography, Max Bense occupied something of a parallel dimension to the world around him in 1944. He published more than a dozen texts that year, with titles that betray nothing of the world-historical and military-catastrophic events simultaneously at play in Europe: a short book titled Das Leben der Mathematiker. Bilder aus der Geistesgeschichte der Mathematik, academic essays such as Das Verhältnis von Literatur und Philosophie, as well as feuilleton articles in the Kölner Zeitung under headlines like Mathematik und Philosophie or Gedanken über ein Sanduhrspiel.

In fact, this apparent disengagement reflects not an esoteric ignorance, but rather an idiosyncratic mental politics in which the fascist war machine embodied an anti-intellectual enemy that could be resisted only by doubling down on a vocation of the mind. »Critically aloof« might best capture Bense's position toward the conflict and its ideologies. He depicted the politics of this aloofness—which itself bears an a- or outright anti-synchronicity—in the memorable epigraph to *Technische Existenz:* »Mit List und Tücke ist es mir gelungen, die zwölfjährige Regenzeit zu überstehen. Ich hatte meine Laterne verhängt, damit ihr Licht nicht bemerkt werde und zu laut und auffällig denjenigen heimleuchte, die auf falschen Pfaden gingen.«³

Survival of the fascist »rainy season« in Bense's case involved an unsuccessful attempt to emigrate to the United States in 1939; a refusal to attend a Nazi Ordensschule following the completion of his dissertation, resulting in the forfeiture of a university career; compulsory service in the Luftwaffe as a meteorologist with no chance of promotion on account of his history of anti-Nazi statements; and, ulti-

³ Bense: Technische Existenz (as note 1), p. 11.

mately, placement from 1943 until the end of the war at the *Labor für Hochfrequenz-technik und Ultraschall* in Georgenthal.

Situated deep in Thüringen, Georgenthal paradoxically served both as a hub of military activity for the Nazis and as a shelter from the front lines for Bense. While there, he undertook a kind of inner immigration, devoting his free time to his own studies. During the day, however, he was at the disposal of the Luftwaffe's research efforts. As he chirps ironically in a letter to a friend from November 1943, »Ab 8 bis 17 Uhr bin ich als Physiker im Labor und mache gute elektronenoptische Versuche für die Luftwaffe.«⁴ The American army, upon capturing Georgenthal in the spring of 1945, was less convinced about the importance of his experiments, deeming Bense little more than a bureaucratic assistant. Here, at least, Bense's strategy of critical aloofness as political resistance paid off: perhaps on account of this apparent lack of engagement with military projects, the American occupiers appointed Bense as Georgenthal's mayor almost immediately after their arrival, an office he held for some six months before taking a position at the university in Jena.⁵

The »criticality« of Bense's aloofness signals the importance of what this *Geistiger* chose and, more importantly, chose *not* to write about. The *Axiomata* open with precisely this point. When Axiom I claims the critic to be arbiter over the ontological dichotomy between recognition and ruination, acknowledgement and annihilation, Bense is articulating his intellectual politics outright. It is not just that written critique is here the ultimate source of creative (or destructive) power. Rather, the performance of Bense's aloofness, from a figure who published constantly throughout the Nazi regime, can never be understood as unintentional. Denial of recognition within Bense's written output is always deliberate, tantamount (following Axiom I) to a purposeful ruination.⁶ Refusing to elevate to the level of intellectual discourse of that which is inherently anti-intellectual constitutes an implicit criticism in Bense's aloofness, an ethos which would keep him focused solely (perhaps to a fault) on subjects that participated in what he deemed to be an *ansichhaltende Vernunft*.

⁴ Max Bense: »Max Bense to Herbert Franke«, 26. November 1943, A: Bense, Max; Briefe an Herbert Franke, Deutsches Literaturarchiv Marbach.

⁵ A more detailed account of these events can be found in Michael Eckardt's contribution to Elke Uhl and Claus Zittel (eds.): Max Bense. Weltprogrammierung, Stuttgart 2018, pp. 11-26.

