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## Marxism and the Holocaust

In this essay, I want to make, and elaborate on, three claims. First, that the Holocaust is a transformational event,<sup>1</sup> a qualitative break in the historical trajectory of capitalist civilisation; indeed, a break so great that, as Enzo Traverso has argued, the Nazi genocide ‘requires us to rethink the twentieth century and the very foundations of our civilisation’.<sup>2</sup> Second, that as a qualitative break in the trajectory of capitalism, the Holocaust poses a fundamental challenge to Marxist theory, such that, for Alex Callinicos, ‘[n]o human phenomenon can put a stronger demand on the explanatory powers of Marxism’.<sup>3</sup> However, it seems to me that orthodox Marxism, at any rate, has been inadequate to that challenge, has failed to provide us with a coherent or persuasive explanation of the ‘Final Solution’. Third, no explanation of the Holocaust, of its origins or unfolding, that does not

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<sup>1</sup> The concept of the Holocaust as a *transformational event* was first articulated by Alan Rosenberg, and subsequently elaborated by the two of us in a series of essays, most notably Milchman and Rosenberg 2003.

<sup>2</sup> Traverso 1999, p. 4. Traverso is one of those rare Marxist thinkers who has seriously grappled with the implications of the Holocaust for Marxist theory; who – in a series of books – has sought to utilise Marxism to understand the Nazi genocide and its singularity.

<sup>3</sup> Callinicos 2001, p. 385.

link it to the immanent tendencies of late capitalism, can provide us with a purchase on what Traverso has termed this tear in the very fabric of history [*l'histoire déchirée*].<sup>4</sup> In my view, it is necessary to forge a direct link between the Nazi genocide and the unfolding of the operation of the law of value; to recognise, with the German dramatist, cultural critic, and Marxist, Heiner Müller, that 'Auschwitz is the altar of capitalism'.<sup>5</sup>

### **The Holocaust as a break in history**

The origins of the Holocaust must be sought in the unprecedented and ever-increasing violence that has accompanied the unfolding of capitalism from its phase of the primitive accumulation of capital and the brutal expropriation of the immediate producers from their means of production, through the bloody colonial wars and orgies of mass murder that characterised the global expansion of capitalism, and that culminated in the mechanised slaughter of masses of conscript soldiers on the battlefields of the First World War. Within that bloodstained history, Auschwitz, understood as a synecdoche for organised and planned mass murder, marked the creation of a death-world in which the extermination of determinate groups of human beings had become the deliberate and systematic objective of the state. Thus, for Traverso,

[t]he 'final solution' appears to us today, at one and the same time, as the culminating point in an uninterrupted sequence of violence, injustice, and murder that has characterized Western development and as an unprecedented *break* in historical continuity. In other words, it is only by setting Auschwitz in a larger context of racist crimes and violence that its uniqueness may be perceived and analyzed.<sup>6</sup>

For Traverso, that uniqueness lies not in the numbers of those slaughtered, but rather in the fact that 'for the first time in history an attempt was made to eliminate a human group for reasons of "racist biology"'.<sup>7</sup> What is at stake in the Holocaust is not simply race hatred, which has characterised capitalism since its very inception, but rather the project – integrally linked to the development of science and technology brought about by capitalism – to

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<sup>4</sup> This is the title of one of Traverso's volumes on the Holocaust.

<sup>5</sup> Müller 1991, p. 40.

<sup>6</sup> Traverso 1995, p. 105.

<sup>7</sup> *Ibid.*

quite literally subordinate the biological realm itself to the logic of capitalist domination and control. The death-world, inaugurated by Auschwitz, had as its goal nothing less than a 'biological reconfiguration of humanity [*remodelage biologique de l'humanité*], devoid of any instrumental nature, conceived not as a means but as an end in itself'.<sup>8</sup> One aspect of that control of the biological realm lay in the ability to remove – through planned extermination – those segments or groups within the human species deemed superfluous, worthless, or dangerous. For the Nazis, the Jews were such a group, a bacillus that had to be extirpated, virtually as a matter of public hygiene, though mass murder was never conceived as being limited to them. This biologisation and racialisation of alterity, and its physical elimination through state-organised politico-military means has become the veritable hallmark of the death-world.

And that death-world constitutes what the Marxist philosopher Ernst Bloch termed a *novum* in human history. In his open system, Bloch's category of the *novum* designates what is radically new in history.<sup>9</sup> It is intended to preclude any conception of a closed or completed world; any teleological vision of history, such as haunts orthodox Marxism. While, in Bloch's philosophy of hope, the category of the *novum* generally refers to the good *novum* of revolution or communism, as the Blochian alternative of *Alles oder Nichts* (the ontological complement to Luxemburg's prescient vision of 'socialism or barbarism') indicates, there is also the possibility of a bad *novum*.<sup>10</sup> The Holocaust and the death-world that it inaugurated constitutes just such a *novum*.

In the Holocaust, the extermination of the racial Other proceeded along dual, though complementary, tracks, revealing two facets of the genocide perpetrated by the Nazi régime. One facet of the Nazi genocide, which has dominated the historiography of the Holocaust, is the rational, bureaucratically administered, industrial production of corpses, carried out in vast factories of death utilising poison gas, such as Auschwitz, Sobibor, or Treblinka. As Enzo Traverso has explained:

The system of extermination functioned like a factory, whose product was death. Jews were its raw material, and there was nothing primitive about

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<sup>8</sup> Traverso 2002, pp. 9–10.

<sup>9</sup> See Bloch 1986, pp. 200–5.

<sup>10</sup> See Bloch 1975, p. 141.

its means of production, at least once the mobile gas trucks were replaced in spring 1942 with the incomparably more efficient fixed equipment: the gas chambers. Here death was brought about by streams of Zyklon B, a type of cyanide specially prepared by IG Farben, the most advanced German chemicals company. The victims' bodies were then burned in the camp crematoria, whose chimneys were reminiscent of the most traditional architectural forms of an industrial landscape.<sup>11</sup>

There, the organisation of genocide was the responsibility of desk-killers like Adolf Eichmann, who could zealously administer a complex system of mass murder while outwardly displaying no particular hatred for his countless victims, no great ideological passion for his project, and no apparent sense that those whom he sent to the gas chambers were human beings and not things. An Adolf Eichmann, or a Rudolf Höss, the commandant at Auschwitz, is the high-level functionary in a vast bureaucratic organisation who does his killing from behind a desk, from which he rationally plans, organises, and administers, mass murder, treating it simply as a technical task, no different than the problem of transporting scrap metal or disposing of industrial waste. The desk-killer is the quintessential bureaucrat, but functioning according to the imperatives of the death-world. As a human type, the desk-killer is one more embodiment of the triumph of instrumental reason that shapes late capitalism. Millions of human beings were murdered in the factory-like setting of the death camps, and it is the image of those camps, symbolised by the smokestacks of Auschwitz, that has come to define the singularity of the Holocaust.

