**Appetite for destruction: Günther Anders and the metabolism of nuclear techno-politics**

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**Abstract**  
It is well recognized how the modern social sciences, particularly in the US, fed off and contributed to a nuclear state associated with the military-industrial complex. It is less known that the thermonuclear revolution also constituted a productive moment for critical theories of (nuclear) techno-politics. In this article, we recover a strand of the latter by focusing on Günther Anders (1902–1992), a German philosopher of technology for whom thermonuclear weapons symbolized the self-destructive capacity embedded in a disenchanted modernity. We stress the techno-political dimensions of Anders’ philosophy by approaching it through his concept and metaphor of metabolism. Anders sought to update Marxist thinking to the age of technology to re-awaken his readers to the realities and power dynamics of the nuclear condition and the ways in which these were consistently obscured. He pondered the grotesque human ability to live with a monstrous and suicidal weapon, while highlighting on the dynamics of extraction and consumption that characterized both modern ‘mass’ society and nuclear techno-politics. Anders’ quest for emancipation focused on a nurturing of the imagination of modern human beings. We stress the critical, global, and activist orientation of his analysis and discuss its shortcomings, merits and contemporary relevance.

**Keywords**  
Nuclear weapons, modernity, technology, metabolism, imagination

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Introduction

In the decades immediately following World War II, renewed economic growth, unrelenting technological development, an expanding consumer culture and social acceleration characterized the West as it became embroiled in an increasingly grave superpower conflict. The modern social sciences, particularly in the US, also received a boost during the early Cold War as they were increasingly funded by, embedded in or otherwise oriented towards the agendas of the military-industrial complex. But, as recent scholarship has demonstrated, the nuclear revolution – particularly its second phase inaugurated in the early to mid-1950s with the invention of thermonuclear weapons – also gave rise to critical revisions of old mind-sets as well as new forms of international theory.1 Marxism was no exception; yet so far few interdisciplinary efforts devoted to the analysis of nuclear politics have paid much attention to post- or neo-Marxist ideas.2 Some scholars have traced the legacy of Critical Theory in relation to nuclear weapons, but hitherto they have mainly drawn on thinkers, who – like Theodor Adorno, Hannah Arendt and Herbert Marcuse – referred to nuclear weapons as exemplary illustrations of modernity but rarely subjected this technology to sustained analysis.3

In this article, we revisit and recover the ideas of the German philosopher Günther Anders (1902-1992), whose work arguably constitutes the most outspoken attempt to come to grips with the nuclear revolution from a Marxist perspective. The nuclear revolution is a central reference point in Anders’ analysis of a disenchanted modernity. Indeed, if techno-politics seeks to capture the myriad forms of political power exercised and enacted through the ideas, artefacts and practices that make up modern technology (or Technics) (Hecht 2011; 2012: 14-15), few can sport a more original analysis of nuclear techno-politics than Anders. His ideas have, however, received far less attention than they deserve.4 Anders’ work merits reflection, because he skilfully scrutinized the social and military import of the nuclear revolution, pondered the grotesque human ability to live with a monstrous and all-destructive weapon and provided a complex and shrewd account of the human condition in the nuclear age. Nuclear weapons lay at the heart of Anders’ intellectual project, yet the relevance of his theorizing extends beyond the parameters of nuclear politics. Indeed, Anders considers the nuclear condition as part of a wider social fabric that, in our times, includes questions of environmental degradation and challenges of the Anthropocene. In its combination of range and insight lays an important intellectual legacy as well as a challenge for current critical scholarship.
The concept and metaphor of metabolism, we argue, helps illuminate the technopolitical character of Anders’ analysis of the nuclear condition. Anders offers an understanding of metabolism as a technologically mediated relation at the heart of modernity’s compulsive gluttonizing of resources and human beings during the twentieth century. Technological progress turned the entire world into a resource to be extracted for consumption, and nowhere was this appetite for (self-)destruction more poignantly expressed than in the nuclear revolution. Nuclear weapons technology symbolized an almost unbridgeable rift between humans and the world, a rift that was opened up by technological progress and could only be countered through the cultivation of the human imagination – a project he actively sought to support through his distinct philosophy of exaggeration.

We begin by briefly introducing Anders’ biography, which provides an important context for situating his thought in the larger body of Critical Theory and post-Marxist theorizing during the mid-twentieth century. We argue that Anders’ central focus on nuclear weapons was shaped by his personal experiences, in particular his stay in the US as German émigré and his brief visit to Japan as anti-nuclear activist. We then turn to examine Anders’ theoretical ambitions by zooming in on the notion of metabolism – a concept and a metaphor through which we can detect the influence of both Karl Marx and Martin Heidegger upon his writings. We go on to illustrate how the metabolic dynamics Anders identified in everyday technologies of mass consumption undergirded his view of nuclear weapons and mass destruction. A discussion of Anders’ philosophy of exaggeration as an attempt to lay out and temper the human appetite for destruction is followed by a brief conclusion that discusses the contemporary relevance of Anders’ ideas.

