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Inventing Provinciality: St Andrews and the Global Networks of Early Victorian Photography

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Article by **Elizabeth Fisher**
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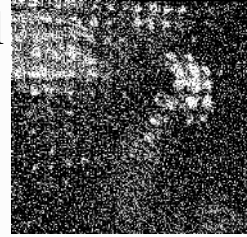
Abstract

This article explores the political artist Gustav Metzger's engagement with aesthetics and dialectical form. It locates aesthetics at the centre of his ethical endeavour, as the locus of what he saw as art's revolutionary potential, and dialectics as its structure or operating principle. It posits a new framework for understanding Metzger's approach to science through this lens, and highlights resonances between Metzger's thinking and that of the Frankfurt School theorist Herbert Marcuse, a key proponent of dialectical thinking and influential member of the New Left and countercultural movement of the 1960s. Tracing the evolution of his aesthetic theories through a career of almost sixty years, from a period of intense experimentation with materials, technology, and scientific processes in the 1960s to his *Remember Nature* project in 2015, this article draws attention to the ways in which Metzger's expansive understanding of aesthetics might be applied to the urgent contemporary task of negotiating an ethical, ecological art practice today.

Introduction

In 2015, at the age of eighty-nine, Gustav Metzger called on artists, arts professionals, and art students around the world to "follow the path of ethics into aesthetics" and participate in a "Day of Action" to highlight the threat of mass extinction:

> The art, architecture and design worlds need to take a stand against the ongoing erasure of species—even where there is little chance of ultimate success. It is our privilege and our duty to be at the forefront of the struggle. There is no choice but to follow the path of ethics into aesthetics. We live in societies suffocating in waste. Our task is to remind people of the richness and complexity in nature; to protect nature as far as we can and by doing so art will enter new territories that are inherently creative.[1]

This call to arms came amid a global wave of citizen protests that erupted in the 2010s, many involving artists.[2] While artists have long been engaged in political struggles, with art often used as a language of resistance, the increasingly muddied terrain between art and social practice has brought to the fore questions around the relationship between aesthetics and activism, particularly in terms of the aestheticisation and potential neutralisation of political action.[3] For

the last sixty years, "aesthetics" has been something of a dirty word in contemporary art, particularly politically engaged artistic practice. During the post-war period in the mid-twentieth century, the aesthetic was roundly rejected by conceptual, performative, and anti-art movements seeking to challenge the hegemony of modernism and the dominant social and economic order of capitalism.[4] Metzger himself is best known for pursuing a radical artistic agenda aligned with these aims. The political content of his work and his long-standing commitment to environmental and social activism have made him an influential figure among successive generations of artists, but it has also largely eclipsed an equally deep-rooted interest in the revolutionary potential of aesthetics as both a perceptual and a political experience. In an interview with Andrew Wilson in 1998, Metzger declared, "I am concerned with beauty, perhaps more than with anything else", adding in the same interview, "an aesthetic which goes beyond beauty is at the centre of my work".[5]

The first reference to aesthetics in Metzger's writings came in 1962, in "Manifesto World" where he called for a "new aesthetic". He imagined this as "an art of extreme sensibility and consciousness" in the context of a post-war world shaped by space travel and splitting atoms: a world, as he described it, "on the edge of destruction".[6] Metzger's "new aesthetic" responded to the expanding boundaries of the known world by invoking an expansive state of aesthetic alertness. It borrowed as much from science as philosophy and embraced both technological and biological ways of sensing and making sense of the world.
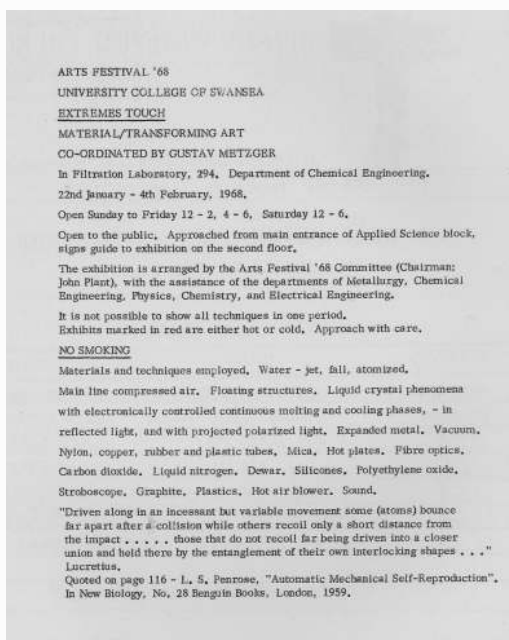
Figure 1

Gustav Metzger, *Extremes Touch*, handout, Arts Festival, University College of Swansea, 22 January–4 February 1968 Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation (all rights reserved)

Metzger's aesthetic sensibility invoked a wider frame of reference than eighteenth-century standards of beauty or taste, and points to the historically broader etymology of the word itself, which derives from the Greek αἰσθητικός, or aisthetikos, meaning "to perceive (by the senses or by the mind), to feel".[7] This connection with sentient experience, combining both feeling (emotion, self-awareness) and sensation (not just visual) denotes a complex psychological and multisensory experience. Repeatedly, Metzger staged just this kind of experience, in works ranging from Extremes Touch (fig. 1), an exhibition of short-lived kinetic sculptures held in a filtration laboratory at University College, Swansea in 1968 to In Memoriam (fig. 2), a maze of tall cardboard columns arranged randomly to fill a room with barely enough space to walk through. Made in 2005, the work offers a disorderly, disorientating, and ephemeral version of the regimented grid of monolithic stone blocks in Peter Eisenman's Memorial to the Murdered Jews of Europe in Berlin (also 2005). Psychoanalysis provided an important touchstone for Metzger, who more than once referred to an "aesthetics of revulsion"; the phrase deliberately foregrounds the

potentially emotional and visceral nature of the aesthetic experience that derived from a combination of specific materials and unsettling political content.

Figure 2

The obverse of "aesthetic", as Matthew Fuller and Eyal Weizman point out, is "anaesthetic", or anaesthesia: the numbing of the senses, which Metzger associated with the powerful effects of mass media and sought to counteract or disrupt.[8] In this article, I argue that this notion of aesthetics as a multimodal means of perception—again, of both sensing and making sense of the world—underpinned Metzger's artistic praxis. Moreover, in Metzger's work, the aesthetic operates in such a way as to actively situate and implicate the viewer directly in relation to profound historical, moral, and epistemological questions and to obviate the possibility of engendering a passive response. Focusing on the relationship between the perceiver and the perceived, Metzger highlighted the intrinsically relational nature of aesthetic experience and its resonance with dialectics, the philosophical methodology that he felt most closely aligned with. For Metzger, dialectical form contained within it the possibility of transformation, and it is in this sense that his engagement with aesthetics was fundamentally an ethical, political, and revolutionary undertaking.

This article begins by looking back to a period of aesthetic experimentation and engagement with scientific phenomena and emerging technologies in the 1960s and early 1970s, and to the role of aesthetic experience in relation to Metzger's artistic practice, which was dedicated to "social action … a left-wing revolutionary position in politics, and to struggles against future wars".[9] The techniques he developed during this period—some of which evolved into autonomous artworks, while others remained ephemeral demonstrations—were part of an overarching effort to fuse political content with aesthetic form, catalysed when he was studying under David Bomberg in the early 1950s and first formally articulated in his manifesto of 1959, "Auto-destructive Art".10 With hindsight, these experiments represented the first clear articulation of a new aesthetic sensibility that for Metzger formed the basis of a revolutionary way of seeing, understanding, and shaping the world. They were in themselves a manifesto for a non-mechanistic, transdisciplinary, and anti-hierarchical way of thinking.

It also posits a framework for understanding Metzger's approach to science, aesthetics, and ideas of beauty in relation to dialectics, specifically the philosophical tenets of dialectical materialism. Of particular importance was the work of Herbert Marcuse, a key proponent of dialectical thinking and a prominent figure in the New Left who played an influential role in shaping the countercultural consciousness of the 1960s.[11] As I demonstrate here, dialectics provides the key to understanding not just Metzger's engagement with aesthetics in the first intense period of creative exploration running up to the mid-1970s, but also the evolution of Metzger's aesthetic lexicon across his entire oeuvre. Metzger repeatedly aligned himself with dialectical materialism and, in an interview with Clive Phillpot recorded in 2009, noted that this connection went beyond an ideological position, as an integral part of his cultural heritage and identity "as a Jew", "as dialectics, thinking dialectically, is inherent in Judaism".[12]

Indeed, the overarching shape of Metzger's career takes dialectical form. There are two key periods of activity, separated by a gap of almost twenty years: his early work from the mid-1940s to mid-1970s, and his late work from the mid-1990s until his death in 2017. This gap, in which Metzger stopped making art and withdrew from the art world, began in 1977 with "Years without Art 1977–80" and lasted until around 1994.[13] Arguably, during this extended hiatus, he continued to engage with ideas about art and aesthetics through research and scholarship; his activities included an unpublished monograph on Johannes Vermeer and the collaborative curatorial project Passiv-Explosiv (1981), with Cordula Frowein and Klaus Staeck. But, in strikingly dialectical terms, this interlude of creative disengagement represents the theoretical *antithesis* of the original *thesis*, while his re-engagement with artistic production in the mid-1990s appears to occupy the role of *synthesis*. In the latter part of this article, I consider the evolution of Metzger's engagement with both aesthetics and dialectical form during this final period.

Radical Politics, Revolutionary Aesthetics

Raised in an Orthodox Jewish household in Nuremberg under National Socialism in the late 1920s and 1930s, Metzger understood the power of aesthetics in the service of both religion and politics from an early age. While the mysticism and ritual of the Jewish religion instilled in him an intuitive sense of the importance of bodily experience, a preoccupation with materiality and deep mistrust of images, he also witnessed the pageantry and spectacle of the Nuremberg rallies and the political symbolism of the Nazi Party's architectural interventions in the medieval city. Later, as an apprentice cabinetmaker in Leeds during the war, he read Eric Gill's writings on art, religion, and industry—which linked aesthetics and social reform—alongside the theories of Karl Marx and Leon Trotsky. Studying under David Bomberg in the early 1950s, he gained a thorough grounding in the formalist aesthetic principles of modern art and a mentor who was deeply concerned with a sense of the social responsibility of artists, who expected the same of those around him, and urged his students to invest the revolutionary artistic language of modernism with equally revolutionary content.[14] It was Bomberg, for instance, who persuaded Metzger not to travel to Mexico to study with the philosopher and natural living enthusiast Edmund Szekely, but to stay in London and engage with the social context he was already part of. In 1997 Metzger went as far as to describe the trajectory of his own ideas "as a continuation, an extension of Bomberg's".[15]