⁶ »Ruin«, too, is a loaded term in Bense's output during the war's end and its immediate aftermath. Surrounded by mountains of rubble, he confronts »ruin« as both a metaphorical and a material reality. The quote that opens this commentary, for instance, is taken from the essay in *Technische Existenz*: *Erinnerung und Voraussicht*. *Eine Rede vor der Ruinen und Särgen* (pp. 64–76). Even more pointed is an undated and unpublished essay from the mid-1940s, *Vom Wesen der Ruine*, which diagnoses a post-Reich Germany with the admonition that: »Jede Ruine birgt nur eine einzige Gefahr: das sie zum inneren Ruin wird« (n. p.).

The second axiom reiterates this politics while framing its inherent untimeliness and asynchronicity, aligning a critique and thus transcendence of the contemporary with a project of human enlightenment. (This enlightenment ideal Bense would never abandon, later openly challenging its now-canonical critics.⁷) But this asynchronicity reflects the form of the text itself, as its recourse to the axiom signals a key, early intellectual interest of Bense's. His self-description as »Axiomatiker« evokes the culminating developments of mathematics in the 19th and 20th centuries, specifically David Hilbert's call for the axiomatization—and thus logical systematization—of mathematical thought.⁸

Bense's intervention arrives in marrying together this mathematical tradition with one of a much clearer humanist genealogy, namely the essay, as Axiom 7 and 8 articulate. The marriage is encoded in his language, with the equivocality of Versuche simultaneously signaling both the laboratory's experiment and the writer's essai. This synthesis of mathematical and humanist aims—a constant refrain in Bense's writing throughout the 1930s and 40s, encapsulated in the titles of works like Geist der Mathematik (1939) and Konturen einer Geistesgeschichte der Mathematik (1946/49)—appears explicitly in Axiom 12. While Bense assigns mathematics to the realm of truth (in the sense of verifiability) and literature to the realm of reality (as generative of effect, an etymologically true notion of aesthetics), they, along with philosophy and science, are united in their adherence to laws, and thereby all subject to a reduction into systematic—and thus axiomatic—forms. That the axiomatic form employed to make this observation would itself be subject to that same observation is no accident. Such conceptual recursivity is invoked in the remarks on Leibniz in Axiom 17: style always expresses intellect. In the specific context of the Axiomata, however, the embeddedness of Geist and Form further indicates an inseparability of mathematics and aesthetics, as the axiom belongs equally to the realm of Form (method) and Geist (logic).

In a gesture to what will become a signal focus of Bense's postwar output, the *Axiomata* link systematicity to a so-called »encyclopedic« attunement. In the late 1940s, the historical *Encyclopédie* embodies Bense's ideal for knowledge production that is democratically distributed, liberally plural, and socialistically historicized.⁹

⁷ See Bense's review of Theodor W. Adorno and Max Horkheimer's Dialektik der Aufklärung: Hegel und die kalifornische Emigration, in: Merkur 4/1 (January 1950), pp. 118-25.

⁸ As Bense remarks already in 1935, Hilbert »weiß um die geheime Mitte der Mathematik und stellt die gesamte mathematische Methodik und Axiomatik in den Dienst der Aufgabe, das Unendliche in seiner Transzendenz zu erfassen.« See Max Bense: Aufstand des Geistes. Eine Verteidigung der Erkenntnis [1935], in: Ausgewählte Schriften in vier Bänden: Bd. 1, Philosophie, ed. Elisabeth Walther, Stuttgart 1998, p. 100.

⁹ Max Bense: Über Rationalisten und Enzyklopädisten, in: Merkur 1/2 (February 1947), pp. 236-8: 238, § 16.

Diderot and d'Alembert are recurring and central figures in Bense's 1950 critique of Theodor W. Adorno and Max Horkheimer's *Dialektik der Aufklärung* as well as in his own *Konturen einer Geistesgeschichte der Mathematik*. Moreover, they set the tone for his entire pedagogic project upon re-entering the academy, serving as the topic of his 1946 *Antrittsvorlesung* in Jena, models of forward-looking intellectualism in the age of *Technik*.