**Günther Anders, modernity and technology**

Günther Anders was born as Günther Stern in the Silesian city of Breslau (now Wrocław in Poland) in 1902 and died in Vienna at the age of 90. It is impossible to capture Anders’ life in all its rich biographic detail here. The period stretching from the late-1920s to mid-1960s is decisive, however, for understanding his analysis of nuclear techno-politics. Following studies in philosophy and the history of art at the universities of Hamburg and Freiburg under Ernst Cassirer, Edmund Husserl and Martin Heidegger, amongst others, the young Stern published works of philosophical anthropology before taking up journalism in Berlin. It was during this time that Stern – newly wedded to Hannah Arendt, a fellow student of Heidegger’s – supposedly changed his named to Anders in response to the remark of an editor that he had to have a different name (‘etwas anders’).

In 1933, following the Nazi usurpation of power in Germany, Anders fled via Paris to the US. During his short spell in Paris he enjoyed the company of his cousin
Walter Benjamin and was exposed to the work of the young Marx and especially Hegel through Kojève’s influential Paris seminars on the dialectic between master and servant – a dialectic Anders would later reformulate as one between human and machine (Anders, 1980: 74). Although he here found an audience for his philosophical investigations into the nature of human being, Anders’ brief period in Paris was a difficult one personally as well as intellectually: his marriage to Hannah Arendt ended and he could not find a publisher for his anti-fascist fable Die molussische Katakombe, which the only French publisher of German literature considered too far removed from official Marxist doctrine – a remark which led Anders to ask, with characteristic sarcasm, whether the editor really found the official communist party line worthy of philosophizing (Anders, 2011 [1979]: 303).

After arriving in the US in 1936, Anders spent fourteen years divided between both the East and West coast, working in such different places as the Office of War Information, The New School for Social Research in New York and a Hollywood costume factory. He had regular contact with other émigré intellectuals in the US, including Bertolt Brecht and several theorists associated with the Frankfurt School of Critical Theory (he briefly lived with the Marcuse family during the early 1940s). The American way of life was to make a significant impression on Anders; it gave him first-hand experience of the symbol of modernity and progress that the US would become during the Cold War, in large part due to technological innovations that reshaped not only the everyday experiences of human beings – in the home, the work place and through mass media – but also the face of power in political and military affairs (Anders, 1980: 93, n.1; Dries, 2009: 14). A cognizant observer – unsurprisingly, perhaps, given his training in phenomenology – Anders relentlessly reflected on such experiences; diary entries from the early 1940s, for example, strike chords that were later to enter his philosophical writings, including observations on social acceleration, mass consumption and entertainment. Similarly, Anders’ early interest in philosophical anthropology – centred on the relation between the modern human being and the world – were echoed in his rumination on the costume as reproduction technology and its implications for ‘reality’. These persistent practices of observation and reflection also included early formulations of “Promethean shame” (a central category in Anders’ later thinking on technology) and musings on the place of sport and entertainment in the modern world (Anders, 2006: 72). Indeed, Anders later conceded that without his Hollywood job he would have been unable to formulate his philosophy of technology.

By the time Anders and his second wife, Elizabeth Freundlich, left the US for Vienna in 1950, the contours of an American mass society sustained by continued post-war economic growth and technological development were beginning to emerge. The US was in the midst of the ‘post-World War II business cycle (1948-1953)’ that brought nearly full employment and led, despite a mild recession in the early 1960s, to the ‘longest economic expansion on record’ (US Department of Labor, 2006: 21, 31). This
society – the consumer’s republic as it has been termed by a prominent US historian (Cohen, 2003) – became the central reference point in 1950s sociological analyses of \textit{The Lonely Crowd} (Riesman, 1950), \textit{The People of Plenty} (Potter, 1954), \textit{The Sane Society} (Fromm, 1956) and \textit{The Affluent Society} (Galbraith, 1958). Several scholars associated with the Frankfurt School were pre-occupied with similar themes – consider, for example, Adorno and Horkheimer’s analysis of ‘The Culture Industry’ in \textit{Dialectics of Enlightenment}, an analysis that was subtitled ‘Enlightenment as Mass Deception’.