Metzger's involvement in political activism began with the workers' union at the furniture factory in Leeds, where he served his apprenticeship and developed during a six-month period living in an anarchist community in Bristol in 1944. At this point, realising that politics

inevitably involved the pursuit of power, he chose to be an artist rather than a full-time revolutionary. Throughout the 1950s his artistic development ran parallel with his involvement in anti-war and anti-nuclear activism, including civil disobedience and direct action with the Committee of 100, the Campaign for Nuclear Disarmament, and the Direct Action Committee. Following a three-month stint in prison resulting from his refusal in court to effectively relinquish his civil right to demonstrate peacefully, Metzger's involvement in political activism shifted to reflect a greater focus on the political potential of artists as agents of social change. By the late 1960s, he was involved with the Artists' Union and the International Coalition for the Liquidation of Art, was an active participant in the radical science movement and the British Society for Social Responsibility in Science (BSSRS), and had become the founding editor of *PAGE*, a politically conscious bulletin of the Computer Art Society.
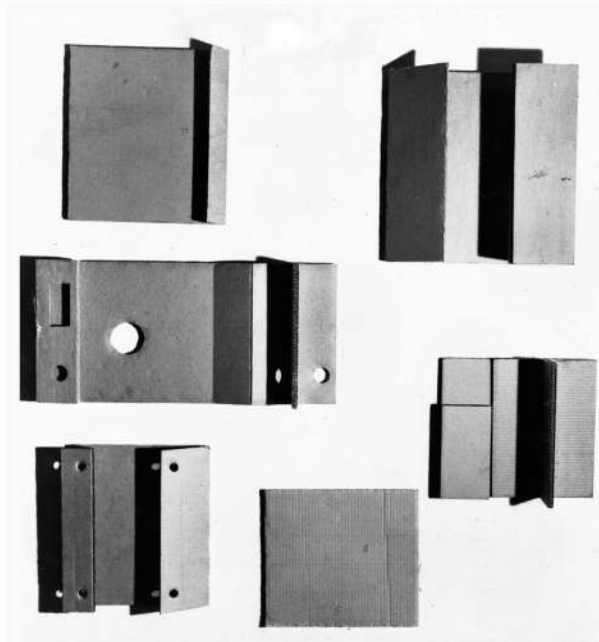
Figure 3

Gustav Metzger, *Cardboard*, found cardboard, selected and arranged by the artist at 14 Monmouth Street, London WC2, 9–30 November 1959 Digital image courtesy of Estate of Gustav Metzger / Photo: John Cox (all rights reserved)

The decade or so between the late 1950s and the early 1970s also saw significant developments in Metzger's artistic practice, and experimentation with a wide range of unconventional materials and processes as alternatives to the traditional techniques and lexicon of art. In November 1959, just three months after showing a series of mixed media "paintings" on steel and hardboard in his first solo exhibition at 14 Monmouth Street, London, Metzger presented a second show of found *Cardboards*, untouched but "selected and arranged" by the artist (fig. 3). In the crisp, machine-cut shapes of discarded television packaging, which he had found outside a shop on the Fulham Road, the artist recognised formal qualities "equal to the greatest in modern painting, sculpture and architecture".[16] They signalled the crystallisation of a fully hybrid praxis premised on the rejection of the traditional figure of the artist-genius and a radically expanded operational field of art.

The press release for the show also incorporated Metzger's first manifesto, "Auto-destructive Art", an invitation to imagine art "created with natural forces, traditional art techniques and technological techniques", in collaboration "with scientists, engineers", or, like the cardboard forms, that was "machine-produced and factory assembled".[17] The notion of auto-destructive art linked creation and destruction in a coupling intended to highlight the self-destructive impulses within post-war industrial society and the manifesto itself pointed to a new aesthetic sensibility rooted in contemporary social, political, and material reality. It made art a visceral as much as an intellectual experience, and was intended to change not only how people thought and felt about art but also society.[18] This was Metzger's proposal for creative productivity commensurate with contemporary experience or, as he put it, "a form of public art for industrial societies".[19] Here is the first indication of a potential relationship with the Frankfurt School theorist Herbert Marcuse, who had referred to "advanced industrial society" in Reason and Revolution (1954) to signal a specifically new relationship between "man" and an emerging technological society shaped by industrial capitalism.[20] Marcuse, an early student of Heidegger, considered technology not simply as a neutral instrument of production or knowledge but as a determining social force, with agency of its own. In his introduction to One-Dimensional Man, Marcuse describes technology as a "productive apparatus [that] tends to become totalitarian to the extent to which it determines not only the socially needed occupations, skills, and attitudes, but also individual needs and aspirations", surmising "technological rationality has become political rationality".[21]

Figure 4

From the late 1950s onwards, Metzger sought out experts working at the forefront of scientific and technological innovation—in metallurgy and materials sciences, computer science, engineering, and chemical engineering—to help him develop new aesthetic phenomena through experimentation with materials, physical forces, and chemical reactions. In this way he developed techniques that could be performed during lecture-demonstrations such as "The Chemical Revolution in Art" at the University of Cambridge in October 1965 (figs. 4 and 5), or choreographed as ephemeral kinetic sculptures and light projections, as he did in a filtration laboratory at University College, Swansea in 1968 (see fig. 1).[22] As much as they were experimental artworks, these activities—along with his annexation of other forms such as the bibliography or index—were also deliberate interventions in traditional spaces of knowledge production.[23] In the same way, through his involvement with the Computer Arts Society and BSSRS, Metzger inserted himself into contemporary discourses around the social significance of science and technology. His strategic adaptation of existing and new platforms helped to establish a lexicon for activist art and opened up what is now familiar territory in

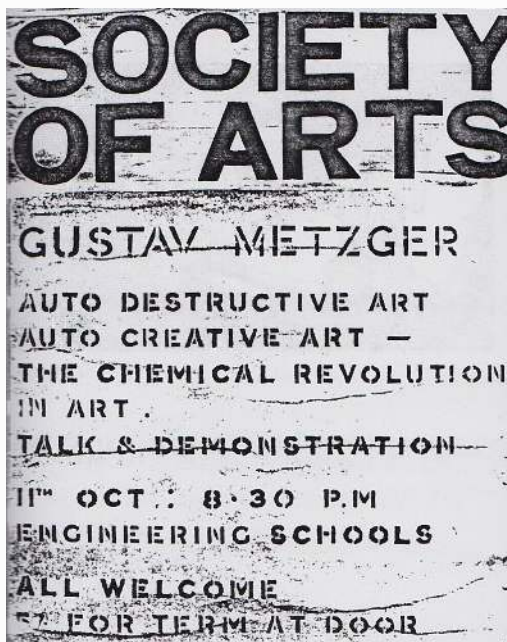contemporary artistic practice but at the time served to establish the *in*disciplinarity of Metzger's radical agenda.
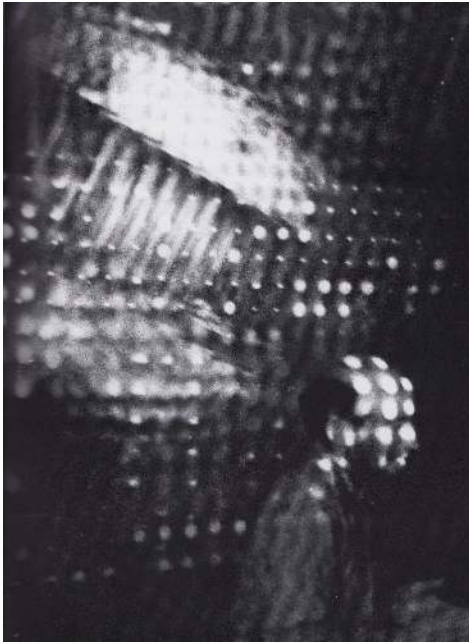
Figure 5

Gustav Metzger giving "The Chemical Revolution in Art" lecture, Engineering Schools, University of Cambridge, 11 October 1965 Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation (all rights reserved)

Between 1960 and 1964, as he was developing these techniques in collaboration with scientists, engineers, and technicians, Metzger continued to write manifestos. His second, third, and fourth manifestos directed increasingly intense criticism at the tyrannical structures of capitalism and the art world, the profit-driven militarisation of governments, and the senseless overproduction of weapons of mass destruction. They also reveal Metzger's efforts to articulate the new aesthetic sensibility as both a symbol and a site of resistance to the destructive tendencies of industrial society. His aesthetic theory hinged on an expansive and anarchic approach to artistic media that embraced valueless trash and new technology, ignored disciplinary lines, and subverted the traditional creative role of the artist—and sketched a realm of aesthetic experience ranging from revulsion to transcendence that would provoke "a form of catharsis in the spectator" and ultimately "lead people to a rejection of many aspects of our civilisation".[24]

Destruction as Liberation
During the 1960s and 1970s, there is an unmistakable resonance between Metzger's work and writing on art, aesthetics, and revolutionary politics, and Marcuse's sustained exploration of the relationship between revolution, art, and aesthetics. Driven, at least in part, by common experience as Germans with Jewish religious backgrounds in Nazi Germany, both perceived the destructive effects of capitalism; they shared concerns over in the escalation of militarisation in the post-war period, and the links between science, technology, and capitalism. Destruction was a common theme in both men's work, as was the theory and practice of science and its social

implications. A dialectical methodology underpinned both their thinking and provided each with the conceptual framework for revolutionary social change. Both saw the need for new methods and institutions for scientific and technological research and both connected this with the development of a radical new aesthetic sensibility. They envisioned far-reaching social and cultural revolution in which more ethical, ecological relations among humans and between humans and other species might prevail.

Although they never met, and there is no evidence that Metzger ever read any of Marcuse's writings, their thinking coincides repeatedly. Metzger attended the Congress on the Dialectics of Liberation at the Roundhouse in London in July 1967, an event that brought intellectuals and political activists, including Marcuse, together "to demystify human violence in all its forms, and the social systems from which it emanates, and to explore new forms of action".[25] Metzger's immersion in radical left-wing politics, anarchism, and anti-war/anti-nuclear protest movements suggests there was a strong possibility that he was at least aware of Marcuse, who by the end of the decade would be widely regarded as both the theoretical "guru" of the New Left and "grandfather" of the student protest movement.[26] It is clear, however, that Metzger was not simply following the theories of Marcuse; his preoccupation with destruction dates back to 1957, when he organised an exhibition of religious icons that had been mutilated and defaced during the English Reformation.[27] He made his first auto-destructive artwork in 1960.[28] In 1966, a year before the Congress on the Dialectics of Liberation, Metzger was involved in organising two events around the theme of destruction: the first, "Creation, Destruction and Chemical Change" in May; and the second, landmark, "Destruction in Art Symposium" (DIAS) in September, which was seen as a precursor to the Congress in bringing together disciplines from psychoanalysis to political activism in order to focus critical attention "on the element of destruction and to relate this to destruction in society".[29]

For his part, in 1964 Marcuse published *One-Dimensional Man*, a radical critique of post-war industrial society. Expounding themes already familiar to Metzger, he described a society built on excessive affluence, neo-imperialist violence, and other forms of domination and control: "The union of growing productivity and growing destruction; the brinkmanship of annihilation; the surrender of thought, hope, and fear to the decisions of the powers that be; the preservation of misery in the face of unprecedented wealth" and "false needs … superimposed upon the individual by particular social interests in his repression; needs that perpetuate toil, aggressiveness, misery, and injustice".[30] In subsequent texts such as "Aggressiveness in Advanced Industrial Society" (1967) and *An Essay on Liberation* (1969), Marcuse continued to argue that the destructive forces of aggression, brutality, and exploitation were intrinsic to capitalist society, warning that "sublimated forms of aggressiveness" were "rampant throughout contemporary industrial society … as the accumulated aggressiveness which drives the business of life in all branches of corporate capitalism, as the legal aggression on the highways, and as the national aggression abroad which seems to become more brutal the more it takes as its victims the wretched of the earth".[31]

Destruction, or more specifically the dialectical relationship between destruction and creation, was an established theme in German literature and philosophy.[32] Dialectical form itself was part of a long-established German intellectual tradition which both Marcuse and Metzger shared, going back through Marx and Hegel to Plato and Aristotle. Historical context was of great importance to Metzger. In lectures and scholarly articles such as the two-part essay "Automata in History", he made a point of highlighting continuities between his work and a diverse range of historical precursors.[33] Auto-destructive art deliberately revives and reconnects with what Paul

Bishop has described as "a creative response to destruction—indeed, of creation amid and even through destruction" in the work of Metzger's German Romantic and early modernist predecessors. Metzger's ongoing engagement with such traditions and ideas embodied a dialectical relationship with history that would come to frame his entire career.