Recently, however, Holocaust historiography has begun to pay attention to another facet of the Holocaust, to those other millions of human beings murdered by the *Einsatzgruppen*, by the Order Police, by the *Wehrmacht*, by the local auxiliaries of the Germans in occupied Eastern Europe, or by ordinary citizens of those occupied lands who slaughtered their Jewish or 'Bolshevik' neighbours. Those killings – face-to-face, by shooting at close range or burning or beating their victims to death – were anything but cold, rational, bureaucratic, and without passion. They were marked by an orgiastic bloodletting, by a hot rage and hysteria, by what in German can only be termed *Rausch*, an intoxication and explosion of repressed emotional content. On the surface, such killing seems to have more in common with the pogroms that periodically

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<sup>11</sup> Traverso 1999, p. 15.

exploded in the villages and cities of precapitalist or early capitalist Europe than with the organised violence of a modern, technologically advanced, industrial state. However, these orgies of frenzied killing were not pogroms – spontaneous outbursts which have traditionally quickly run their course, no matter how violent they are – but, rather, an integral part of the systematic mass murder organised by a modern capitalist state. The shootings of more than thirty thousand Jews at the Babi Yar ravine in September 1941, no less than the murder of ten thousand people that Rudolf Höss claimed he had gassed in a single day at Auschwitz, proceeded from the *same* social conditions; different facets of the same project of mass murder, generated, as I will try to show, by the same capitalist civilisation.

It seems to me that a Marxist theory of the Holocaust must account not just for the industrialisation and bureaucratisation of mass murder, and for the primordial role of the desk-killer, but also for the *Rausch*, the unleashing of the orgiastic lust for blood exemplified by the *Einsatzgruppen* and their East European accomplices. Such a claim has nothing to do with the interpretation of the Holocaust as the violent and inevitable outcome of centuries of antisemitism peculiar to Germany, articulated by Daniel Jonah Goldhagen.<sup>12</sup> While Goldhagen correctly points to the role of *Rausch* in the mass murder of the Jews, his inability to recognise the enormous abyss between the Holocaust and the violent manifestations of antisemitism that have characterised the whole history of the West, his failure to link the Holocaust to the trajectory of capitalism, and his insistence that its bases are to be found exclusively in a purported German *Sonderweg*, vitiates that insight.

### **The failure of orthodox Marxism to comprehend the Holocaust**

Thinkers working within the framework of orthodox Marxism have failed to grasp the singularity of the Holocaust. For the most part, orthodox Marxism has treated the Nazi genocide as a by-product of fascism, itself conceived as a screen for the rule of the most reactionary and imperialistic factions of monopoly capital or as a means for big business to mobilise the petty bourgeoisie behind it in its effort to crush the working class. The categorial arsenal deployed by orthodox Marxism is itself a formidable obstacle to any comprehension of the Holocaust. Orthodox Marxism's base/superstructure

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<sup>12</sup> See Goldhagen 1996.

model of social reality, in which ideology is an epiphenomenon determined by the economic base; its pronounced tendency to a kind of economic reductionism; a vision of history that equates 'progress' with scientific and technological development; a failure to theorise the role of the irrational in human history; a disregard for the role of contingency in the social realm; and a tendency to see the Nazi genocide not as a *novum* in human history, linked to the immanent tendencies of late capitalism, but rather as an atavistic regression to an earlier stage of human development, all frustrate the efforts of orthodox Marxists to adequately confront the Holocaust. Thus, Ernest Mandel has argued that the actions of German imperialism in Eastern Europe were rooted in the same imperatives that motivated the crimes of colonialism/imperialism at the time of the African slave trade and the Spanish conquest of the Americas ('But it was precisely German imperialism's "manifest destiny" to colonize Eastern Europe'<sup>13</sup>). In addition, Mandel has sought to demonstrate the at least partial economic rationality of the use of slave labour in the concentration camps ('the costs of such labour can be reduced to almost nothing, a miserable pittance which rapidly reduces the labourer's weight and health till he dies from starvation and deprivation'<sup>14</sup>). Both claims, in my view, attest to the inability of orthodox Marxism to grasp the singularity and the break in history represented by the Holocaust.

This failure of orthodox Marxism has been clearly grasped by Enzo Traverso, for whom 'Auschwitz has shown once and for all that economic and industrial progress is not incompatible with human and social retrogression',<sup>15</sup> and, according to whom, the racism of the Nazis cannot be reduced to a screen behind which the real economic interests of big capital hid. For Traverso,

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<sup>13</sup> Mandel 1986, pp. 90–1. In a work of over 160 pages, Mandel devotes a mere five pages to the Holocaust! Decades before Mandel sought to assimilate the Nazi genocide to the crimes of colonialism, Theodor Adorno pointed to the dangers of such analogies: '[t]he statement that things are always the same is false in its immediateness, and true only when introduced into the dynamics of totality. He who relinquishes awareness of the growth of horror not merely succumbs to cold-hearted contemplation, but fails to perceive, together with the specific difference between the newest and that preceding it, the true identity of the whole, of terror without end.' Adorno 1978, p. 235.

<sup>14</sup> Mandel 1986, p. 93. Here, Mandel links the behaviour of the SS to that of ancient Roman latifundists and to early nineteenth-century Southern planters in the US. Beyond the highly questionable nature of such historical analogies, Mandel completely ignores the fundamental distinction between the latifundia and plantations, which were devoted to the production of commodities, and the Nazi death camps, the exclusive function of which was the production of corpses.

<sup>15</sup> Traverso 1995, p. 110.