Anders never became more than a fringe member of these circles (Dries, 2009: 14), but his concerns were quite close to the agenda of the Critical Theorists. He was highly attuned to the antinomies and contradictions in the constitution of modern society, but what makes his work so interesting for contemporary efforts to grasp the nuclear condition is the central place he accords to technology, and in particular to weapons technology, as a prism through which to understand wider societal shifts. Moreover, and unlike many of the Critical Theorists who took up central positions at universities, Anders’ intellectual work developed in tandem with his political activism. Two years after he published the first volume of \textit{Die Antiquiertheit des Menschen} he travelled to Japan to visit Hiroshima and to participate in the Fourth World Conference against A- and H-Bombs and for Disarmament. The visit allowed him to examine from up close the condition of ‘post-atomic humanity’ (Anders, 1982 [1958]: 4) and gave him the opportunity to sharpen and apply ideas first formulated in the first volume of \textit{Die Antiquiertheit des Menschen} – most notably, perhaps, his insistence on the need for a new moral codex for the nuclear age (Anders, 2011 [1979]: 55, 59; see also Anders, 1956a: 298). At the same time, his Japanese experiences were channelled back into his philosophical framework, which he continued to develop over the ensuing years (Anders, 1980: 436n.1). Hiroshima’s reconstruction, for instance, helped Anders sharpen his thinking on the human condition in contemporary mass societies, where reality is often not what it seems. Indeed, the ‘destruction of the destruction’ created a ‘false reality’ \textit{[Selbstfälschung]}, which made it impossible to conceive of the horrors that had taken place there and hence signified less a restoration than ‘the culmination of destruction’ (Anders, 1982 [1958]: 62).

For Anders, the narrowness of vision that fostered and continued to surround nuclear weapons was a particular intense manifestation of a modern society characterized by estrangement and a fetishization of the scientific, mechanical and invented. In his analysis of modern technology, nuclear weapons served as the most powerful reminder that technology is a world-changing force, which, if left unchecked and uncontrolled, could eventually empty human life of higher purpose and, ultimately, destroy human civilization, either literally – something that was not unlikely – or spiritually.
Metabolism, technology and human being

Günther Anders’ work has recently been appropriated as part of a larger group of mid-twentieth century thinkers that stood out for their distinctive blend of realism and radicalism in their treatment of nuclear weapons and globality (van Munster and Sylvest, 2014; 2016). Anders’ philosophy of technology is often discussed in the context of Heidegger,9 but Jason Dawsey has convincingly argued that the more radical elements of Anders’ oeuvre are better seen as a result of his deep preoccupation with Marx and his intellectual legacy (Dawsey, 2013: 12-13). Anders’ theorizing indeed shares important features with that of Marx, including a commitment to historical materialism, a dialectic openness and emancipatory reason. Yet, Anders’ larger ambition to attune Marx’s categories to the dynamics of the twentieth century – a historical period which Marx had no chance of grasping – nonetheless remains strongly flavoured by his previous, critical engagement with Heidegger’s philosophical anthropology.

The central influences of both Marx and Heidegger are particularly evident in Anders’ employment of metabolism – an instructive concept and metaphor for dissecting and digesting the role of technology in modern society. Originally Marx had used the notion of metabolism [Stoffwechsel] to describe the human relation to nature in the context of the second agricultural revolution (ca. 1830-1880). He identified a complex interdependence between humans and their environment, a relationship that was shaped predominantly by the activity of labour: ‘Labour is, first of all, a process between man and nature, a process by which man, through his own actions, mediates, regulates and controls the metabolism between himself and nature’ (Marx, quoted in Foster, 1999: 380). Building on the work of Justus von Liebig, a chemist who wrote intensively on the relation between artificial fertilizers and soil depletion, Marx further elaborated on the concept of metabolism. The industrialization of agriculture had turned humans into geological agents unaware of or inattentive to the organic limits of their material existence and subsistence, creating an ‘irreparable rift in the interdependent process of social metabolism’.10

Anders was clearly familiar with Marx’s notion of metabolism as a ‘basic operation’ between humans and nature (Anders, 2001: 129), but during the 1930s he made reference to the concept in his quest to define the condition of human being. Despite the at times explicit use of Marxist vocabulary, at this stage his project was more closely tied to Heidegger’s philosophical anthropology than to Marx’s historical critique of capitalism.11 Taking issue with Heidegger’s view of existence as being-thrown-into-the world [Da-sein], Anders suggested that the condition of human being is in fact defined by its very opposite: the ability to distance or withdraw oneself from the world [Weltfremdheit]. At the same time, however, he claimed that human beings nonetheless remain inherently dependent upon the world [Weltangewiesenheit] in a
concrete, biological sense (see Anders, 2001: 62-7, 81-8, 128-32; see also Dries, 2012: 34-49). Anders described this complex dialectic between distance and dependence as a metabolic relation governed by hunger (Anders, 2001: 129-30). On the one hand, the human need for nutrition implies that complete distance from the world can only be achieved at the expense of starvation and ultimately death. On the other, the fact that humans ‘are not cut out for any [specific] mode of existence’ also implies a ‘possibility of being everything’ (Anders, 2009: 284, 282) – a possibility that is defined by a certain hunger for the world that has to be taken in and transformed in order to survive and live (Anders, 2001: 130). Because humans do not encounter the world as something imposed upon them, they have to make it their own; hence, hunger is the ‘motor of being’ [Dasein] (Anders, 2001: 63) that enables and requires humans to build their own worlds on top of the one they find ‘according to a thousand historical variants and in a way as a superstructure; sometimes as a “second world”, sometimes as another’ (Anders, 2009: 279).