In 2009 Metzger declared that "dialectical materialism, coming out of Marxism but without reference to Marx … is to the present day the field in which I am. It will explain everything I have done".[34] Marcuse, whose critical theory drew on Marxist, Freudian, and phenomenological traditions, was also closely associated with dialectical materialism, and his thinking was fundamentally rooted in dialectical form. As a result, Marcuse theorised social change as the coexistence and resolution of contradictory forces, or the process of exposing contradictions and then overcoming them through the revolutionary action by which advanced industrial societies are constituted. Douglas Kellner, Marcuse's intellectual biographer, described him as an "intransigent revolutionist".[35]

The Aesthetic as a Site of Resistance, Revulsion, and Epiphany

Like Metzger, Marcuse saw revolutionary potential in the neglected terrain of the aesthetic. He described the "aesthetic ethos" as providing "the common denominator between the aesthetic and the political" through its association with the beautiful, serving "as a sort of gauge for a free society" and embodying a political and moral ideal:

> *The aesthetic morality is the opposite of puritanism. It does not insist on a daily bath or shower for people whose cleaning practices involve systematic torture, slaughtering, poisoning; nor does it insist on clean clothes for men who are professionally engaged in dirty deals. But it does insist on cleaning the earth from the very material garbage produced by the spirit of capitalism, and from this spirit itself. And it insists on freedom as a biological necessity: being physically incapable of tolerating any repression other than that required for the protection and amelioration of life.[^36]*

Marcuse also understood art as essentially dialectical; it existed within the structures of repressive society and yet contained within it the possibility of an alternative reality. In the realm of the aesthetic, resistance could be imagined and freely enacted: "art contains the rationality of negation. In its advanced positions, it is the Great Refusal—the protest against that which is".[37] "Negative thinking" was Marcuse's term for a dialectical methodology that closely aligns with Metzger's work in a number of ways, from the conceptual framing of auto-destructive art to the transformative processes harnessed to make the work.

Figure 6

Gustav Metzger, *Liquid Crystal Environment*,
installation view from the exhibition Gustav
Metzger: Lift Off!, Kettle's Yard, University of
Cambridge, 24 May–31 August 2014, 1965 Digital
image courtesy of Estate of Gustav Metzger /
Gustav Metzger Foundation (all rights reserved)

Figure 7

Gustav Metzger, Model for "*Auto-Destructive
Monument*", 1960/2005, staples, steel, varnished,
20 × 40 × 23 cm. Collection of Generali Foundation
Collection—Permanent Loan to the Museum der
Moderne Salzburg Digital image courtesy of Estate
of Gustav Metzger / Gustav Metzger Foundation /
Photo: Werner Kaligofsky (all rights reserved)

As Metzger explained in 2014, "Revolutionary theory and practice is behind the entire Swansea project and much else".[38] The techniques he developed and named, first as auto-destructive or auto-creative, and later as "material/transforming art", involved processes of chemical and physical transformation, of self-destruction and auto-creation. These were laden with implicit questions around agency (of both the artist and, by implication, humanity) as well as metaphors of transcendence: from the heating and cooling of liquid crystals that could produce colourful and infinitely varied moving images, successfully utilised in Metzger's early light projections and the *Liquid Crystal Environment* (1965) (fig. 6), to the slow corrosive process of the chemical reaction between iron, oxygen, and water to produce rust—the basis of the first unrealised *Auto-destructive Monument* (1960) (fig. 7).[39]

Figure 8

Gustav Metzger, *Acid Action Painting*, installation view from exhibition Destroy, and You Create: Gustav Metzger in King's Lynn, Fermoy Gallery, King's Lynn, 29 June–3 August 2019, 1960, remade 2015 Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation (all rights reserved)

The iconic *Acid Action Painting* of 1960 deployed the rapid disintegrative effects of hydrochloric acid on synthetic plastics (in this case, nylon) (fig. 8). Other techniques, particularly those demonstrated with light projectors during the lecture/demonstrations, were intrinsically fleeting. Into the space between the projector bulb and lens, Metzger would slip handmade vials containing ink suspended in glycerine, water between two moving pieces of perforated plastic, or copper mesh dipped in water with graphite and glycerine added as the water evaporated, even a microscope slide, burned and melting, thus illuminating and magnifying the processes of change in chemical and physical phenomena, from Brownian motion to burning. These were the precursors of the large-scale moving light projections (developed by Metzger but also notably, and by different means, Mark Boyle) that came to epitomise the psychedelic aesthetic of 1960s counterculture and associated drug-induced, altered states of consciousness and expanding perceptual horizons, and were memorably described in such terms by Dom Sylvester Houedard in 1966.[40] The aesthetic effects were thus produced by transformative processes over which the artist had minimal control, in which matter changed state from liquid to gas, gained or lost energy, or displayed random motion.
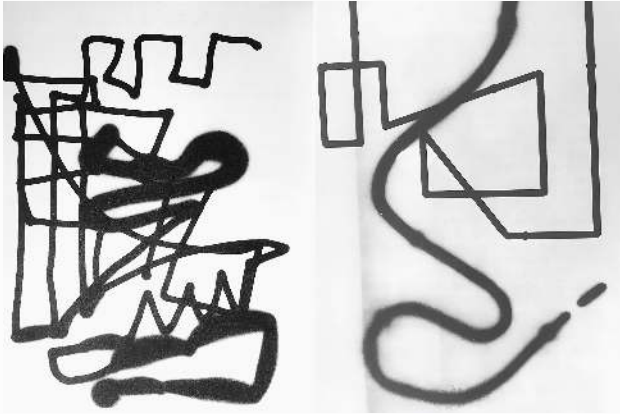
Figure 9

Gustav Metzger and Heather Peri, *Plotter drawings*, 1970 Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation (all rights reserved)
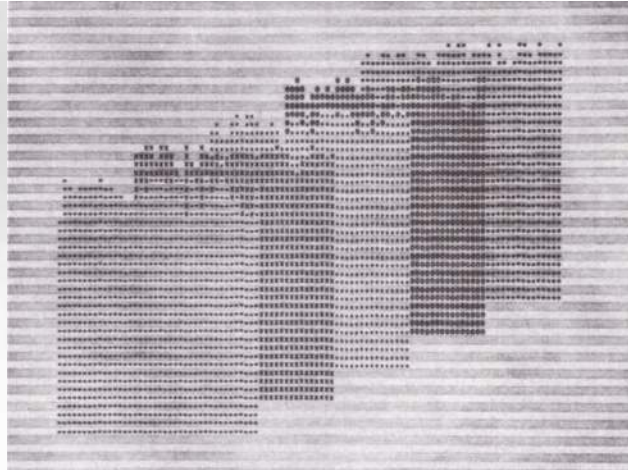

Figure 10

Gustav Metzger and Beverley Rowe, *Design Study for Five Screens with Computer*, March 1969, computer-generated drawing Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation (all rights reserved)

Metzger sought the same expression of randomness and entropy by "othering" creative agency through new technology such as plotters (forerunners of the inkjet printer), early computers, and software. Initial experiments involved "drawings" produced by manipulating the movement of the plotter's fibre-optic light guide with magnetic control tape, and inserting multiple light sources, mirrors, and filters into the printing mechanism (fig. 9). Metzger also gained access to the University of Cambridge's mainframe computer, TITAN, to develop multiple design studies for the unrealised *Five Screens with Computer* (1965–69) using FORTRAN 66, the world's first high-level programming language (fig. 10).[41]

Conflating processes of creation and destruction, auto-destructive art in particular—in the form of *Acid Action Painting*, *Auto-destructive Monument*, *Five Screens with Computer*, and other, unrealised, proposals in which sculptural structures would gradually or spectacularly disintegrate, decay, and corrode due to processes of electrical, chemical, and mechanical breakdown—echoed the contradictions inherent in contemporary capitalist society, including the dialectical relationship between forces of domination and liberation.[42] Metzger considered these works both as "a warning and admonition" to 'remind people of the horrors which they are perpetuating … and reverse this direction",[43] and as a potentially therapeutic "socially sanctioned outlet for destructive ideas and impulses … [an] instrument of mass psychotherapy in societies where the suppression of aggressive drives is a major factor in the collapse of social balance".[44]. In 1959 Metzger listed these as including "man's power to accelerate disintegrative processes of nature", "the compulsive perfection of arms manufacture", "the immense productive capacity, the chaos of capitalism and of Soviet communism, the co-existence of surplus and starvation" and "the disintegrative effects of machinery and of life in built-up areas on the person".[45] While auto-destructive art aimed to "channel some of the aggressive drives in society into directions that promise release of tensions without the utter destructiveness of future wars", the means by which it did so were inherently creative in opening up a new order of aesthetic experience.[46]
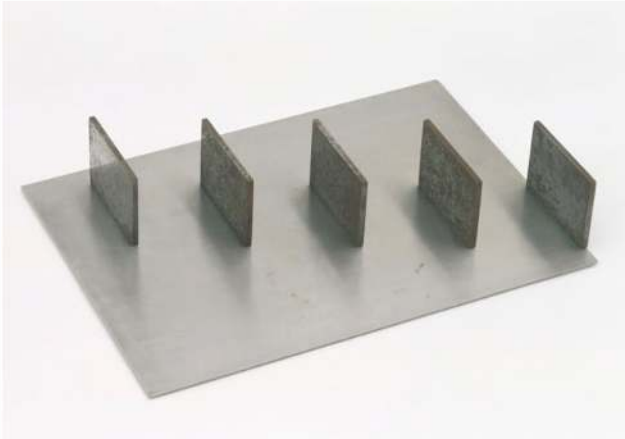
Figure 11

Gustav Metzger and Alan Sutcliffe, Model for *Five Screens with Computer*, 1969/2005, steel, 7.2 × 44.4 × 30.9 cm. Collection of Generali Foundation Collection—Permanent Loan to the Museum der Moderne Salzburg Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation / Photo: Werner Kaligofsky (all rights reserved)

Metzger explored and wrote about transformative aesthetic responses ranging from the sublime to disgust. In his final manifesto, "On Random Activity in Material/Transforming Art" (July 1964), the tone is lyrical and visionary, describing an aesthetic experience in which the random activity of materials achieves transcendent form. According to Kristine Stiles, his liquid crystal projections inspired plans for a meditation and therapy centre—an alternative form of public mass therapy—that he conceived in collaboration with the architect Cedric Price but never constructed.[47] Metzger continued to advocate for the therapeutic potential of liquid crystals, explaining in 2016, "My projections are light fountains, which constantly rejuvenate themselves. We're moved by liquid-crystal projections and fountains to go deeper into ourselves; we are stimulated and recharged. This is central to my work: the use of art to recharge the human being who can tend towards depletion or collapse".[48] By contrast, his lecture/demonstration at the Architectural Association in 1965 articulated a new and potent element of visceral precarity, of imagined, impending threat integral to aesthetic experience: during this lecture, he introduced the proposal for *Five Screens with Computer*, which involved the ejection of elements of glass, steel, or plastic from a monumental structure over a time-frame of multiple decades, their release triggered by a randomised computer algorithm (fig. 11).[49] As part of his lecture that evening, Metzger had planned a demonstration involving the dropping of a sheet of glass from height to simulate the effect of this work; in the event, having not conducted sufficient trials, he decided to withdraw it on the basis of safety concerns, but students took matters into their own hands and executed the demonstration without the artist's consent. It was perhaps the first of several allusions to Kristallnacht that Metzger would make in his career: an action that clearly recalled the physical danger and psychological trauma but also the apathy and revulsion of onlookers.