[a]n element that strikes and disconcerts historians studying the Jewish genocide is its essentially *antieconomic* nature. Where was the economic rationality of a regime which, to kill six million men, women, old people, and children, created in wartime conditions an administrative system, transport network, and extermination camps, employing human and material resources which would certainly have been put to better use in industry and on the increasingly depleted war fronts.<sup>16</sup>

Indeed, for Traverso, '[t]he Jewish genocide cannot be understood in depth as a function of the class interests of big German capital. . . .'<sup>17</sup> Alex Callinicos has also challenged the orthodox-Marxist interpretation of the Holocaust:

[t]he primacy of Nazi ideology in the development of the Holocaust is critical to understanding that, even if economic pressures – for example, food shortages in the occupied USSR – may have helped motivate particular murder campaigns, the extermination of the Jews cannot be explained in economic terms.<sup>18</sup>

For Callinicos, biological racism is the key to the Nazi genocide, thereby providing a more sophisticated account of the orthodox-Marxist relationship between economic base and ideological superstructure, and the task of Marxism is to explain 'why this ideology assumed such centrality in National Socialism'.<sup>19</sup>

While Traverso and Callinicos reject orthodox Marxism's economic reductionism and its focus on the direct class interests of big capital as the basis for explaining the Holocaust, they remain committed to understanding the Nazi genocide as an expression of the immanent tendencies of capitalism. Norman Geras, by contrast, while also rejecting the orthodox-Marxist interpretation of the Holocaust, has completely severed the link between the Nazi genocide and capitalism. In his attempt to grasp the Holocaust, Geras breaks with the orthodox-Marxist vision articulated by Ernest Mandel in 1946, and subsequently only somewhat modified by him, according to which, as Geras explicates it, 'the destruction of the Jews of Europe is *rationaly explicable* as the *product of imperialist capitalism*, and as such is manifestly *comparable* to

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<sup>16</sup> Traverso 1995, p. 127, my emphasis. This is indicative of what Traverso terms the 'counter-rationality' of the Nazi genocide.

<sup>17</sup> Traverso 1999, p. 60.

<sup>18</sup> Callinicos 2001, p. 403.

<sup>19</sup> Callinicos 2001, p. 404.

the other barbarisms which this socio-economic formation throws up.<sup>20</sup> In challenging such a vision, however, Geras does not seek to explain the Holocaust by reference to the specific trajectory of *late* capitalism and its immanent tendencies, but rather to ‘something that is not about capitalism’ at all,<sup>21</sup> something ensconced in what he terms ‘the subsoil . . . of the human psyche’,<sup>22</sup> in a transhistorical human nature itself. Thus Geras is convinced that the radical evil instantiated in the Holocaust is an ineradicable potential embedded in an essentialised human nature; a free-floating danger that has haunted, and will haunt humanity, quite apart from the historically determinate social relations it constructs or civilisations it establishes. Thus, for Geras, the Holocaust tells us virtually nothing about the specific lethal potential of late capitalism, but a great deal about the capacity of an ahistorical human being for murderous violence.

### **The categorial bases for a Marxist theory of the Holocaust**

A Marxist theory of the Holocaust, I believe, requires a different categorial basis than that provided by orthodox Marxism; by the Marxism of the Second, Third, and Fourth Internationals.<sup>23</sup>

A Marxist dialectic comprehends the world as open, incomplete, unfinished, an *experimentum mundi*,<sup>24</sup> in contrast to the vision that prevails in so many orthodox-Marxist conceptions of history in which human beings are subject to objective ‘laws of history’, to their implacable logic, and to a naturalistic causality. Thus, Ernst Bloch distinguishes between cause [*Ursache*] and condition [*Bedingung*], with causes, in this sense, understood as resting on the principle of ground, and implying necessity, while conditions ‘are the presuppositions of a possible realization, that will not be brought about without the intervention of the subject’.<sup>25</sup> Conditions, therefore, are linked to what, for Bloch, is the primordial category of ‘objective-real possibility’: a possibility the conditions for which are developing within social reality; which exist in a state of what Bloch terms ‘tendency-latency’. What Bloch seeks, however, is a new concept

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<sup>20</sup> Geras 1998, pp. 144–5.

<sup>21</sup> Geras 1998, p. 164.

<sup>22</sup> Geras 1998, p. 157.

<sup>23</sup> Space permits only a brief exposition of the Marxist categories adequate to an understanding of the Holocaust.

<sup>24</sup> This is the title of Ernst Bloch’s last work, a Marxist *Kategorienlehre*.

<sup>25</sup> Bloch 1975, p. 129.



of causality [*Kausalität*] that is shorn of the unilinear character of mechanical causality, a dialectical causality, in which the possibility of discontinuity, ‘*dialectical interruptions [das dialektisch Unterbrechende]*’ is always present.<sup>26</sup> It is on the basis of such a dialectical concept of causality, in which contingency also plays a central role, that it is possible to understand the Holocaust.

Such an understanding also entails, from this perspective, the rejection of the base/superstructure model of social reality, and its pronounced tendency to economic determinism, that has characterised orthodox Marxism. In its place, what is needed is the concept of overdetermination, first adumbrated by Louis Althusser, and then developed by the Marxists of the Amherst school. Thus, for Stephen Resnick and Richard Wolff:

[t]he centrality of the concept of overdetermination rules out any notion that any one social aspect, such as the economic, can be ultimately determinant in some last instance of other social aspects. This centrality also carries with it a definition of the particular kind of complexity characteristic of Marxian theory. That theory focuses not on the relative importance of the economic versus noneconomic social aspects but rather on the complex ‘fitting together’ of all social aspects, their relational structure, the contradictions overdetermined in each by all.<sup>27</sup>

The concept of overdetermination permits us to appreciate how biological racism could play such a central role in the unleashing and unfolding of the Nazi genocide, even when the continuation of the Final Solution had become an impediment to the German war economy and to the actual military operations of the *Wehrmacht*.

The appearance of the desk-killer, of the functionaries of the death camps, and also of the troops and mobs who slaughtered Jews or ‘Bolsheviks’ in a state of *Rausch*, of rage and fury, and indeed of the countless bystanders whose silence or inaction were necessary for the Final Solution to be implemented, are all indicative of the need to confront the issue of philosophical anthropology, of a doctrine of an ahistorical human nature, in Marxism. In contrast to such a vision, defended, for example, by Norman Geras, I believe that the modes of human subjectivation are themselves historically variable; that the human subject has no ‘essence’, but is socially ‘constructed’, the ‘product’ of the social relations, the interaction of the complex causal chains

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<sup>26</sup> Bloch 1975, p. 141.