Anders warned that the dialectic of metabolism involves an inherent danger to existence, as humans may bring forth worlds that consist of ideas, artefacts and technologies that neglect and undermine the physical dependence of human beings upon the world driving them to extinction. In Anders’ early interpretation of the human condition, he referred to this danger as a form of nihilism, but stressed that this nihilist orientation should first and foremost be taken as a ‘philosophical exaggeration’ highlighting the pathological condition of human being (Anders, 2009: 294). By the time Anders published Die Antiquiertheit des Menschen in 1956 he had become convinced, however, that Western, mid-twentieth-century modernity – characterized by the rise of fascism, total war, the Holocaust and the atomic bombing of Hiroshima and Nagasaki as well as the post-war trend of mass consumption – was in fact thoroughly nihilist and bent on its own destruction. Nowhere was this more evident that in the case of nuclear weaponry. The nuclear condition was the pinnacle of nihilism. The Holocaust already had transformed the old adage that ‘all men are mortal’ into ‘all men are exterminable’, but the advent of nuclear weapons now meant that humankind as a whole could be exterminated (Anders, 1956b: 148) – a condition Anders tellingly captured as one of ‘an-nihilism’ (Anders, 1956a: 304).

The development of nuclear weapons led Anders to unpack the contradictions and antinomies produced by technology and subsequently introduced into the living and working conditions of ordinary people. It was a perspective that never lost sight of the economic and political materiality of power emphasized by Marx and his intellectual offspring. In Anders’ interpretation, the technological means of mass destruction simply could not be discussed in isolation from the mass consumption societies in which they were embedded and which were responsible for creating an ever-growing severance of the metabolic bond between humans and nature. Marx had located the dynamics of metabolism in the activity of labour (homo faber), but Anders introduced a
technological understanding of metabolism characterized by the increasing replacement of *homo faber* with machines. It was in this context that Anders stressed the need for revising the Marxist base-superstructure model. By the mid-1950s, this relationship designated less a causal link than an ever-widening gap between the human world and the world of machines (Anders, 1956a: 16). Anders fittingly described this condition as the ‘Promethean discrepancy’ (Anders, 1956a: 16), a predicament that aptly captured the condition of the fragmented subject attached to specialized tasks while unaware of any larger social totality.

Most of the texts Anders included in the second volume of *Die Antiquiertheit des Menschen* (1980) are concerned with rethinking and reformulating central Marxist concepts – including that of materiality, history, property, labour, the working class, the proletariat, ideology and resistance12 – in light of this discrepancy. Most notably, Anders substituted the classical Marxist view of technology – a view based on the notion that technology is primarily a neutral tool that can be used for either good or bad purposes – with the idea that existence itself was now defined by technology. He astutely observed how during the mid-twentieth century technology transformed human experience and human beings while introducing new forms of dependency, a trait that was evident in large technical systems like electricity grids and the automobile complex (see e.g. Dries, 2009: Ch. 7). He strongly feared that the only place for human beings in this world would be that of feeding the grinding wheels of a techno-scientifically driven complex of ‘pseudo-persons’ (machines) to which scientists, workers and consumers all unwittingly contributed – an analysis that led Anders to the radical conclusion that by the mid-twentieth century human being had come to equal ‘resource existence’ [*Sein ist Rohstoffsein*]. This was a form of existence in which the ‘machine’s hunger for accumulation is unsatiable’ (Anders, 1964: 50), where the world itself becomes a ‘exploitable mine’ populated by ‘expendable humans’ whose only role was that of ‘*homo materia*’ (Anders, 1980: 33, 42, 22).

Anders’ analysis of technology was a bleak one. In a discussion that is reminiscent of Lewis Mumford’s (1964) contemporary analysis of the Machine as a form of social and bureaucratic organization that enabled societies to undertake vast and complex projects, but also often reduced individuals to dependant yet expendable components in centralized power complexes, Anders strongly felt that modern society had come to treat technics as an end in itself, a process in which human beings would become increasingly obsolete (Anders, 1980: 26). This also meant that the question of major political ideologies – one unjustly claiming to be ‘free’; another rightly portrayed as ‘unfree’ – could not (or could no longer) take priority (Anders, 1956a: 7). Without ignoring the fundamental differences that continued to exist between the Western world and that of Communism, he stressed that both Moscow and Washington aspired to and were dependent on the rule of technology [*Diktat der Technik*] and an accompanying technological rationality (Anders, 1980: 108). In sum: ‘Technology is now our fate’

**The metabolic rift of the nuclear age**

Anders’ ‘dialectics of technology’ (Anders, 1980: 126) came to focus primarily on the manifold ways in which nuclear weapons were imbricated in the processes of obfuscation and alienation that he associated with more mundane practices and technologies characteristic of modern life. This is reflected in the structure of *Die Antiquiertheit des Menschen* (1956), which pursues the central theme of a Promethean discrepancy by linking the role of modern industrial production and mass communication channels such as film, radio and television to the development of nuclear weapons in which Anders saw the most extreme manifestations of mass society. In short, in Anders’ interpretation mass destruction was inherently linked to mass consumption.