Figure 13

Gustav Metzger, *100,000 Newspapers*, still from video documentation of Gustav Metzger's performance/installation, T1+2 Gallery, London, 21–23 January 2003 Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation / T1+2 Gallery (all rights reserved)

Figure 12

Gustav Metzger, *Bag*, 1960, remade 2021 Digital image courtesy of Estate of Gustav Metzger / Gustav Metzger Foundation (all rights reserved)

In the same lecture, Metzger cited an artistic tradition from Grünewald to Artaud that echoed in his provocative vocabulary of waste, disintegration, corrosion, and disorder: from acid and rust to the trash in Bag (1960) (fig. 12); and the collapsing mess of works such as *100,000 Newspapers* (2003) (fig. 13). These works were intended to provoke "a form of catharsis in the spectator" and ultimately "lead people to a rejection of many aspects of our civilisation" through an aesthetic experience of revulsion.[50]

Wilhelm Reich, Psychoanalysis, Science, and Social Order

Perhaps surprisingly, the psychoanalyst Wilhelm Reich, author of books such as *The Mass Psychology of Fascism* (1933) and *The Sexual Revolution* (1936), whose theory of "orgonomy" and fusion of Freudian and Marxist ideas gained widespread traction within the counterculture and sexual politics movement of the 1960s, was also a common denominator in the background of both Marcuse's and Metzger's revolutionary thinking. In 1965 Metzger, who first encountered Reich's work in the late 1940s, acknowledged "the views I hold on psychology are largely determined by the work of Freud and Reich", while the political theorist Gad Horowitz has revealed the roots of Marcuse's theory of repressive desublimation in the writings of Reich and Freud.[51] In turn, Reich's non-mechanistic approach to science, which he termed "orgonomic functionalism", was rooted in dialectical materialism and his provocative psychoanalytic theories connected to a thoroughgoing critique of modern science and social structures.[52] It is in relation to Reich's attitude towards scientific research that Andrew Wilson has noted the psychoanalyst's influence on Metzger's theory of auto-destructive art as well as his interrogation of science and its place in society.[53] The same argument could be made about Marcuse.[54] Railing against the prevailing mechanistic principles of both scientific research and human society in the essay

"Orgonomic Functionalism", Reich countered "the strait-jacket of mechanistic technology into which mechanistic man has forced his character and his civilisation" with a revolutionary theory of "natural science".[55] Reich set it out in *The Sexual Revolution*: "Natural science confronts its greatest task: to assume the responsibility for the future destiny of a tortured humanity. Politics has finally been reduced to mere politicising at cross-purposes. Natural scientists, whether they like it or not, will have to guide social processes".[56]

Metzger would echo this sentiment twenty-six years later, in "Manifesto World" (1962): "the artist acts in a political framework whether he knows it or not. Whether he wants to or not".[57] In *One-Dimensional Man*, Marcuse followed Reich in identifying a relationship between "quantified" scientific culture and a bureaucratic social order; in "the inherent limit of the established science and scientific method, by virtue of which they extend, rationalize, and insure the prevailing *Lebenswelt* without altering its existential structure—that is *without envisaging a qualitatively new mode of 'seeing'*, and qualitatively new relations between men and between men and nature.[58] Again, Marcuse's use of the word "Lebenswelt", in a nod to another early teacher, Edmund Husserl, founder of phenomenology, consciously invoked a broader, sensual conception of lived experience than that of the "atomised" natural sciences that would resonate on an immediate level with Metzger's aesthetic dismantling of science, as well as his later work, which interweaves complex physical and psychological experiences.

Both Metzger and Marcuse held the scientific establishment accountable for the grotesque distortions of our relationship to nature demanded by capitalism, and this again recalls Reich.[59] According to Reich, mechanistic civilisation, built on scientific rationalism and capitalist economics was "a deviation from natural law" and he spent the last ten years of his life speaking out on ecological issues such as pollution, waste, and the nuclear industry as part of his campaign for a non-mechanistic science.[60] His stated aim was nothing short of "fighting for a new order of life" in which the liberation of humanity depended on the transformation of the social conditions of life and the creation of a "planetary community" that encompassed the appreciation and protection of ecological structures.[61]

Marcuse, likewise, envisaged "a science and technology released from their service to destruction and exploitation, and thus free for the liberating exigencies of the imagination".[62] It would require the restructuring of scientific knowledge and redefinition of values "as elements in the technological process", even asserting themselves "in the construction of scientific hypotheses—in pure scientific theory".[63] He foresaw a critical role for artists in the process: "The rationality of art, its ability to 'project' existence, to define yet unrealized possibilities could then be envisaged as validated by and functioning in the scientific-technological transformation of the world". Rather than being the handmaiden of the established apparatus, "beautifying its business and its misery, art would become a technique for destroying this business and this misery".[64]

This was in 1964. In November 1965, in an article that appeared in *Granta* shortly after his "Chemical Revolution in Art" lecture-demonstration at the University of Cambridge, Metzger declared: "Nature can be manipulated in a great variety of ways, quite different from the ones we happen to be operating with. We are now faced with the imperative need to take one of the most radical steps in history. The conscious creation of new forms of science and technology that have been cleared, to some extent, of in-built destructive elements. All available methods of information processing, methods of analysis and control and other aids will be employed in these tasks … *We shall use science to destroy science*".[65]

A New Sensibility

For Marcuse, the challenge of redefining the values of science was concomitant with the cultivation of a "new sensibility". In 1969 he argued: "In order to become vehicles of freedom, science and technology would have to change their present direction and goals; they would have to be reconstructed in accord with a new sensibility … Then one could speak of a technology of liberation, product of a scientific imagination free to project and design the forms of a human universe without exploitation and toil".[66] Marcuse's vision of social and political revolution hinged on the development of a radically new perceptual or aesthetic framework for engaging with the world, rooted in an expansive, instinctual sensuality.[67] Linking scientific and aesthetic enquiry, he spoke of "the need for such a revolution in perception, for a new sensorium". He wrote, "the senses must learn not to see things anymore in the medium of that law & order which has formed them", pointing to the "new rebels" who desire to "see, hear, feel new things in a new way" and to "dissolve the world of ordinary and orderly perception". What came out of this would be a "new sensibility", the catalyst of revolutionary change ushering in a post-capitalist reality "formed by the aesthetic sensibility of man".[68]

Metzger had been promoting this idea since at least 1962, arguing in "Manifesto World" that, in the face of overwhelming reality, humanity's survival came down to "a question of a new artistic sensibility".[69] Again, in February 1965, Metzger informed his audience at the Architectural Association that "a rapidly changing and on the whole deteriorating social situation screams out for radical, unprecedented forms of art".[70]

Like Marcuse, Metzger also imagined a new aesthetic paradigm that would draw on the most recent scientific and technological developments and help to transform scientific understanding. "Entire new technologies are being created based on a fresh approach to the malleability of materials … studies of the fundamental properties of matter. Some of the most profound forms of today are being achieved in plasma research … the shaping of materials by magnetic force, air-currents, temperature, for example, indicate new ways of comprehending and dealing with matter from which the artist cannot afford to be divorced"; it was all "potential aesthetic phenomena".[71] Equally, concepts such as quantum mechanics reflected "the extension of concepts and language, the subtlety of the philosophical structure of science", which demanded an equivalent "extension of concepts and language in the fields of art theory, history and criticism".[72] He argued that the use of "light, heat and motion" as artistic media had resulted in art forms corresponding "in their physical structure to the theories of physics", wherein "the artist stands in a new relation to nature".[73] Noting that "a restructuring of knowledge and technique is the basis for survival", Metzger sought to carve out a new role for art in this task.[74] As an advocate of interdisciplinary collaboration, he also warned of the perils of straying blindly into a "technological kindergarten": "A thinker, scientist, artist or architect who blithely accepts that which science and technology has to offer here and now without the deepest probing and most ruthless criticism of the material and ideas that he is using, is guilty of burying the world".[75]

The culmination of Metzger's aesthetic experiments came in January 1968, when he spent two weeks in a Filtration Laboratory at University College Swansea (see fig. 1). Using only the lab facilities (water jets, compressed air, heat, and access to various chemical compounds and minerals), Metzger created ephemeral, kinetic artworks through the manipulation of different materials and their transition between different states of matter. Every evening, visitors were ushered into the lab where he would choreograph a range of immersive aesthetic effects, from artificial rainbows and levitating sheets of polystyrene to drops of water evaporating on a

hotplate and liquid crystal light projections.[76] Suggestively blurring the line between aesthetic and scientific enquiry, it was as much a study of perception—an opportunity to observe the effects of kinetic art on the autonomic nervous system—as it was an attempt to push the boundaries of aesthetic experience.[77] These physical, chemical, and biological processes had, according to Metzger, revolutionary implications for "concepts of art, nature and society".[78] As Metzger strove to "mak[e] aesthetics more scientific", Marcuse predicted that "technique" or scientific method "would then tend to become art, and art would tend to form reality: the opposition between imagination and reason, higher and lower faculties, poetic and scientific thought, would be invalidated".[79] Both men imagined a new social order "under which a new sensibility and a desublimated scientific intelligence would combine in the creation of an aesthetic ethos".[80] By 1969, both Metzger and Marcuse had reached the conclusion that a new aesthetic ethos meant "the Aufhebung of art"—a dialectical term invoked by Marcuse inferring both the sublation and preservation of art, a situation in which the aesthetic realm would no longer be limited to the output of artists.[81] Marcuse speculated it would mean "the end of the segregation of the aesthetic from the real", believing the aesthetic had a key role to play in the reconstruction of society "as a work of art"—a role that would necessitate a shift in artistic methods towards a "social process of production" in which, as he put it, "art would have changed its traditional locus and function in society: it would have become a productive force in the material as well as cultural transformation. And as such a force, art would be an integral factor in shaping the quality and the "appearance" of things, in shaping the reality, the way of life".[82]