<sup>27</sup> Resnick and Wolff 1987, pp. 49–50.

and overdetermined contradictions, that shape a specific civilisational complex. Subjectivation, here, means both the way that the human being is historically 'constructed' as a subject, and the modes by which the human being is historically subjected to the prevailing social relations. The latter, as Antonio Gramsci pointed out, can take the form of coercion or hegemony. Hegemony is the way in which a dominant class instantiates its rule over society through the intermediary of ideology. For Gramsci, ideology is not mere false consciousness, but rather is the form in which humans become conscious – become subjects. The desk-killer, the mass murderer in a state of *Rausch*, the bystander, as I hope to show, are all modes of subjectivation produced by late capitalism, and its ideologies.

### **The Holocaust as a refutation of the equation between technological development and human progress**

A number of thinkers on the margins of Marxism – Bloch, Walter Benjamin, Theodor Adorno, Herbert Marcuse, and Günther Anders – have challenged the orthodox-Marxist equation of industrial, scientific, and technological development and the progress of the human species.<sup>28</sup> This equation represents the *productivist* element in Marxism, which celebrates unlimited industrial growth and technological development, conceives of capitalism as historically progressive so long as it assures such development, and insists that the same science, technology, and industrial labour, that propelled the global expansion of capitalism will serve as the basis of socialism. Even before the Nazi genocide, Walter Benjamin, in his 'Theses on the Philosophy of History', had grasped the danger inherent in the orthodox-Marxist commitment to technological progress, and its concomitant fetishisation of industrial labour, as the standard by which to measure human development:

[t]his vulgar-Marxist conception of the nature of labour bypasses the question of how its products might benefit the workers while still not being at their disposal. It recognizes only the progress in the mastery of nature, not the retrogression of society; it already displays the technocratic features later encountered in Fascism.<sup>29</sup>

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<sup>28</sup> In his *L'Histoire déchirée*, Traverso has both elucidated the contributions of Benjamin, Adorno, and Anders, and explicitly linked them to an understanding of the Holocaust.

<sup>29</sup> Benjamin 1968, p. 261.

Benjamin's recognition of the catastrophic side of capitalist progress, his anticipation of the death-world to come, was seconded by his friend, Ernst Bloch, who preferred 'a dash of pessimism' to 'the banal, automatic belief in progress as such', because it would help avoid being surprised by catastrophes, 'by the horrifying possibilities which have been concealed and will continue to be concealed precisely in capitalist progress'.<sup>30</sup> Surely, the Holocaust was one of those 'horrifying possibilities', as Herbert Marcuse clearly recognised:

[c]oncentration camps, mass extermination, world wars and atom bombs are no 'relapse into barbarism', but the unrepressed implementation of the achievements of modern science, technology, and domination.<sup>31</sup>

I want now to briefly examine this catastrophic side of industrial, technological, and scientific progress, as it has been theorised by Adorno, Marcuse, and Anders, and to show its links to the death-world symbolised by Auschwitz. In his essay on 'Society' (1965), Adorno pointed to the '*totalitarian* tendencies of the social order' inherent in the spread of the commodity-form to all aspects of social reality.<sup>32</sup> For Adorno, totalitarianism is not just a political system, but the culminating point of the subjugation of the totality of social existence to the imperatives of the commodity-form. The autonomy of the various spheres of life, that still characterised early capitalism, is destroyed as the category of exchange-value invades all realms of existence, even the aesthetic, the erotic, and the psychological. Thus, as Adorno claimed in his essay on 'Late Capitalism or Industrial Society?' (1968):

Material production, distribution, and consumption are jointly administered. Their boundaries – which once really separated the distinct spheres, in spite of their mutual dependence within the total process, and thereby respected their qualitative differences – dissolve. All becomes one [*Alles ist Eins*].<sup>33</sup>

While Adorno's vision of the totalitarianism of late capitalism seemingly leaves no space for opposition or resistance, and thereby leaves Marxism no basis for the revolutionary optimism or hope which is its hallmark, he nonetheless has grasped an important dimension of its historical trajectory.

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<sup>30</sup> Bloch 1986, p. 199.

<sup>31</sup> Marcuse 1966, p. 4. Marcuse's linkage of Auschwitz and Hiroshima has been seconded, and elaborated, in the work of his friend Günther Anders.

<sup>32</sup> Adorno 1979, p. 16, my emphasis.

<sup>33</sup> Adorno 1979, p. 369.

This vision of the totalitarian tendencies of late capitalism also shapes the work of Adorno's friend Herbert Marcuse, who, in his *One-Dimensional Man*, argued that science, technology, and rationality, all possessed a definite, capitalist, social content:

The principles of modern science were *a priori* structured in such a way that they could serve as conceptual instruments for a universe of self-propelling, productive control. . . . The scientific method which led to the ever-more-effective domination of nature thus came to provide the pure concepts as well as the instrumentalities for the ever-more-effective domination of man by man. . . . Today, domination perpetuates and extends itself not only through technology but *as* technology, and the latter provides the great legitimization of the expanding political power, which absorbs all spheres of culture. . . . Technological rationality thus protects rather than cancels the legitimacy of domination, and the instrumentalist horizon of reason opens on a rationally totalitarian society.<sup>34</sup>

This science, technology, and rationality, historically generated by capitalism, and inextricably linked to its social relations, and immanent tendencies – what Marcuse designates as ‘the Logos of technics’ – has, in late capitalism, ‘been made into the Logos of continued servitude’.<sup>35</sup> And this same Logos of technics constituted one of the preconditions for the unfolding of the project of industrialised mass murder in the Nazi death camps.

Günther Anders illuminates several of the other causal chains, whose interaction provided the necessary conditions for ‘the *transformation of humans into raw material [Rohstoff]*’ for the factories of death.<sup>36</sup> For Anders, the very technology generated by human beings, and brought to perfection within the framework of capitalism, risks rendering its creators – humankind – superfluous, obsolescent; this is the claim of Anders’s two-volume *magnum opus*, *The Obsolescence of Man [Die Antiquiertheit des Menschen]*. Not only have man’s own creations, technologies and their accompanying social relations, assumed a life of their own, become *things* which seem to escape human control, the phenomenon of reification, first adumbrated by Georg Lukács in his *History and Class Consciousness*, but – according to Anders – they now threaten the very annihilation of the human species itself. Thus:

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<sup>34</sup> Marcuse 1964, pp. 158–9.