The metaphor of metabolic rift(s) can be used to bring out Anders’ deeply techno-political view of the nuclear age. Indeed, he frequently deployed metabolism-related metaphors, such as ‘hunger’, ‘thirst’, ‘cannibalism’ and ‘eating’, to highlight how mass consumption lulled modern human beings into an artificial existence increasingly removed from the organic world. For example, Anders illustrated the metabolic process of mass consumption society with reference to the fashion industry – *Stoffwechsel* literally meaning a change *[Wechsel]* of fabric *[Stoff]* – where artificial needs were created and products were ‘born’ obsolete (Anders, 1980: 48). An accelerated metabolism, however, was not just characteristic of the fashion industry but of the entire mode of life in societies of mass consumption:

My thirst for Coca Cola is by no means ‘mine’, but something the Coca Cola producer specifically creates within me, turning me into as much of a product as the brew itself – i.e. a device whose sole purpose and performance consists in satisfying the thirst for profit (Anders, 1980: 444-45, n1, author translation; see also Anders, 1962b: 113).

This diagnosis came to full fruition in his discussion of television, which most vividly exposed the obsolescence of human beings in a mass society obsessed with consumption. Anders connected mass consumption and mass communication in his analysis of post-war estrangement. Audiences were spoon-fed an ongoing stream of ready-made products and prefabricated realities that obscured the mutual imbrication of production and destruction. Beginning from a sociological analysis of entertainment and media consumption, in which centralization (theatres) had been displaced by dispersal (radio and TV broadcasting), Anders suggested that the mass consumption of television
and radio shows amounted to an ‘industrial oral phase’ analogous to that of the breastfeeding mother and infant (Anders, 1980: 259, 51). In his earlier work, Anders had reserved the metaphor of breast-feeding to describe a form of intuitive being that was completely in sync with the surrounding environment (see Dries, 2012: 32). In the context of his interpretation of a mass consumption and mass communication society, however, the images of infancy and breast-feeding conveyed the exact opposite: an alarming alienation from the world through the infantilization of the adult population. The reality emanating from the screen left much outside the frame and was edited to serve particular (if sometimes unexciting) interests. Given the actually existing threats produced by human beings, this ‘pseudo-familiarity’ (Anders, 1956c: 22) produced two grave side-effects: first, a belief in already knowing the world past and present and, second, a disinclination to question the ‘processed’ realities being served up in front of the screen. The ease with which television impressed itself as reality – combined with the surrogate ‘chumminess’ of TV hosts – left Anders to conclude that the ideal of human beings in mass societies simply was to ‘sit on their butts and watch TV for their entire life’ (Anders, 1980: 28).

Nuclear weapons were embedded in this system, which organized their production, accorded them a particular political significance and, ultimately, secured their continuing demand through the manufacturing of a particular reality in which these immensely destructive weapons were, paradoxically, positioned as both necessary and harmless. Just like a Coke was sold as thirst-quencher rather than a thirst-producer, the bomb was served up not as a threat but as a security measure against a threat (Anders, 1962b: 113-14). In response, Anders urged his readers not to tolerate the application of ‘honest sounding, “keep smiling” labels’ to the atomic bomb or the H-bomb (Anders, 1961a: 16). Anders already identified these features in the mid-1950s but later found in President Ronald Reagan and his proposal for a Strategic Defense Initiative the perfect link between mass consumption and mass destruction. Not only had Reagan been an actor before he turned to politics, he also continued to draw inspiration from the screened world, when he – at the time of the Beirut hostage crisis – announced that Sylvester Stallone’s film personage ‘Rambo’ was an important personal inspiration (Anders, 1986a).

By the 1980s, the metabolic rift had widened further. Anders now suggested that the epoch he lived through resembled ‘a post-civilizational form of cannibalism’ (Anders, 1980: 25-6). The cannibalism that Anders referred to here was one in which human consumption was also the consumption (and hence destruction) of human beings. This cannibalism was aided by new technological modes of production, which obscured the moral qualities of the end-product. Since the modern worker was ‘merely’ doing his or her part on the assembly line, the outcome of labour was ‘beyond good and evil’ (Anders, 1956a: 289). The psychological category of the sub-liminal acquired a new counterpart in the ‘supra-liminal’: ‘the stimulus too big to produce any reaction or
to activate any break-mechanism’ (Anders, 1962a: 497). That humans as titans were capable of committing monstrous killing while, as mere mortals, unable to comprehend or imagine the destruction they could wreck turned the Promethean discrepancy into a question of both existence and survival (Anders, 1956b: 147-8). Loss of vision – the blindness to Apocalypse – was more than a sign of unfreedom: it created ‘the most divided, the most disproportionate, the most unhuman beings that have ever existed’ (Anders, 1956b: 154).