The Aufhebung of Art

For both Metzger and Marcuse, the threat of a technologically "administered", advanced industrial society capable of neutralising the critical function of art demanded a reconfiguration of forms of resistance.[83] As Marcuse explained in a short article titled "The Concept of Negation in the Dialectic" (published in 1971 but originally delivered as a paper in 1966), "the present period seems to be characterized by a stalemate of the dialectic of negativity. We face new forms of late capitalism and thus also the task of developing revised dialectical concepts adequate to these forms".[84] Caught up in the protests of May 1968 as he addressed the UNESCO conference on Marx in Paris, Marcuse called for a "change in the concept of revolution, a break with [the] continuity of the technical apparatus of productivity".[85] This "fateful link between capitalism and socialism" had, he explained, "in its very structure and scope, become an apparatus of control and domination" and the task at hand was to cut this link, "not to regress in the technical progress, but to reconstruct the technical apparatus in accordance with the needs of free men".[86] Whether or not Metzger was aware of where Marcuse was leading, he pushed further into the realms of science and technology. In addition to his regular editorial contributions to *PAGE*, "drawings" made using plotters and computers and meticulously researched articles on automata, art and technology, science and social responsibility, he began to publish iterations of his proposal for *Five Screens with Computers* in exhibition catalogues such as *Cybernetic Serendipity* (1968), *Event One* (1969), and *Tendencies 4: Zagreb 1968–69* (1970); in publications such as *Arte e Cybernetica* (1971) and *Computer Graphics* 70 (1971), and in conference proceedings such as *Memoria de la Conferencia International sobre Sistemas and Redes y Computadoras* (Mexico City, 1971).[87] He also coauthored the "Zagreb Manifesto" (delivered by Jonathan Benthall and Gordon Hyde to the International Symposium on Computers and Visual Research, Zagreb, 1969) and "Harmony" (with Jerome Ravetz, Kit Pedlar, David Dickson, Robin Clark, and Peter Harper, fellow members of the BSSRS New Science working group, September

1970).[88] This last manifesto, thoroughly Marcusean in its account of the dehumanising effects of capitalism and modern technology, its critique of inherited ways of thinking and historicisation of the concept of utopia, offers a prescient assessment of "our present comforts and their insoluble problems … achieved by a science and technology developed in the context of an alienated and fragmented conception of man and the world".[89]

Seeking unassimilated forms of resistance, Marcuse looked to the "chaotic, anarchistic … unorganized opposition" of various counterculture groups from the New Left to the sexual politics movement.[90] By their "refusal to join and play a part, the disgust at all prosperity, the compulsion to protest", and their anarchist strategies of opposition from sexual liberation to "dropping out", they represented an "irreconcilable contradiction to the existing whole".[91] In this respect, there are echoes too in the protest movement Metzger formed with other artists in 1970: a "loose organisation" called the *International Coalition for the Liquidation of Art*. He published the group's manifesto in *PAGE* in October 1970 and was instrumental in organising their only event, a demonstration at the Tate Gallery later that month.[92] Describing art as "a monopoly among many others", they claimed there was "only one solution" to the problem of the practice of art under late capitalism. "We must liquidate this crazy thing called art to make it possible for all people everywhere to be creative", the group declared and, in a nod to Metzger's manifesto for auto-destructive art, pronounced, "it is our duty as artists to become self-destructive in a constructive way".[93] In 1974 Metzger called again for the cessation of all art-related activity for a period of at least three years.[94] Echoing Marcuse's bleak assessment of art's agency within existing social structures, Metzger dismissed the activities of artists engaged in political struggle and direct social change as "necessarily of a reformist, rather than revolutionary character [that] serves to consolidate the existing order". Instead, he "dropped out" to find his own space of resistance outside of the system.[95]

Phenomenological Aesthetics

Figure 14

Gustav Metzger, *Historic Photographs To Crawl Into – Anschluss, Vienna*, March 1938 (1996), installation view from exhibition Gustav Metzger: Historic Photographs, New Museum, New York, 19 May–3 July 2011, black-and-white photograph on vinyl and cotton cover, 314.9 × 424.1 cm Digital image courtesy of Estate of Gustav Metzger / New Museum, New York / Photo: Benoit Pailley (all rights reserved)

In 1995, after an extended absence of almost twenty years, Metzger began to make his *Historic Photographs*, a series of large works dealing with the anaesthetising effects of mass media (fig. 14). During this period, as his statements from 1998 and 2015 confirm, aesthetics remained a central concern. Metzger also continued to engage with Husserl, Freud, and Reich, staying close to Marcuse's thought through them.[96] He also remained invested in Marcuse's "transcendent project" of liberation, or at least the importance of dialectics and its negative movement in creating space, as Anders Bartonek puts it, "to be critical toward existing societal conditions and to instigate radical change".[97]

Instead of seeking to instigate change from within, the institutions of knowledge production, "using science to destroy science" as his early work had, Metzger's *Historic Photographs* series engaged mass media as the visual culture of late capitalism. A brief comment in a text on Viennese actionism that he wrote in 1990 sets out his rationale: "the questioning, and the critique, of the medium of photography are among the important activities of our century … its unrestrained, unmediated use has catastrophic implications. An entire culture can be swamped by the image. And where fractions of reality are recorded and fixed, immeasurable segments are distorted and eliminated".[98]

The works in *Historic Photographs* enact the dialectical form of negative thinking, a critique performed from within the system. Each installation involved photographs depicting well-known examples of human brutality or environmental destruction, from the ramp at Auschwitz to the extension of the M3 motorway through Twyford Down, which had been reproduced and circulated worldwide by the mass media, enlarged almost beyond recognition in order to force a bodily encounter with the image. They were, however, presented behind structures that appear initially to obscure it entirely, structures that, on closer inspection, permit a tightly prescribed encounter with the image that effectively isolates and emphasises the subjective experience of the viewer: "To see the works, one has to enter into the space between the photographic image and the connecting cloth. Inevitably there will be contact between the body, the clothing and the material making up the work … At no time will it be possible to view the photograph in its entirety".[99]

The phenomenology of the exhibition space as part of a complex aesthetic experience or "felt event" had been the subject of ongoing reflection for Metzger for some time; the notion of an intimate, individual aesthetic experience was anticipated by earlier projects at Gallery House, London, where Metzger invited visitors to take a bath, or at the Heine Onstad Art Centre near Oslo, where he paid a masseur to offer free massages to visitors (both in 1972). In the early 1980s he also began to articulate what he called an "ignored, crucial complex of questions" around "how to present complex contemporary art trends in context with society, science and culture in exhibitions and museums".[100] Both lines of enquiry prefigure a turn in Metzger's

aesthetic language, informed by his enduring interest in Reich's theorisation of sensuality as an agent of change, and a broader definition of aesthetic experience that expressed itself in a growing desire to exclude the spectator and "up-end what is held to be the point of coming: which is to look".[101]

The *Historic Photographs* posit the artwork as a dynamic site where constitutive tensions within our relationship to images are experienced and negotiated phenomenologically. The complex aesthetic experience of, for example, crawling under a sheet to encounter an image of Jewish people being forced to clean the streets of Vienna while armed guards and other citizens looked on enacts dialectical experience as an ongoing process that simultaneously acknowledges the powers and limits of the artwork while pointing beyond itself (see fig. 14). By means of its presentation, the artwork achieves a form of synthesis and returns to its ontological status of thought. As Metzger explained: "the extreme is placed on view, but the activity takes place in the mind of the viewer. The suffocating horror is felt, not seen. It is strictly internalised: there is no blood on the floor".[102] Later installation works like *100,000 Newspapers*, in which thousands of newspapers spilling from dishevelled rows of metal shelving fill the space of a cold, dark basement, or *In Memoriam* (2005) (see fig. 2), which forced the viewer through a tall, tight cardboard maze, continue to engulf and activate the space of the viewer in complex kinaesthetic environments where the historical and political heft is palpable. "Here is a psychic arena", wrote Metzger, "where uncertainty and the unknown are given free range" and in which feelings of "bafflement, uncertainty, loss … stand in for a multitude of experiences perceived elsewhere".[103]

Figure 15

Gustav Metzger, Eichmann and the Angel, 2005, installation view from exhibition Act or Perish! Gustav Metzger—A Retrospective, CoCA Torun, 27 March–30 August 2015 Digital image courtesy of Estate of Gustav Metzger / CoCA Torun / Photo: Wojciech Olech

With these works, Metzger sought to activate moments of revelation, insight, and resolution through powerful physical sensations such as revulsion or intimacy: "Facing profound issues within an aesthetic context can give insights which affirm 'life enhancing' capacities".[104] His experiments in the physical spaces of exhibition and installation connect with the imagination of the viewer through multiple perceptual registers including the haptic and mnemonic. They also recall the phenomenological conception of experience that allowed Marcuse to formulate the resistant space of aesthetic experience as a transcendent (dialectical) unity of theory and

praxis.[105] At the same time, Metzger places the onus on a viewer's actions, implicating them within the dialectic. In *Eichmann and the Angel* (2005) (fig. 15), which conflates the historical biographies of Hannah Arendt, Walter Benjamin, and Adolf Eichmann, the viewer is invited to sit and read in a reconstruction of the glass booth where the Nazi war criminal—whose most disturbing attribute, according to Arendt, was his relatability, his ordinariness—sat, facing a wall of stacked newspapers. An industrial conveyor belt spews freshly discarded newspapers (presumably from the visitors who sat and read them) onto a growing pile, overseen by a reproduction of Paul Klee's *Angelus Novus* (1920) or, as Benjamin called it, his "angel of history", whose back is turned to the future. This is Metzger's admonition, which resounds among onlookers in the same way as the shattering glass at the Architectural Association on 22 February 1965 recalled another night of broken glass on 9 November 1938; the viewer must cast their newspaper on the conveyor belt and take a position in relation to the dialectics of history.