The notable absence of »Technik« from the Axiomata, however, is all the more conspicuous given its status as watchword of the Bensean postwar program. While, in subsequent years, the concept both underpins Bense's synthesis of Geist, Mathematik, and Material, and serves as the axis around which his embrace of historical encyclopedism revolves, the shibboleth is only implied in the final axiom: »Die Welt, die heraufkommt, ist immer synthetischer als die Welt, die verlassen wird.« The synthetic world is nevertheless a fitting conclusion for the Axiomata, as it opens out to a sentiment that Bense's work invokes repeatedly in the postwar period. ¹⁰

This postwar work has served as the focus for the recent resurgence of interest in Bense, which aims to move the thinker's writings to a more central place in techno- and media-theoretical discourse.¹¹ There is an understandable tendency in this revival to emphasize Bense's ready reception of cybernetics beginning in the 1950s, and his partly prophetic, partly esoteric prognosis of the convergence of the machinic and aesthetic worlds.¹² As insightful as these perspectives are, ex-

- This axiom could plausibly serve as the mantra of Bense's *Technische Existenz*, as evinced by statements such as »Der Fortschritt der Welt besteht darin, daß sie synthetischer wird« (p. 90), or »Für den Einzelnen der Gesellschaft der Intellektuellen bedeutet diese Forderung nach der ethischen Verantwortung der Welt, die man mit hervorgebracht hat und die man bewohnt, nichts geringeres als der *Eintritt in die ethische Verantwortung dieser Welt*, die er hervorgebracht hat und die er bewohnt. Man wird nicht mehr Dichter, Gelehrter, Künstler, Erfinder und Schriftsteller im ausschließenden Sinne sein können, man wird ein synthetisches, ein enzyklopädisches Dasein führen müssen [...].« (p. 73).
- See here Elke Uhl and Claus Zittel (eds.): Max Bense. Weltprogrammierung, Stuttgart 2018; this volume largely reflects the proceedings of a 2010 conference held at the Internationales Zentrum für Kultur- und Technikforschung of the Universität Stuttgart on the occasion of Bense's 100th birthday. This collection is complemented by a second volume, Andrea Albrecht et al. (eds.): Max Bense. Werk Kontext Wirkung, Stuttgart 2019, based on a conference with the same title from early 2018 at the Deutsches Literaturarchiv in Marbach.
- Such a tone is set by the editors' introduction to the recent volume Max Bense. Weltprogrammierung, positioning Bense as a woefully forgotten patriarch of digital humanities, the modern variant of which appears by comparison regrettably »hausbacken, apolitisch, anti-ästhetisch und in systematischer Hinsicht dramatisch unterkomplex« (p. 3). In his contribution to the same volume, Claus Pias presents Bense as an ur-media theorist, while Hans-Christian von Hermann traces Bense's anticipation of post-digital forms of art, and Sybille Krämer's essay categorizes Bense's literary theory as postmodern avant le lettre, perhaps even post-postmodern in its utter comfort with the artificiality of textual surface.

amining Bense's intellectual character at an earlier stage and on the cusp of his reception of information theory reveals the steadfastness of his dedication to the interdisciplinarity that, in his later oeuvre, appears under the signs of cybernetics and semiotics. In the *Axiomata*, this interdisciplinarity takes the form of a wide conceptual scope that seeks to unite mathematics, philosophy, aesthetics, and systematicity as all exhibiting a critical rationality, a rationality that claims its truest manifestation when it enters or even constructs a public space. Above all, the curation of this intellectual public space marks Bense's central political gesture, in which ideologies are always subject to a dynamic of *Anerkennung* or *Ruinierung*—preserved in the space of discourse or expelled from it.

Simultaneously embedded in Bense's key historical interests while anticipating the work that followed, the *Axiomata* illuminate the way that Bense's extensive and diverse intellectual trajectory betrays not ruptures of paradigm so much as periodic reorganization under new signs. The *Axiomata* remind us that there is a marked consistency over time in Bense's methods and ideas, one obscured only by the inherently provisional nature of his nomenclature and his constant search for a new vocabulary to name the phenomena he had all along been recognizing, all along been acknowledging.