With nuclear weapons, however, this loss of vision was accompanied by a loss of voice that went beyond the apathy that other technologies could be seen to produce. First of all, the invention and operation of nuclear weapons technology was shot through with notions of competence, specialization and security’s air of high politics, which in turn served to remove these inherently political artefacts from democratic deliberation. A new form of instrumental rationality came to colonize social and political rationality: ‘Ought is merely the correct chess move, and the Ought Not, the wrong chess move’ (Anders, 1956b: 150). Quite apart from the bizarre exposure to danger that followed from this metamorphosis of instrumental rationality into policy, Anders warned against the betrayal of democracy that the competence craze involved. The essence of democracy was precisely to engage the decisive, common questions beyond the professional remits of individual citizens: ‘Since, after all, we are the “res publica”, the reproach that we are “meddling” amounts to the ridiculous accusation that we are interfering with our own business’ (Anders, 1962a: 500; emphasis in original).

Second, Anders noted how the trend towards thoroughly technologized human beings – beings that were materially satisfied yet increasingly unsatisfactory as human beings (Anders, 1962b: 119-120) – was accompanied by a reverse trend in which technologies were humanized. The transformation of weapons into ‘pseudo-persons’, a development blissfully ignored by most contemporary philosophy, had dramatic social and political effects: it led to a demand that human beings should respect the ‘natural’ development of weapons, make way for new ‘generations’ of bombs and not stand in the way of technology’s apparently self-directed improvement (Anders, 1956a: 40; 1986). In short, the humanization of nuclear technology involved a process of normalization whereby the monstrous became both mundane and mandatory. Such confusion and diffusion of nuclear agency further accelerated the abandonment of human responsibility.13

Against an-nihilism: Anders’ philosophy of exaggeration

For Anders, in short, the nuclear condition threw up the mystifying powers of technology and the civilizational faults to which human beings had become liable in their most dramatic and frightening guise. The potential for material destruction was immense, unfathomable and apparently natural. He did much to lay bare the obstacles
for seeing and speaking out against the monstrosity of nuclear weapons by analysing the roots of acquiescence and moral blindness.

Anders’ project, moreover, was deliberately activist. He captured its essence, when in the foreword to the second volume of Die Antiquiertheit des Menschen (1980) he developed Marx’s eleventh thesis on Feuerbach. For Marx, it was essential to move beyond philosophical interpretation: ‘the point is to change [the world]’. For Anders, however, it was not ‘enough’ to change the world, since the world changed regardless. His activism was based on the need for interpreting such changes. This was necessary ‘in order to change [the world]. In order for the world not to change further without us. And to not finally become a world without us’ (Anders, 1980: i, author translation). Following Anders’ interpretation of the changes that accompanied the nuclear age – the consumption and digestion of human beings that technology involved – he sought to return moral and political responsibility to his contemporaries by assisting their recovery of vision and voice. Given the stakes and given the fact that in the nuclear condition the ‘victorious’ lie was one that prevented human beings from ‘even suspecting that it could be a lie’ (Anders, 1962a: 502), the trusted Marxist tool of ideology critique would only get the post-Hiroshima generations so far. Hence, Anders devised a style and method that could serve as shock therapy. Witnessing the proverbial frog in the slowly warming pot, Anders determined that soft-spoken warnings and wringing hands simply would not do. The result was his philosophy of exaggeration [Übertriebung].

The objective of this philosophy was to confront the human inability to imagine its own self-destructiveness in order to recover the (meagre) potential for solidarity, imagination and reform that humanity still possessed. He urged his contemporaries to rekindle the imagination and widen their moral horizon in order to avert catastrophe. To be successful, such an expansion of moral responsibility would entail a rebellion against official definitions of reality and the (mass) means by which such definitions were circulated. In short, it would mean the recovery of political agency. In this dimension of Anders’ thinking the transformation of two absolutely central categories of human experience – time and space – took center stage. In relation to national conceptions of space, he insisted that the cry of concerned scientists in the post-Hiroshima years – one world or none! – was still valid, despite the quest to accommodate the bomb within Cold War political and military thinking. Anders dissected palliative assurances that the bomb was never to be used or that the bomb was necessary means of deterring or defending a distinct country or group of countries against an enemy. For one, the bomb had already been used – ‘(which fact an astonishing number of people seem to have forgotten)’ (Anders, 1961a: 17) – just as it was in fact continuously used through the mere fact of its existence. It constituted a persistent threat because of its scale. It was a blunt colossus that dissolved the distinction between means and ends. ‘[T]oday we are all proximi’, he argued, which demanded a widening of our ‘horizon of responsibility
... till it becomes global’ (Anders, 1962a: 495). Thus, in a speech given during a peace procession in Yaizu in 1958, he concludes that the Clausewitzian credo that war is the continuation of politics by other means needs to be reversed: ‘What today is wrongly called ”peace” is but the continuation or preparation for war by other means’ (Anders, 1982 [1958]: 38, emphasis in original, author translation).