Figure 16

Gustav Metzger, *Flailing Trees*, permanent installation, Manchester, 2009 Digital image courtesy of Estate of Gustav Metzger / Photo: Tony Richards (all rights reserved)

With *Flailing Trees* (2009) (fig. 16), we return to the context in which this discussion of Metzger's dialectical aesthetics began: his environmental activism. Described as "a protest against the increasing brutalisation of the natural world", the work featured several willow trees, up-ended in concrete with their roots visible in the place of branches.[106] Enacting a violence against nature that invokes strong feelings of antipathy, aversion, and distaste associated with the aesthetics of revulsion first articulated by Metzger in 1965, it is a provocation that pales into insignificance against the vast tracts of the Amazon laid bare to industrial agriculture each day— a system that most of us blindly participate in on a daily basis. In dialectical terms, it represents a negation of the natural order and highlights the contradictions of a neoliberal capitalist world in crisis. As Metzger explained, "I'm aiming at people saying, 'My God! What a mistreatment of beautiful young willow trees!' … Trees are being mistreated all the time. Violence and trees go together".[107]

Both Metzger and Marcuse believed that the natural world contains within it a blueprint for a new social order to replace the extractive, exploitative, colonial model of capitalism.[108] Both found the means to imagine and instigate social change in the transcendent and revelatory workings of aesthetics and art. In recent years, Marcuse's notion of an aesthetics of resistance has provided a critical point of departure for contemporary discourses around art as social

practice, which continue to challenge definitions of artistic production. It has also been used as a critical framework for the rehabilitation of the aesthetic within nascent discourses around post-capitalist art practices.[109] Furthermore, Marcuse's theorisation of advanced industrial society and the groundswell of anti-establishment resistance that emerged in the 1960s has received renewed critical attention in light of more recent, intersectional forms of resistance around the world, from indigenous mobilisation and front-line community activism such as the Struggle for Life Camp or Idle No More to global protest movements including Occupy and Extinction Rebellion, with much analysis of the recent shift in global politics playing heavily on comparisons between both the focus and forms of dissent, resistance, and revolution of the late 1960s and those of the present.[110]

Metzger's work and writings reveal a sustained engagement with, and enactment of, dialectical or negative thinking as part of aesthetic experience. This in turn casts the process of sensing and sense-making as dynamic and dialogic: an ongoing negotiation that both reflects and looks beyond itself, resonating with Marcuse's ideas about aesthetics as a powerful social and cultural force. In this sense, his diverse output represents a rich resource for creative exploration in emerging fields such as new materialism, ecocritical theory, and other post-humanist philosophical discourses around the Anthropocene.[111] After sixty years of experimentation, as the quotation at the beginning attests, Metzger still regarded aesthetic experience as uncharted territory. His directive to "follow the path of ethics into aesthetics" in this time of existential crisis points to a realm of immanent potential in which heightened attunement to the practice of life itself might alert us to ecologies of aesthetic relations between ourselves, as well as other species and matter, that will enable the imagining of new ethical and equitable relations, ecological forms and futures.

About the author

Elizabeth Fisher is a curator and historian of twentieth-century art and curatorial practice. She holds a PhD in art history from the University of Cambridge and an MA in curatorial studies from the Center for Curatorial Studies at Bard College, New York. Previously curator of exhibitions and collections at Kettle's Yard, she is now a Leverhulme Early Career Research Fellow at Northumbria University. Her research looks at post-war experimental and expanded arts practice in remote, rural, and peripheral landscapes, using the lens of exile to examine the concept and practice of place. She began working with Gustav Metzger in 2012 and has continued to write, think about, and curate his work since then. She will curate the first survey of Metzger's works on paper at Norwich Castle Museum in 2025.

Footnotes

1. Gustav Metzger, "Action Mass Extinction: Statement for the Conference *Facing Extinction* at UCA Farnham, June 2014", in Gustav Metzger, *Gustav Metzger: Writings 1953–2016*, ed. Mathieu Copeland (Geneva: JRP Editions, 2019), 681.
2. From the Arab Spring (2010–12) and the Occupy Movement (2011–) to Black Lives Matter (2013–) and Extinction Rebellion (2018–).
3. See, for example, Boris Groys, "On Art Activism", *e-flux Journal* 56 (June 2014), https://www.e-flux.com/journal/56/60343/on-art-activism; and Gregory Sholette, "Merciless Aesthetic: Activist Art as the Return of Institutional Critique. A Response to Boris Groys", *Field* 4 (Spring 2016).

4. "The construction of the modern notion of the aesthetic artefact is … inseparable from the construction of the dominant ideological forms of modern class society": Terry Eagleton, *The Ideology of the Aesthetic* (Oxford: Blackwell, 1990), 3.

5. Gustav Metzger, "A Terrible Beauty", interview by Andrew Wilson, Art Monthly 222 (December 1998/January 1999): 7.

6. Gustav Metzger, "Manifesto World (Fourth Manifesto)", 7 October 1962, in *Gustav Metzger: Writings 1953–2016*, 88.

7. See "Aesthetic (n.)", *Online Etymological Dictionary*, https://www.etymonline.com/word/aesthetic.

8. Matthew Fuller and Eyal Weizman, *Investigative Aesthetics: Conflicts and Commons in the Politics of Truth* (London: Verso, 2021), 36.

9. Gustav Metzger, *Auto-destructive Art: Metzger at the AA (expanded version of a talk given at the Architectural Association on 24 Feb 1965)*, 3rd ed. (London: Bedford Press, 2015), 1.

10. Gustav Metzger, "Cardboards Selected and Arranged by G. Metzger—Auto-destructive Art (First Manifesto)", press release, 4 November 1959, in *Gustav Metzger: Writings 1953–2016*, 61.

11. Elsewhere, Metzger's work has been considered in relation to the work of Marcuse's contemporary and fellow Frankfurt School theorist, Theodor Adorno. See, for example, Anna-Verena Nosthoff, "Art After Auschwitz: Responding to an Infinite Demand: Gustav Metzger's Works as Responses to Theodor W. Adorno's 'New Categorical Imperative'", *Cultural Politics: An International Journal* 10, no. 3 (2014): 300–319, DOI:10.1215/17432197-2795693; and Johanna Malt, "On Not Saying, Not Knowing and Thinking about Nothing: Adorno, Dionysius, Derrida and the Negation of Art", *Paragraph: A Journal of Modern Critical Theory* 41, no. 2 (2018): 196–217, DOI:10.3366/para.2018.0263.

12. Gustav Metzger, interview by Clive Phillpot, 1997, *Artists' Lives* recording (British Library C466/292).

13. Gustav Metzger, "Years without Art 1977–80", in *Art into Society—Society into Art: Seven German Artists*, ed. Christos Joachimides and Norman Rosenthal (London: Institute of Contemporary Arts, 1974), 79.

14. Kristine Stiles notes that Bomberg took an overtly political position on contemporary issues, lobbying the London Group in 1937 to prohibit reactionary groups from exhibiting, to join Artists International Association and surrealist groups in supporting anti-fascism in politics and art, to grant funds for Spanish medical aid, and to give honorary membership to left-wing poets and writers. She also writes that it was Bomberg who "taught Metzger that the revolutionary formalism that had been unanimously upheld as the standard for radical art since Impressionism was insufficiently concerned with revolutionary content". Kristine Stiles, "The Destruction in Art Symposium (DIAS): The Radical Social Project of Event-Structured Live Art", PhD diss., University of California, Berkeley, 1997, 66–67.

15. Gustav Metzger, interview by Clive Phillpot, 1997, *Artists' Lives* recording (British Library C466/50/APZZ).

16. Metzger, "Cardboards Selected and Arranged by G. Metzger", 61.

17. Metzger, "Cardboards Selected and Arranged by G. Metzger", 61.

18. Auto-destructive Art seeks to be an instrument for transforming peoples' thoughts and feelings, not only about art, but it also wants to use art to change peoples' relation to themselves and society". Metzger, *Auto-destructive Art: Metzger at the AA*, 3.

19. Metzger, *Auto-destructive Art: Metzger at the AA*, 3.

20. Herbert Marcuse, *Reason and Revolution: Hegel and the Rise of Social Theory* (New York, Humanities Press, 1954).

21. Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (London: Routledge, 2007 [1964]), xlv, xlvi. Andrew Feenberg writes, "Like Heidegger the later Marcuse saw technology as more than technical, as more even than political; it is the form of modern experience itself, the principal way in which the world is revealed. For both philosophers 'technology' thus extends its reach far beyond actual devices". Andrew Feenberg, "Heidegger, Marcuse and the Philosophy of Technology", lecture, Philosophy Department, Simon Fraser University, 2004, https://www.sfu.ca/~andrewf/hm.pdf, 6.

22. Gustav Metzger, *Extremes Touch, Material/Transforming Art Coordinated by Gustav Metzger*, Arts Festival '68, Filtration Laboratory 294, Department of Chemical Engineering, University College Swansea, 22 January–4 February 1968.

23. See, for example, Gustav Metzger, "The Art Dealer: A Bibliography" (1974), in *Gustav Metzger: Writings 1953–2016*, 482–94.

24. Metzger, *Auto-destructive Art: Metzger at the AA*, 18.

25. The Congress on the Dialectics of Liberation (for the Demystification of Violence), organised by Joe Berke and colleagues at the Institute of Phenomenological Studies, Roundhouse, London, 15–30 July 1967, http://www.dialecticsofliberation.com/1967-dialectics/.

26. Nonetheless, it is not certain that Metzger even heard Marcuse's address because the Congress coincided with his trial at the Old Bailey on the charge of presenting "an indecent exhibition contrary to common law"—the charge related to a performance by Hermann Nitsch involving a lamb carcass as part of the Destruction in Art Symposium (DIAS) in September 1966. Speaking in 1997, Metzger recounted having to run back and forth from the Roundhouse to the Old Bailey between court appearances. Gustav Metzger, interview by Clive Phillpot, *Artists' Lives* recording (British Library C466/50/BSZZ). On the Dialectics of Liberation website, however, Metzger is recorded as saying he "saw something of Marcuse", acknowledging that he "would have seen him in the afternoon" and that "There was no question that he was the power behind the event. And everyone recognised that including myself". Gustav Metzger, "Memories of the Congress", Congress on the Dialectics of Liberation, http://www.dialecticsofliberation.com/1967-dialectics/memories/.

27. Titled *Treasures of East Anglian Churches*, the exhibition brought together religious relics from across the region that had been defaced by zealous protestants during the English Reformation of the sixteenth century, drawing attention to the aesthetic and symbolic power of the image even in the mutilated form of damaged icons.

28. Swapping a nylon fabric for the traditional canvas and hydrochloric acid for paint, he sprayed and splashed acid onto the nylon support, which began to dissolve instantly. "Auto-destructive art" was intended to embody and critique society's self-destructive impulses. At the same time, his second manifesto, composed in March 1960, began with the words "Man in Regent Street is auto-destructive. Rockets, nuclear weapons are auto-destructive. Auto-destructive art". In 1961 he turned the act of painting into a performance on London's South Bank. Metzger, dressed in protective gas mask, gloves, and goggles, applied acid in sweeping arcs to three large (7 foot × 12 foot 6 inch) screens as a handout containing his first three manifestos was distributed to bemused onlookers. Explicitly framed as a political gesture, the performance neatly subverted the heroic posturing of abstract expressionism—the artistic

movement co-opted by the American government as political (capitalist) propaganda in the Cold War.

29. The declared purpose of the Congress on the Dialectics of Liberation, which took place at the Roundhouse, London, in July 1976 was "to demystify human violence in all its forms, the social systems from which it emanates, and to explore new forms of action". "Creation, Destruction and Chemical Change" took place at Ravensbourne College, London, in May 1966, and DIAS involved a three-day conference on 9–11 September 1966, and a month-long programme of art events, performances, happenings, and readings in venues across London, organised by Metzger with the poet John Sharkey. See "Destruction in Art Symposium", Wikipedia, https://en.wikipedia.org/wiki/Destruction_in_Art_Symposium.

30. Marcuse, *One-Dimensional Man*, 7.

31. Herbert Marcuse, *An Essay on Liberation*, transcribed by Alejandro Thamm (Boston: Beacon Press, 1969), 54, https://www.marxists.org/reference/archive/marcuse/works/1969/essay-liberation.htm; see also "Aggressiveness in Advanced Industrial Society", in *Negotiations: Essays in Critical Theory* (Boston: Beacon Press, 1969), 187–202.