<sup>35</sup> Marcuse 1964, p. 159.

<sup>36</sup> Anders 1986, p. 22.

What we constantly aim at is to bring about something that can function without our presence and help, tools by which we make ourselves superfluous, by which we eliminate and 'liquidate' ourselves. It doesn't matter that this goal has only been approximated. What matters is the tendency. And its watchword is: 'without us.'<sup>37</sup>

Indeed, for Anders, this tendency inexorably leads to an outcome in which technology becomes the subject of history. One feature of this impending 'obsolescence of man' as a result of his own technological prowess, according to Anders, is the new mode of human existence that it has wrought: being a means, 'mediality [*Medialität*]'.<sup>38</sup> This mode of existence is characterised by an extreme conformism, in which the human being executes her assigned tasks without question. This behaviour, so typical of a business office or state agency, reappears in Auschwitz, where '*the employee [Angestellte] of the death camp has not "acted" [gehandelt], but, as strange as it seems, done a job.*'<sup>39</sup> Action entails decision, thought, and conscience; doing a job, performing an assigned task, means asking no questions, especially about purpose or goal, demanding no reasons for the prescribed task, other than the order to do it. It is capitalism that generates this 'medial' existence, a mode of subjectivation integrally linked to an economy based on the law of value, and necessary for the appearance of the desk-killer, that essential functionary of the death-world.

These meditations on the totalitarian tendencies of late capitalism, on the integral links between science and domination, technology and annihilation, and the medial existence of contemporary humans, raise two important problems for the kind of Marxist theory that is adequate to the task of understanding the Holocaust. First, there is the possibility that Adorno and Anders, however prescient their analyses of certain determinate tendencies of capitalist social development may be, risk propounding a sort of negative teleology, in which the meaning or goal of history lies in totalitarianism or in nihilistic destruction. For example, such a negative teleology seems inherent in Anders's vision of technology as the subject of history, culminating in an '*Endzeit*' in which 'humanity as a whole is eliminatable [*tötbar*]'.<sup>40</sup> Such a vision appears to leave no room for a revolutionary alternative to capitalism;

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<sup>37</sup> Anders 1981, p. 199.

<sup>38</sup> Anders 1961, p. 287.

<sup>39</sup> Anders 1961, p. 291.

<sup>40</sup> Anders 1961, p. 243.

for the overthrow of a system based on the commodity-form and the law of value. Second, these meditations need to be connected to Marx's reflections on technology and automation, and his analysis of the transition from the formal to the real subsumption of labour under capital, reflections that did not directly shape the theoretical work of Adorno or Anders, and their analyses of late capitalism and its immanent tendencies. Indeed, I believe that the link between late capitalism and the death-world, requires a clear understanding of both the transition from the formal to the real domination of capital, and of the sharpening of the contradiction between value and 'real wealth', also adumbrated by Marx – developments that have transfigured the history of the twentieth century, and to which the Holocaust is linked.

### **From the formal to the real domination of capital**

Marx links the formal subsumption of labour under capital to the extraction of absolute surplus-value, whereas the real subsumption of labour under capital is linked to the extraction of relative surplus-value. This transition accompanies the whole history of capitalism, and, while the extraction of absolute surplus-value never ceases, an ever-greater reliance on the extraction of relative surplus-value asserts itself, and becomes increasingly dominant in the course of the twentieth century. With the formal domination of capital, the commodity-form and the law of value remain largely confined to the immediate point of production: the factory and the direct extraction of surplus-value. The real domination of capital, by contrast, is characterised by the penetration of the law of value into every segment of social existence. Thus, from its original locus at the point of production, the law of value has systematically spread its tentacles to incorporate not just the production of commodities, but their circulation and consumption too. Moreover, the law of value also penetrates and then comes to preside over the spheres of the political and ideological, including – besides the modes of subjectivation of human beings – science and technology themselves. This latter occurs not just through the transformation of technological and scientific research (and the institutions in which it takes place) into commodities, but especially through the infiltration of the value-form into reason itself (the triumph of a purely *instrumental* reason), and the reduction of all beings, nature and humans, to mere objects of manipulation and control. While the transition from the formal to the real domination of capital begins in the industrial metropolises

in the nineteenth century, its triumph, consolidation, and global spread, is a twentieth-century phenomenon.

While the transition from the formal to the real subsumption of labour under capital entails an increasing reliance on the fruits of science and technology to raise the productivity of labour, and thereby extract relative surplus-value, no matter how many changes occur in the forms and techniques of production, according to Marx, capitalism remains a mode of production whose 'presupposition is – and remains – the mass of direct labour time, the quantity of labour employed, as the determinant factor in the production of wealth'.<sup>41</sup> However, the historical trajectory of capitalism produces a growing contradiction between its unsurpassable basis in the expenditure of living labour to produce exchange-value, on the one hand, and the actual results of its own developmental tendencies on the other:

But to the degree that large industry develops, the creation of *real wealth* comes to depend less on labour time and on the amount of labour employed than on the power of the agencies set in motion during labour time, whose 'powerful effectiveness' is itself in turn out of all proportion to the direct labour time spent on their production, but depends rather on the general state of science and on the progress of technology, or the application of this science to production.<sup>42</sup>

This disjunction between exchange-value and 'real wealth', the former dependent on the direct expenditure of living labour, and the latter increasingly dependent on the overall productive power of society, and its cultural and technological development, creates the preconditions for the supersession of value production and the commodity-form. In Marx's words:

[a]s soon as labour in the direct form has ceased to be the great well-spring of wealth, labour time ceases and must cease to be its measure, and hence exchange-value [must cease to be the measure] of use value. The *surplus labour of the mass* has ceased to be the condition for the development of general wealth. . . .<sup>43</sup>

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<sup>41</sup> Marx 1973, p. 704.

<sup>42</sup> Marx 1973, pp. 704–5, my emphasis.

<sup>43</sup> Marx 1973, p. 705.