Moreover, Anders strongly rejected the idea that continued nuclear weapons testing was necessary for political signaling and further development of this monstrous technology. Nuclear testing produced radioactive fallout travelling across state borders through the atmosphere and turned the whole world into a laboratory or test site. Testing, in short, was not testing. It was a practice that already ‘affected and infected’ both the planet and human beings (Anders, 1956a: 260, author translation). To argue that the word experiment was ‘out of place’ (Anders, 1961a: 17) was to insist that testing became historical reality; albeit a reality that modern humans could not comprehend because they were just as caught in the now as they were in retrograde categories of geopolitics (Anders, 1962b: 120). It was against this background that Anders set forth his theory of moral and political ‘blindness’, a blindness produced by specifically modern form of estrangement most visible relation to nuclear weapons. Two effects stood out: first, a loss of historical sense; and, second, a failure to comprehend the very real dangers to human futures. Whereas the first argument harked back to the human qualities that were lost when humans had (relatively briefly) occupied a space between a purely animalistic and a purely instrumental existence, there was a strong proto-environmentalist spirit in the second argument. While no one could speak with certainty about the effects of nuclear testing, they could prove both genetically [erbbiologisch] serious for humans (Anders, 1956a: 260) and catastrophic for nature (Anders, 1960: 201). By pointing to the irreversible, if still unspecified, effects of testing and to the responsibility of prolonging the ‘final age’, Anders insisted that human beings had also become ‘neighbours in time’ (1962a: 495).

Examining so-called ‘natural disasters’ (there was hardly anything natural about them, as Anders observed) constituted one way in which humans could recapture a sense of moral responsibility. This was a precondition of regaining control of actions that had increasingly been left to machines or embedded in technological systems that devoured human beings and their habitat. There is little doubt, however, that Anders’ despair and desperation deepened with the widening of the Promethean gap. It was this very gap that kept ‘technology as world’ [Weltzustand Technik] and its associated practices of domination and its potential for monstrous violence and killing in place. In the mid-1980s he desperately concluded that most people appeared more than happy to live without imagining the destructive consequences of their actions (Anders, 1986). Eventually, Anders’ increasing pessimism about the positive role imagination could play also led him to contemplate the possibility of violent protest against those in command of nuclear weapons (Anders, 1987). Although Anders never repeated this
controversial argument, his plea for meeting violence with violence constituted a severe intellectual, moral and political failure on his account. Yet, it is hard to deny that many of the challenges Anders located in the nuclear condition still exist. We may have recovered parts of our vision and some of our voice, but the rekindling of our imagination that Anders deemed essential for coming to terms with our world-dependence and effecting political change continues to elude us.

Concluding reflections

Intent on awakening his readers and fellow human beings to the social and political implications of technology – and in particular to the realities and power dynamics of the nuclear condition and the ways in which these were obscured, socially and politically – Günther Anders developed a profound and sophisticated analysis of nuclear techno-politics. In this article, we have argued that the concept and metaphor of metabolism provides an instructive way into this way of analysing the nuclear condition. It is also evident that this metaphor and associated processes like digestion, reproduction and waste still has purchase. Theoretically, Anders’ work constitutes an important, but largely overlooked, intellectual precursor to neo-Marxist and other materialist perspectives that highlight the complex metabolic interdependencies between humans, other organisms and planetary processes. Like Anders, such approaches view technological systems and infrastructures supporting metabolism as central to our understanding of the world (Foster, 1999; Mol and Law, 2004; Edwards, 2016).

At the same time, Anders reminds us that we have not escaped the nuclear age – indeed, it is the final age, as he often repeated. Campaigns for nuclear zero or a ban on nuclear weapons regularly spur a new sense of optimism, but the prospects of disarmament still appear dim as fears of a cold war redux make headlines in glittered magazines and feed into a deeply worrying rhetoric about nuclear weapons. Meanwhile, spending on nuclear weapons is growing. In some estimates nuclear weapons modernization in the US and UK are set to reach unfathomable heights in the coming decades ($1 trillion in the US and more than £100 billion in the UK).16 Although there are some overlaps in the moral concerns of Anders and contemporary anti-nuclear arguments advanced by NGOs or campaigns like the Humanitarian Initiative under the Non-Proliferation Treaty (NPT), Anders’ approach to nuclear techno-politics, particularly if read through the concept of metabolism, involves at least two dimensions that can inspire the contemporary nuclear disarmament movement.