32. See Paul Bishop, "Dialectic of Destruction and Creation in the German Tradition: A Jungian Perspective on Goethe, Rilke & Nietzsche", *Jung Journal: Culture and Psyche* 5, no. 4 (Fall 2011): 64; and Ayon Maharaj, *The Dialectics of Aesthetic Agency: Revaluating German Aesthetics from Kant to Adorno* (London: Bloomsbury, 2013).

33. Gustav Metzger, "Automata in History", [part 1], *Studio International*, 177, no. 909 (March 1969); part 2, 178, no. 915 (October 1969), 109–17.

34. Metzger, *Artists' Lives* recording (C466/292).

35. Douglas Kellner, *Herbert Marcuse and the Crisis of Marxism* (London: Macmillan, 1984), 320.

36. Marcuse, *An Essay on Liberation*, 23.

37. Marcuse, *One-Dimensional Man*, 66.

38. Conversation with the author, February 2014.

39. *Model for an Auto-destructive Monument* (1960) was developed with the help of Mr E. Ll. Evans, who worked in the corrosion of metals research group at the National Chemical Laboratory. Metzger developed a technique for manipulating liquid crystals with the help of the Cambridge-based protein chemist and immunologist, Arnold Feinstein. It was trialled for the first time (unsuccessfully) at the "Chemical Revolution in Art" lecture in Cambridge in 1965 and realised a few weeks later in an installation at Better Books, London.

40. Houedard recorded his responses to Metzger's light projections during a demonstration at the symposium "Creation, Destruction and Chemical Change" at Ravensbourne College, London, in May 1966. See Elizabeth Fisher, "Gustav Metzger: Iconoclasm and Interdisciplinarity", *Interdisciplinary Science Reviews: The Experimental Generation—Networks of Interdisciplinary Praxis in British Art, 1950–70* 42, nos. 1–2 (2017): 15–17, DOI:10.1080/03080188.2017.1297165. Metzger developed a series of light projections for a concert with Cream and The Who at the Roundhouse on New Year's Eve, 1968.

41. The plotter drawings were produced with the help of artist Heather Peri and D. E. Evans of the Computer Unit, Imperial College, London. *Five Screens with Computers* was developed in collaboration with Beverley Rowe, then Head of Applications at the University of London Computing Centre, and with the support of Richard J. Stibbs and Anthony W. Nutbourne, students in the Mathematics Department and Centre for Land Use and Built Form Studies at the University of Cambridge.

42. "Auto-destructive art contains the contradictions of our situation. It is an instrument for probing the consciousness of masses of people on issues of peace and war". Gustav Metzger, "Gustav Metzger", in "Auto-destructive Art", special issue, *Art and Artists* 1, no. 5 (August 1966): 22.

43. Metzger, *Auto-destructive Art: Metzger at the AA*, 18.

44. Gustav Metzger, "Machine, Auto-creative and Auto-destructive Art", *ARK: Journal of the Royal College of Art* 32 (Summer 1962): 8

45. Gustav Metzger, "Auto-destructive Art (First Manifesto)", in *Gustav Metzger: Writings 1953–2016*, 63. In 1962 he went further, explaining: "Auto-destructive art emerges from the chaotic, obscene present. The world's annual military expenditure is over £40,000 million. For each individual on earth there is a stockpile of 500 tons of TNT. In four years' time this stockpile will increase to 1,000. Eichmanland was a fairytale playground compared with this. Auto-destructive art is conceived as a desperate last-minute subversive political weapon used by artists. It is an attack on the capitalist system and the production of war materials. It is committed to nuclear disarmament and people's struggles against war. It is an attack also on art dealers and collectors who manipulate modern art for profit". Metzger, "Machine, Auto-creative and Auto-destructive Art", 8.

46. Gustav Metzger, "The Chemical Revolution in Art", published as "Auto-destructive Art", *Granta* 71, no. 12457 (6 November 1965).

47. Stiles, "The Destruction in Art Symposium", 125.

48. Gustav Metzger, "Gustav Metzger: Influences", *Frieze* 178, 19 March 2016, reposted 2 March 2017, https://www.frieze.com/article/gustav-metzger-influences.

49. According to Metzger, "This sculpture consists of five walls or screens, each about 30 feet in height and forty feet long and two feet deep. They are arranged about twenty-five feet apart and staggered in plan. I envisage these in a central area between a group of three very large, densely populated blocks of flats in a country setting. Each wall is composed of 10,000 uniform elements. These could be made of stainless steel, glass or plastics … The principle of the action of this work is that each element is ejected until finally after a period of ten years the walls cease to exist. I propose the use of a digital computer that will control the movement of this work". Metzger, *Auto-destructive Art: Metzger at the AA*, 19.

50. Metzger, *Auto-destructive Art: Metzger at the AA*, 18.

51. Metzger, Auto-destructive Art: Metzger at the AA, 6; see also Gad Horowitz, *Repression: Basic and Surplus Repression in Psychoanalytic Theory: Freud, Reich and Marcuse* (Toronto: University of Toronto Press, 1977), 78. Note also that Marcuse devoted an entire book to the study of Freud: *Eros and Civilisation: A Philosophical Inquiry into Freud* (Boston: Beacon Press, 1955). Building (and, according to many commentators, improving) on Reich's work, Marcuse's book synthesised psychoanalytic theory and Marxism.

52. See Philip W. Bennett, "Wilhelm Reich's Early Writings on Work Democracy: A Theoretical Basis for Challenging Fascism Then and Now", *Capitalism Nature Socialism* 21, no. 1 (2010): 68, DOI:10.1080/10455751003655898; and James Strick, "Wilhelm Reich: Bion Experiments", contribution to the Orgonomy Conference, "Wilhelm Reich's Bion Experiments: An Unusual Origin of Life Research Program, 1934–1939", 9 November 2019, New York, https://www.psychorgone.com/history/wilhelm-reichs-bion-experiments-an-unusual-origin-of-life-research-program, note 4.

53. Andrew Wilson, "Gustav Metzger: A Thinking against Thinking", in *Gustav Metzger: Retrospectives*, ed. Ian Cole (Oxford: Museum of Modern Art, 1999), 75.

54. In his article, Bennett sets out various links between Reich and Marcuse in terms of left-wing politics.

55. Willhelm Reich, "Orgonomic Functionalism", in *Selected Writing, An Introduction to Orgonomy* (New York: Farrar, Straus and Giroux, 1986 [1960]), 278–79.

56. Willhelm Reich, *The Sexual Revolution: Towards a Self-Regulating Character Structure* (New York: Farrar, Straus and Giroux, 1974), xix.

57. Metzger, "Manifesto World (Fourth Manifesto)", 88.

58. Marcuse, *One-Dimensional Man*, 169; emphasis original.

59. For a discussion of Marcuse's environmental concerns, see, for example, Charles Reitz, *Ecology and Revolution: Herbert Marcuse and the Challenge of a New World System Today* (London: Routledge, 2018); Richard Kahn, "The Educative Potential of Ecological Militancy in an Age of Big Oil: Towards a Marcusean Ecopedagogy", *Policy Futures in Education* 4, no. 1 (2006): 31–44. DOI:10.2304/pfie.2006.4.1.31; and Andrew Light, "Marcuse's Deep-Social Ecology and the Future of Utopian Environmentalism", in *Herbert Marcuse: A Critical Reader*, ed. John Abromeit and W. Mark Cobb (London: Routledge, 2014), 227–35.

60. "*Nature is inexact. Nature operates not mechanically, but functionally.* Hence the mechanist always misses nature when he applies it to his mechanistic principles. There is a lawful harmony in natural functions, which permeates and rules all being. But this harmony and lawfulness is not the strait-jacket of mechanistic technology into which mechanistic man has forced his character and his civilisation. Mechanistic civilisation is a *deviation from natural law*". Reich, "Orgonomic Functionalism", 278–79; emphasis original.

61. Reich, *The Sexual Revolution*, xix.

62. Marcuse, *An Essay on Liberation*, 26.

63. Marcuse, *One-Dimensional Man*, 236.

64. Marcuse, *One-Dimensional Man*, 244.

65. Metzger, "The Chemical Revolution in Art"; emphasis original. In 1966 he elaborated: "only a most thorough restructuring of transmitted knowledge and skills can lead to an effective safeguarding of our future … the analysis of history from new standpoints … the restructuring of institutions and methods of manipulating matter … the *scientific study of science* is in fact *the most important* scientific activity now in progress … We no longer see the development of science and technology as something determined, but as the interaction of numerous events and conditions. Science is the invention of man and could have been—has been—invented in many different forms! We are in a position to foresee the invention of numerous forms of science and technology. It is the decision as to which attitudes and premises these forms of science and technology are based upon that will determine the future of man. We are a new breed of barbarians, but we are very unlike barbarians of the past. The new barbarians will work with all the paraphernalia of the present. We will have in our caves all sorts of electronic toys like computers, access on tape and microfilm to a vast range of knowledge. Our task? The demolition of the framework which created the toys! The revolution which matters to our time will not take place at the point of a gun, but in the laboratories of dedicated, fanatical destroyers of ideas and values who, in order to save time, have managed to appropriate some of the tools of the oppressors in order to turn them against themselves". Gustav Metzger, "An Overwhelming Concern with Shelter!" *Peace News*, 2 September 1966, 5–6.

66. Marcuse, *An Essay on Liberation*, 19.

67. "The revolution must be at the same time a revolution in perception which will accompany the material and intellectual reconstruction of society, creating a new aesthetic environment". Marcuse, *An Essay on Liberation*, 30.

68. Marcuse, *An Essay on Liberation*, 26. See also Douglas Kellner, "Radical Politics, Marcuse and the New Left", in *The New Left and the 1960s: Collected Papers of Herbert Marcuse*, vol. 3, ed. Douglas Kellner (London: Routledge, 2004), 14.

69. Metzger, "Manifesto World (Fourth Manifesto)", 88.

70. Metzger, *Auto-destructive Art: Metzger at the AA*, 3.

71. Metzger, "Gustav Metzger", 22; and Metzger, *Auto-destructive Art: Metzger at the AA*, 16.

72. Metzger, *Auto-destructive Art: Metzger at the AA*, 24.

73. Metzger, *Auto-destructive Art: Metzger at the AA*, 23–24, 27.

74. Metzger, "Automata in History", [part 1], 108.

75. Gustav Metzger, "The Possibility of Auto-destructive Architecture", *Clip-Kit: Studies in Environmental Design 2* (1966), reproduced in *Gustav Metzger: Writings 1953–2016*, 139–42. Metzger used the term "technological kindergarten" in "Automata in History", [part 1], 107: "while more and more scientists are investigating the threats that science and technology pose to society, artists are being led into a *technological kindergarten* the idea being that the artist can amuse himself and some of the populace with the gadgetry of modern life" (emphasis original).

76. No documentation exists of these works. At the behest of John Latham, Metzger wrote detailed descriptions of a number of the techniques used in Swansea some months after the event itself. These notes were subsequently published in Mathieu Copeland, *Gustav Metzger: Auto-creative Art* (Lyon: Les Presses du reel, 2013).