Therefore, when the perpetuation of value production, with its insurmountable basis in the extraction of surplus-value from living labour, has become an obstacle to the continued production of material wealth, capitalism as a mode of production and civilisation becomes the site of social *retrogression*. At that point in its historical trajectory, only a social revolution, the abolition of the law of value, and a qualitatively different science and technology, one no longer bound to instrumental reason, quantification, and the logos of domination, can prevent the catastrophes that the perpetuation of value production will entail. In the absence of such a social revolution, the continued existence of capitalism, bound as it is to the extraction of surplus-value from living labour, and yet confronted by the tendential fall in the rate of profit by the fact that the rate of growth of surplus-value tends to fall even as the level of surplus labour rises, compels it to *accelerate* the development of the productive forces and technology at an ever-more frenzied rate and tempo. Marx clearly grasped this imperative:

Thus the more developed capital already is, the more surplus labour it has created, the more terribly must it develop the productive force in order to realize itself in only smaller proportion, i.e. to add surplus value – because the barrier always remains the relation between the fractional part of the day which expresses *necessary labour*, and the entire working day. It can move only within these boundaries. The smaller already the fractional part falling to *necessary labour*, the greater the *surplus labour*, the less can any increase in productive force perceptibly diminish necessary labour; since the denominator has grown enormously. The self-realization of capital becomes more difficult to the extent that it has already been realized.<sup>44</sup>

However, this very contradiction increases the pressure on every capital entity, on every business, to expand the forces of production, develop and implement new technologies, increase its productivity, in a desperate attempt to escape the downward course in the average rate of profit, and to obtain a surplus-profit by producing commodities *below* their socially average value. Therefore, the faster the rate of profit falls, as a result of the rising organic composition of capital, i.e. the growth of the productive forces, the greater the pressure on each capital entity – nation or firm – to accelerate the development of those self-same productive forces in the endless quest to get a jump ahead of its competitors, and to grab a surplus-profit. One result of this frenetic

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<sup>44</sup> Marx 1973, p. 340.



growth of the productive forces in an epoch of social retrogression is the inevitable creation of a surplus population for which capital can find no profitable use.

### **Surplus population and mass murder**

While each stage of capitalist development entails demographic displacements, what typically occurs is a shift of labour-power from one sector to another, from agriculture, to industry, to tertiary sectors. While such shifts continue to occur as the transition from the formal to the real domination of capital takes place, a new and unprecedented development also makes its appearance when capitalism, as Marx shows, 'calls to life all the powers of science and nature, as of social combination and of social intercourse, in order to make the creation of wealth independent (relatively) of the labour time employed on it'.<sup>45</sup> The result is the tendential *ejection* of ever-larger masses of labour from the productive process; the creation of a population that from the point of view of capital is *superfluous*, no longer even potentially necessary to the creation of value, and indeed having become an insuperable burden for capital, a dead weight that it must bear, even at the expense of its profitability. The existence of such a surplus population – at the level of the total capital of a national entity – can create the conditions for mass murder, inserting the extermination of whole groups of people into the very 'logic' of capital, and through the complex interaction of multiple causal chains emerge as the policy of a capitalist state.

In the specific case of Nazi Germany, Götz Aly and Susanne Heim have argued that the extermination of the Jews was the first stage of a far-reaching demographic project in the service of economic modernisation. Germany's attempt to confront Anglo-American domination of the world market entailed the creation of a vast economic space [*Grossraumwirtschaft*], continental autarky for Europe, under German hegemony. But such a project was not simply based on geographical expansion; it also necessitated vast demographic changes, especially in Eastern Europe. There, the German planners, demographers, and economists, whose projects Aly and Heim have investigated, confronted a problem of economic backwardness linked to *overpopulation*.<sup>46</sup> A vast agricultural population, with small landholdings and

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<sup>45</sup> Marx 1973, p. 706.

<sup>46</sup> Aly and Heim 1993, pp. 102–24.

extremely low productivity, was a formidable obstacle both to German hopes for autarchy in food production for the European continent, and for industrial development, economic modernisation, in the East, so as to make the German economic space competitive with Anglo-American capital. The Jews in Eastern Europe, both as a largely urban population, and as the owners of small, unproductive businesses, constituted a particular obstacle to the migration of Slavs from the overpopulated countryside to the cities, such that their elimination was seen as a prerequisite for economic development. Moreover, for these planners, such processes of economic transformation could not be left to 'market forces' – which in England, the US, and in Western Europe, had taken generations – but, given the exigencies of imperialist competition and war, had to be undertaken by the state on the quick. The *Generalplan Ost*, within which the extermination of the Jews was the first stage, envisaged the elimination, by 'resettlement' (beyond the Urals), death by starvation and slave labour, or mass murder, of a surplus population of perhaps fifty million human beings.<sup>47</sup>

While emphasising the economic 'utilitarianism' and rationality of this project of mass murder, and ignoring the sadism and brutality of so much of the killing, Aly and Heim have nonetheless attempted to incorporate the role of biological racism into their analysis of the Holocaust:

[s]election according to racist criteria was not inconsistent with economic calculations; instead it was an integral element. Just as contemporary anthropologists, physicians and biologists considered ostracizing and exterminating supposedly 'inferior' people according to racist and achievement-related criteria to be a scientific method of improving humanity and 'improving the health of the body of the *Volk*', economists, agrarian experts, and environmental planners believed they had to work on 'improving the health of the social structure' in the underdeveloped regions of Europe.<sup>48</sup>

What seems to me to be missing in the work of Aly and Heim, is the link between racism and science constituted by their common source in a logos

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<sup>47</sup> Aly and Heim 1993, pp. 394–440.

<sup>48</sup> Heim and Aly 1994, p. 50. In addition to a tendency to a monocausal analysis of the Holocaust, based on utilitarian factors, only partially modified in this and subsequent texts, Aly and Heim fail to account for the primordial role of antisemitism, of fanatical Jew hatred, and of the *Rausch*, the orgy of bloodletting, in which so much of the killing was carried out.

of technics based on the absolute control of nature and humans, right down to the most elementary biological level of existence. And that logos, as I have argued, is the product of the spread of the capitalist law of value into the sphere of reason itself. However, Aly's and Heims's research, particularly if it is linked to the operation of the capitalist law of value, and treats the demographic problems that German planners confronted in Eastern Europe as a manifestation of the specific tendency of late capitalism to create a surplus population, can help us to grasp one of the causal chains that led to the gas chambers of Auschwitz.

### **Massification and the Nazi genocide**

If we are to understand the role played by fanatical antisemitism, and by the orgiastic character of so much of the killing, in the Final Solution, then, it seems to me, we must also grasp another causal chain linked to the immanent tendencies of late capitalism: that unleashed by the phenomenon of *massification*.