First, and in contrast to contemporary campaigns that are often based on a narrow analysis of nuclear weapons as dangerous and costly, Anders’ perspective on technological expansion and acceleration as a process of metabolic overdrive installs nuclear weapons in a broader context that includes the (re)production of privilege, unfreedom and global, intergenerational problems. Upscaling our perspective to the
planetary level and seeing nuclear techno-politics through the metabolic prism of insatiable hunger, digestion and waste, Anders highlights a fundamental human inability to tackle its own self-destructiveness. Current investments in nuclear programs can potentially lead to a spiraling modernization race that would keep us in the thrall of a nuclear appetite for resources for at least the next half-century. At the same time, scientists now argue that a regional nuclear war could set off a nuclear winter that would lead to a drop in global temperatures and a catastrophic effect on global food provision. The extraction of material, economic and human resources by nuclear weapons complexes is deeply imbricated in a wider system that governs our future relationship to the planet.

Second, Anders highlights the dynamics that prevent us from effectively questioning ‘nuclear normalcies’ (see Schmid, 2016). While we are now, at least in some respects, aware of how nuclear technology governs us – just as we are conscious of the ways in which individual daily actions and choices issue in collective tragedy – we appear unbothered. Indeed, compared to earlier generations ‘today’s advocates of nuclear abolition must contend with low public awareness of the issue and a great deal of complacency’ (Schlosser, 2015: 15). Even if the dynamics of estrangement and paralysis that Anders identified with the nuclear condition may have taken on new appearances in the current age of the Anthropocene, it is hard to deny that they are still in operation. We continue to observe the unrelenting extraction of resources and our incessant production of waste with lofty indifference; we are able to rehearse the dangers but unable to envision alternative courses of action. It seems evident that the proliferation of global problems that are imbricated in the predominantly Western way of life, above all climate change, requires the recovery of voices and visions that transcend professionalized debate and expert opinion. In this predicament of anthropophagy, the first requirement of democratic action and effective campaigning must be a sustained effort to expand our political imagination.

References


van Munster R and Sylvest C (2016) *Nuclear Realism: Global Political Thought during the Thermonuclear Revolution*. Abingdon: Routledge


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**Notes**

1 Craig (2003), Scheuerman (2011) and van Munster and Sylvest (2014; 2016).
3 On the need to recuperate Critical Theory for the study of security and nuclear weapons, see Wyn Jones (1999), Booth (2007) and Peoples (2010).
4 The work of Anders has trickled down in International Relations (IR) through the writings of John H. Herz, whose thinking on nuclear weapons and technology was influenced by Anders (Hacke and Puglierin, 2007: 374). For a more extensive treatment of his ideas, see van Munster and Sylvest (2016).
5 For a more detailed biographical account, see Bahr (2010).
6 Anders (2011 [1979]: 301). For different accounts of the background to his name change, see Marcuse (1997) and Dries (2009: 13).
7 Anders developed his philosophical anthropology during the 1920s and early 1930s. In France, two articles outlining the main features of his philosophy were published in *Recherches Philosophiques* (see Anders, 2009). As we will discuss in more detail below, the idea of metabolism was a central notion in Anders’ account of human existence (Anders, 2001; Dries, 2012). Anders’ two French publications left a significant expression upon Jean-Paul Sartre and Gilles Deleuze.
8 Anders considered the costume a precursor of TV and radio: a technology of reproduction that creates its own (false) reality (Anders, 2006: 8).
9 See e.g. van Dijk (2000).
Marx quoted in Foster (1999: 379). Foster’s brilliant analysis seeks to recover Marx’ theory of metabolism in order to counter a string of anti-ecological readings of Marx. Metabolism for Marx had both a social and an ecological meaning, and it is this duality that allows Foster to tease out a basic Marxian understanding of sustainability (see also Fischer-Kowalski, 1998).

For a discussion of the difficult relationship between Heidegger and Anders, see e.g. Dawsey (2013: Ch. 3).

Many of these texts were already written during the late 1950s and early 1960s.

Although Anders did not write specifically about the neutron bomb, this technology – which was heavily discussed in the mid-1950s and then again in the late 1970s – vindicated his analysis of the absurdities of the nuclear condition. The N-bomb was a low-yield nuclear weapon that boosted radiation with the aim of maximizing human casualties while minimizing material destruction. Proponents of the N-bomb stressed its more humane character compared to already existing H-bombs, but Anders would certainly have agreed with critics that a bomb designed to kill people but protect property – a feature which earned it the name of ‘capitalist bomb’ – represented the nadir of an ‘American culture of things that created the monstrous weapon in the first place’ (Zeman, 2004: 76).

Anders’ early interest in Kafka may have been important in opting for this strategy. For Anders, Kafka was ‘a realistic fable writer’, whose fiction brought his readers closer to reality that the best non-fictional descriptions and analysis. It has also been suggested that Anders’ was influenced by Brecht’s Verfremdungseffekt and John Heartfield’s collages in developing this strategy (Dries 2009: 18). One could also speculate that Walter Benjamin was significant in this respect. Benjamin was a cousin of Anders and actively promoted the method of collage in his writings.

In his later writings, Anders (1986b) turned his attention to environmental issues in relation to nuclear energy. See also van Munster and Sylvest (2016: Ch. 4) for a discussion of the nature of Anders’ proto-environmentalism.

See the estimates in Schlosser (2015).