77. "It is the counterpoint, feedback, and accumulation of process, temperature, time and tension in the autonomic nervous system <u>that is opposed to or contradicts</u> or is off-balance with the timing, rhythm, tempo, tension, relaxation and character of the observed work (and here we can also refer to music and dance) which leads to a heightening, a stretching, of complexity to new depths of sensation and experience—including aesthetic, intellectual and other factors—that have as it were been forced through the wave-like (?) [sic] contradictions". Metzger, *Auto-destructive Art: Metzger at the AA*, 25–26; emphasis original.

78. Gustav Metzger, "On Random Activity in Material/Transforming Art (Fifth Manifesto)", 30 July 1964, in *Gustav Metzger: Writings 1953–2016*, 97.

79. Metzger, *Auto-destructive Art: Metzger at the AA*, 25; Marcuse, An Essay on Liberation, 22.

80. Marcuse, *An Essay on Liberation*, 22.

81. Marcuse, *An Essay on Liberation*, 27. "Aufheben/aufhebung" is a term coined by Hegel, whose dialectical method is the basis of Marcuse's own concept of "negative dialectics". The word has various seemingly contradictory meanings, including to lift up; to abolish, cancel or suspend; or to sublate. The term has also been defined as "abolish", "preserve", and "transcend". See "Aufheben", Wikipedia, https://en.wikipedia.org/wiki/Aufheben.

82. Marcuse, *An Essay on Liberation*, 27–32.

83. According to Marcuse, "when technics becomes the universal form of material production, it circumscribes an entire culture; it projects a historical totality—a world". Marcuse, *One-Dimensional Man*, 154.

84. Herbert Marcuse, "The Concept of Negation in the Dialectic", *Telos* (Summer 1971): 130, https://fadingtheaesthetic.files.wordpress.com/2014/06/telos-summer-1971-p-130-32.pdf. Marcuse was not alone; Adorno published *Negative Dialectics* in 1966. The book's

paradoxical title neatly summarised Adorno's project to "emancipate" dialectics from the positive "thought-means of the negation" and set itself squarely "against tradition" in order to open new dialectical possibilities. Theodor W. Adorno, *Negative Dialectics* (London: Routledge, 1990), xix.

85. Herbert Marcuse, "Re-examination of the Concept of Revolution", in *All We Are Saying: The Philosophy of the New Left*, ed. Arthur Lothstein (New York: Capricorn Books, 1970), 280.

86. All quotations from Marcuse, "Re-examination of the Concept of Revolution".

87. See, for example, Metzger, "Automata in History", parts [1] and 2; "Notes on the Crisis in Technological Art", leaflet circulated to members of the Computer Arts Society at the Post-Mortem on *Event One*, British Computer Society, London, 3 April 1969; "Social Responsibility and the Computer Professional: The Rise of an Idea in America", *PAGE 11: Bulletin of the Computer Arts Society* (October 1970); "New Ideas in Plotter Design Construction and Output", in *Computer Graphics 70: International Symposium: Sessions and Papers* (London: Plenum Press, 1970).

88. See Gustave Metzger, with Gordon Hyde and Jonathan Benthall, "Zagreb Manifesto" (1969), in Gustav Metzger: Writings 1953–2016, 268–69; and Gustave Metzger et al., "Harmony" (1970), in Gustav Metzger: Writings 1953–2016, 361–64.

89. Gustav Metzger et al., "Harmony", 361.

90. Marcuse, *One-Dimensional Man*, 243–44.

91. Marcuse, "The Concept of Negation in the Dialectic", 131–32.

92. Excerpts from a recording of this event were transcribed and published in Felipe Ehrenberg, "Date with Fate at the Tate", *Studio International* 180, no. 931 (March 1971): 92–93, republished 8 August 2013, https://www.studiointernational.com/index.php/date-with-fate.

93. Gustav Metzger, "The Art World Erupts: International Coalition for the Liquidation of Art", *PAGE 11: Bulletin of the Computer Arts Society* (October 1970): 6.

94. Metzger, "Years without Art 1977–80", 79.

95. Metzger, "Years without Art 1977–80".

96. For a discussion of Marcuse's "phenomenological Marxism", see Andrew Feenberg, "Marcuse: Reason, Utopia, Imagination", *Radical Philosophy Review* 21, no. 2 (2018): 271–98, DOI:10.5840/radphilrev201891190.

97. Anders Bartonek, "Herbert Marcuse: No Dialectics, No Critique", in *Hegelian Marxism: The Uses of Hegel's Philosophy in Marxist Theory from Georg Lukács to Slavoj Žižek*, ed. Anders Burman and Anders Bartonek (Huddinge: Södertörns högskola, 2018), 85.

98. Gustav Metzger, "Wiener Aktionismus 1960–74", leaflet for the exhibition *Wiener Aktionismus 1960–74*, Studio Oggetto, Milan, 1990.

99. Note sent to the curators of the exhibition Life/Live, Musée d'Art moderne de la Ville de Paris, 5 October 1996–5 January 1997, in *Gustav Metzger: Writings 1953–2016*, 577–83.

100. See "Passiv/Explosiv Proposal for an Exhibition 1981", in *Gustav Metzger: Writings 1953–2016*, 511–13.

101. Gustav Metzger, "Outline for a Retrospective (1959–74)", unpublished manuscript, July 1993, reproduced in *Gustav Metzger: Writings 1953–2016*, 570.

102. Gustav Metzger, "Killing Fields", in *Gustav Metzger: Writings 1953–2016*, 625.

103. Metzger, "Killing Fields", 623–24.

104. Metzger, "Killing Fields", 624.

105. See Herbert Marcuse, *The Aesthetic Dimension: Towards a Critique of Marxist Aesthetics* (Boston: Beacon Press, 1978), 71–73. Marcuse's early teacher Edmund Husserl was the

founder of phenomenology.

106. Originally commissioned by Manchester International Festival. See Gustav Metzger, "Flailing Trees", Manchester International Festival, https://mif.co.uk/whats-on/flailing-trees/.

107. Gustav Metzger is quoted at "Semi Mature Trees and Specialist planting for the Professional", Specimen Trees, http://www.specimentrees.net/projects/special.html.

108. Nature was a key concern throughout Metzger's life; it prompted him to become vegetarian and to join the Soil Association in the 1940s and provided the basis of his initial exploration of scientific phenomena. It was the focus of works both realised (i.e. *Mobbile*, 1970; *Reduce Art Flights*, 2007) and unrealised (*Karba and Stockholm June*, both 1972; *Earth Minus Environment*, 1992) as well as lectures and papers from 1992 onwards.

109. See, for example, James McMahon, "Aesthetics, Technology and Democracy: An Analysis of Marcuse's Concept of the New Sensibility", in "Critical Refusals", part 1, special issue, *Radical Philosophy Review* 16, no. 1 (2013): 141–57, DOI:10.5840/radphilrev201316115; Stephen Pritchard, "Herbert Marcuse and Acts of Resistance—Culture, (Anti)Aesthetics, Activism and Social Practice", https://www.academia.edu/28505161/Herbert_Marcuse_and_Acts_of_Resistance_Culture_anti_Aesthetics_Act and Jaeho Kang, "The Aesthetics of Radical Sensibility: Art and Politics in Marcuse's Later Writings", in "Dossiê Herbert Marcuse", part 1, special issue, *Dissonância: Revista de Teoria Crítica* 2, no. 1.1: 85–113. Commentators such as Pritchard suggestively court the notion of aesthetic experience as emancipatory, while others attempt to define aesthetic practice in terms of collective creativity (McKee); as "healing" practices focused on the body or group experiments with expression and imagination (Holmes); or as "training in the practice of freedom" (Husain). See Stephen Pritchard, "Art & Life? Culture, (Anti)Aesthetics, Anti-art, Activism & Social Practice", *Colouring in Culture*, 1 May 2016, https://colouringinculture.org/blog/art-life-culture-antiaesthetics-anti-art-activism-social-practice/; Yates McKee, Strike Art: Contemporary Art and the Post-Occupy Condition (London: Verso 2016), 156; Brian Holmes, "Art After Capitalism", in *It's the Political Economy, Stupid*, ed. Gregory Sholette and Oliver Ressler (London: Pluto Press, 2013), 169; and Amin Husain, "In Conversation with Emily Bellor", 29 July 2016, https://c4aa.org/2016/07/amin-husain.

110. See, for example, Ron Aronson, "Marcuse Today", *Boston Review*, 15 November 2014, http://bostonreview.net/books-ideas/ronald-aronson-herbert-marcuse-one-dimensional-man-today; Andrew Lamas, Todd Wolfson, and Peter N. Funke, eds., *The Great Refusal: Herbert Marcuse and Contemporary Social Movements* (Philadelphia: Temple University Press, 2017); Ronald Brownstein, "The Rage Unifying Boomers and Gen Z", *The Atlantic*, 18 June 2020, https://www.theatlantic.com/politics/archive/2020/06/todays-protest-movements-are-as-big-as-the-1960s/613207/; and Ronald Mendel, "The Occupy Wall Street Movement in the American Radical Tradition", *USAbroad: Journal of American History and Politics* 3, no. 1 (2020): 3–69, DOI:10.6092/issn.2611-2752/9869. Like today's protest movements, which address a broad set of social concerns from anti-austerity and pro-democracy to migrant solidarity, climate change, corporate responsibility, and gender and race issues, the protest groups that coalesced in the 1960s fought causes from civil rights to the Vietnam War and environmentalism; see Esther Addley, "From Local Protests to a Global Howl of Protest", *The Guardian*, 18 October 2011, https://www.theguardian.com/world/2011/oct/17/occupy-movement-global-protest. Recent protest movements have also deployed similarly decentralised, inclusive models of direct action and civil disobedience. The Occupy

movement represents a new form of globally networked, localised protest which manifests public dissent on issues as diverse as anti-austerity to Black Lives Matter in the form of the occupation of public and private space; Extinction Rebellion describe themselves as organised "in small, autonomous groups distributed around the world … connected in a complex web that is constantly evolving … working to build a movement that is participatory, decentralised, and inclusive". See Extinction Rebellion, "Our Principles and Values", https://volunteer.extinctionrebellion.uk/about_xr.

111. See, for example, Natalie Loveless, *How to Make Art at the End of the World: A Manifesto for Research-Creation* (Durham, NC: Duke University Press, 2019); Malcolm Miles, "Eco-aesthetic Dimensions: Herbert Marcuse, Ecology and Art", *Cogent Arts & Humanities* 3, no. 1 (2016), DOI:10.1080/23311983.2016.1160640; Katve-Kaisa Kontturi, Milla Tiainen, and Adrian Mróz, eds., *New Materialism: The Mattering of the Arts, Crafts, and Aesthetics: Polish Journal of Aesthetics* 57 (February 2020), https://pjaesthetics.uj.edu.pl/documents/138618288/146139876/pja-57-new-materialism-2-2.pdf/08150d83-c333-4892-9a44-213399552b00; Ali Lara et al., "Affect and Subjectivity", *Subjectivity* 10, no. 1 (24 April 2017): 30–43, DOI:10.1057/s41286-016-0020-8; and T. J. Demos, "Contemporary Art and the Politics of Ecology", *Third Text* 27, no. 1 (2013): 1–9, DOI:10.1080/09528822.2013.753187.

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