One of the most dramatic effects of the inexorable penetration of the law of value into every pore of social and individual existence has been the destruction of all primitive, organic, and precapitalist communities. Capitalism, as Marx and Engels pointed out in the *Communist Manifesto*, shatters the bonds of immemorial custom and tradition, replacing them with its exchange mechanism, and contract. The outcome is the phenomenon of atomisation, the subjectivation of the person as an individual monad, animated purely by self-interest. Moreover, that very tendency produces an ever-growing mass of rootless individuals, for whom the only human contact is by way of the cash nexus. But those who have been uprooted – geographically, economically, politically, and culturally – are frequently left with a powerful longing for their lost communities (even where those communities were hierarchically organised and based on inequality), for the certainties and 'truths' of the past, which are romanticised the more frustrating, unsatisfying, and insecure, the world shaped by capital has become.

These longings can take the form of the constitution of a *mass*. In a work written in 1939, Emil Lederer analysed the formation of the mass as one of the dominant features of the epoch. In contrast to a class, this is how he described it:

I understand by a mass or a crowd a great number of people who are inwardly united so that they feel and may possibly act as a unity. . . . The

individuals in a mass belong to different social groups, but that does not matter: they are not aware of it as long as they form part of the mass. Masses are therefore amorphous; social stratification is effaced or at least blurred. The point of unity for the individuals comprising a mass is always emotional. A crowd can be united only by emotions, never by reason: reason would be lost on the masses. . . .<sup>49</sup>

According to Lederer, 'usually the crowd will act only if there is a leader'.<sup>50</sup> And when the mass acts, its members

cease to think: they are moved, they are carried away, they are elated; they feel united with their fellow members in the crowd, released from all inhibitions. . . . Psychological descriptions of this phenomenon by individuals who have experienced it concur in this respect: they say they were 'carried away'; that they only felt; that it is similar to intoxication.<sup>51</sup>

What is missing in Lederer's account, however, is the connection of the phenomenon of massification to the developmental tendencies of late capitalism. Indeed, Lederer explicitly links the formation of the mass to the end of class society; for him, the 'state of the masses' arises on the ashes of capitalism, not as one of its possible political forms. I want to refunction Lederer's concept of massification by linking it directly to the trajectory of capitalism, and by showing how this phenomenon is connected to the orgiastic features of the Nazi genocide. It is the very longing for community that sociologically underlies the formation of the mass, a longing that the capitalist state under determinate conditions, such as those prevailing in Germany on the eve of Hitler's seizure of power, could utilise in the interests of a mass mobilisation – even as those same longings powerfully affected segments of the ruling class itself. In that sense, the Nazi vision of a 'racially pure community', a *Volksgemeinschaft*, was directly linked to the effects of capitalism's destruction of all genuine communal bonds, and to the void that it left in its wake. The powerful impact of such an ideology, its modes of subjectivation, and its deep roots, escaped the orthodox Marxist opponents of the Nazis, both Stalinist and Trotskyist, though they were clearly understood by Ernst Bloch.<sup>52</sup>

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<sup>49</sup> Lederer 1967, pp. 30–1.

<sup>50</sup> Lederer 1967, p. 39.

<sup>51</sup> Lederer 1967, pp. 32–3.

<sup>52</sup> See Bloch 1990, especially pp. 37–185, for an insightful analysis of this phenomenon, first written in the 1930s. While Bloch grasps the significance of this longing for

No matter how intense this longing for community may be, it cannot be satisfied so long as the law of value regulates social existence. The organic communities of the precapitalist past can be neither preserved nor recreated; their destruction is irreversible. Moreover, no new communities, no human *Gemeinwesen*, can be created within the historico-economic space occupied by capitalism. The condition of massification, spawned by the very development of capitalism itself, leaves only the prospect of a 'community' in which a racial, ethnic, or religious identification is merely superimposed on the existing conditions of wage-labour. Yet, as Lederer points out, this identification is necessary to the constitution of the crowd or the mass out of the multitude of a given population:

[t]hat a multitude can easily become a crowd must not obscure the fact that its members must be susceptible to the same emotions, which presupposes . . . that they speak the same language and share a common historical experience. Large numbers of people belonging to different nations and races are not likely to coalesce into what we call a crowd. The existence of a common cultural basis is very important.<sup>53</sup>

The formation of the mass both provides a substitute gratification for the genuine longing for community felt by the multitude of the population, and a basis upon which the ruling class can establish its hegemony.

However, the foundation upon which such a mass is constituted, the identity upon which the pure community is established, necessarily entails the exclusion of those who do not share the common historico-cultural bases of the mass. Those excluded, the Other, racial, ethnic, or religious minorities for example, though they inhabit the same territorial space as the mass, become alien elements within the putatively 'homogeneous' world of the pure community. The Other, the Jew within the Nazi *Volksgemeinschaft*, for example, then becomes the scapegoat for the inability of the pure community to provide real communal bonds between people, to eliminate the alienation generated by capitalism. The more crisis-ridden a society becomes, the greater the rage of the mass against alterity; the more urgent the need of the ruling class for a mobilisation of the crowd behind its projects (including war), the more imperious the necessity to channel anger onto the Other. Thus racism and xenophobia are

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community, and the success of the Nazis in mobilising it for their own purposes, he does not explicitly link it to the process of massification in late capitalism.

<sup>53</sup> Lederer 1967, p. 31.

inseparable from the constitution of the mass in late-capitalist society. In an extreme situation, that rage against alterity can become one of the bases for a genocidal project directed at the Other, whose very existence is seen and felt to be a mortal danger to the pure community.

One outcome of that rage against alterity can be seen in the orgiastic bloodletting that characterised so much of the killing during the Holocaust. One example, from the war diary of Felix Landau, a member of one of the *Einsatzkommando*, active in Lemberg in 1941, can serve as an illustration:

[t]here were hundreds of Jews walking along the street with blood pouring down their faces, holes in their heads, their hands broken and their eyes hanging out of their sockets. They were covered in blood. . . . We went to the citadel; there we saw things that few people have ever seen. At the entrance to the citadel there were soldiers standing guard. They were holding clubs as thick as a man's wrist and were lashing out and hitting anyone who crossed their path. The Jews were pouring out of the entrance. There were rows of Jews lying one on top of the other like pigs whimpering horribly. The Jews kept streaming out of the citadel completely covered in blood. We stopped and tried to see who was in charge of the Kommando. . . . Someone had let the Jews go. They were just being hit out of rage and hatred.<sup>54</sup>

The 'cold', rational, organisation of the factories of death and the transport networks that served them, administered by desk-killers like Adolf Eichmann, must be linked to the 'hot' rage and uncontrolled lust and aggression witnessed by Landau, in order to have a comprehensive picture of the unfolding of the Nazi genocide. The source of both these facets of the Holocaust, as I have argued, is to be found in the trajectory of late capitalism, and one vital task of Marxist theory is to expose the bases for this modern barbarism.

### **The *futural* dimension of the Holocaust**

The Holocaust opened a door into a death-world, and so long as capitalism exists that door will remain open. The horrors of the past decade, the genocide of the Tutsis in Rwanda, the concentration camps filled with starving prisoners, the mass rape of Muslim women, and the mass killings by beating and

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<sup>54</sup> Klee and Riess 1991, p. 91.

shooting of Muslim men and boys in Bosnia, the ethnic cleansing, first by Serbs and then by Albanians in Kosovo, the Russian army's reduction of Grozny to a pile of rubble, beneath which are buried tens of thousands of Chechen civilians, deliberately killed by the most sophisticated modern weapons, all bear witness to the fact that the death-world remains an objective-real possibility on the front of history. Alex Callinicos has argued, that

... the point of Holocaust commemoration is surely not only to acknowledge the suffering of the victims but also to help sustain a political consciousness that is on guard against any signs of the repetition of Nazi crimes.<sup>55</sup>

That political consciousness requires a recognition that key causal chains that came together to unleash the Nazi genocide, the logos of domination that shapes science and technology, the tendency to create a vast overpopulation, a multitude that cannot be profitably exploited by capital, the racism, and hatred for alterity, attendant on massification, are integrally linked to the trajectory of late capitalism, and decisively shape the contemporary socio-economic landscape. The narrative of the Holocaust cannot be written in the past tense, so long as the world created by the real domination of capital remains intact.

## References

- Adorno, Theodor 1978 [1951], *Minima Moralia: Reflections from Damaged Life*, London: New Left Books.
- Adorno, Theodor W. 1979, *Soziologische Schriften I*, Frankfurt am Main: Suhrkamp.
- Aly, Götz and Susanne Heim 1995, *Vordenker der Vernichtung: Auschwitz und die deutschen Pläne für eine neue europäische Ordnung*, Frankfurt am Main: Fischer Taschenbuch Verlag.
- Anders, Günther 1961, *Die Antiquiertheit des Menschen: Über die Seele im Zeitalter der zweiten industriellen Revolution*, Munich: Verlag C.H. Beck.
- Anders, Günther 1981 [1972], *Die atomare Drohung: Radikale Überlegungen*, Munich: Verlag C.H. Beck.
- Anders, Günther 1986, *Die Antiquiertheit des Menschen. Band II: Über die Zerstörung des Lebens im Zeitalter der dritten industriellen Revolution*, Munich: Verlag C.H. Beck.
- Benjamin, Walter 1968 [1955], *Illuminations*, New York: Harcourt, Brace & World, Inc.
- Bloch, Ernst 1975, *Experimentum Mundi: Frage, Kategorien des Herausbringens Praxis*, in Ernst Bloch, *Gesamtausgabe Band 15*, Frankfurt am Main: Suhrkamp.

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<sup>55</sup> Callinicos 2001, p. 386.

- Bloch, Ernst 1986 [1959], *The Principle of Hope*, Cambridge, MA.: MIT Press.
- Bloch, Ernst 1990 [1962], *Heritage of Our Times*, Berkeley: University of California Press.
- Callinicos, Alex 2001, 'Plumbing the Depths: Marxism and the Holocaust', *The Yale Journal of Criticism*, 14, 2: 385–414.
- Geras, Norman 1998, *The Contract of Mutual Indifference: Political Philosophy after the Holocaust*, London: Verso.
- Goldhagen, Daniel Jonah 1996, *Hitler's Willing Executioners: Ordinary Germans and the Holocaust*, New York: Alfred A. Knopf.
- Heim, Susanne and Götz Aly, 1994, 'The Holocaust and Population Policy: Remarks on the Decision on the "Final Solution"', *Yad Vashem Studies*, 24: 45–70.
- Klee, Ernst, Willi Dressen and Volker Riess (eds.) 1991 [1988], *The Good Old Days: The Holocaust as Seen by Its Perpetrators and Bystanders*, New York: Konecky & Konecky.
- Lederer, Emil 1967 [1940], *The State of the Masses: The Threat of the Classless Society*, New York: Howard Fertig.
- Mandel, Ernest 1986, *The Meaning of the Second World War*, London: Verso.
- Marcuse, Herbert 1964, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society*, Boston: Beacon Press.
- Marcuse, Herbert 1966 [1955], *Eros and Civilization: A Philosophical Inquiry into Freud*, Boston: Beacon Press.
- Marx, Karl 1973 [1939], *Grundrisse: Foundations of the Critique of Political Economy (Rough Draft)*, Harmondsworth: Penguin Books.
- Milchman, Alan and Alan Rosenberg 2003, 'The Need for Philosophy to Confront the Holocaust as a Transformational Event', *Dialogue and Universalism*, 13, 3–4: 65–80.
- Müller, Heiner 1991, *'Jenseits der Nation'*, Cologne: Rotbuch Verlag.
- Resnick, Stephen A. and Richard D. Wolff 1987, *Knowledge and Class: A Marxian Critique of Political Economy*, Chicago: University of Chicago Press.
- Traverso, Enzo 1995 [1992], *The Jews and Germany: From the 'Judeo-German Symbiosis' to the Memory of Auschwitz*, Lincoln: University of Nebraska Press.
- Traverso, Enzo 1997, *L'Histoire déchirée: Essai sur Auschwitz et les intellectuels*, Paris: Éditions du Cerf.
- Traverso, Enzo 1999, *Understanding the Nazi Genocide: Marxism after Auschwitz*, London: Pluto Press.
- Traverso, Enzo 2002, *La violence nazie, une généalogie européenne*, Paris: Éditions La Fabrique.



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