

ENGELS'S SECOND THEORY

Technology, Warfare and the Growth of the State

FRIEDRICH ENGELS famously spent his working life in the shadow of Karl Marx, a position he now occupies for posterity, and one in which he willingly placed himself.¹ Born in 1820 in the Rhineland town of Barmen, he left school a year before his *Abitur* on the say-so of his father and, as the eldest son, entered the family business. An autodidact, then, his encounter with Marx left him profoundly impressed by the systematic-philosophical brilliance of the young Hegelian, whom he hailed as a world thinker. By comparison, he himself was no more than, perhaps, a talent. Among the German philosophizing classes of the time, the type of speculative thinking at which Marx excelled was considered the highest form of scientific endeavour; Engels, who shared this outlook, may have seen his own contribution, grounded in positivism, as pedestrian by comparison. In the collaboration with Marx, he understood his role to be that of editor, reader, publisher, translator, publicist and hence also popularizer of Marxian (not Marxist-Engelsian) theory, making it comprehensible to the socialist movement for which it was intended. That the act of translation resulted at times in simplifications and reductive formulations was not only unavoidable but desirable, though the price to be paid for it was the still-lingering suspicion that Engels was incapable of greater complexity.

Yet Engels had genuinely remarkable achievements to his name—and not despite, but precisely because his temperament inclined him towards the actually existing world, to realities rather than abstractions. Alongside his extraordinarily wide-ranging scientific, literary, journalistic and political undertakings, Engels would become a successful industrial entrepreneur with many years of experience. This not only

enabled him to finance the slow progression of Marx's theoretical production, it also furnished him with an understanding of capitalism from within, unusual among its opponents. In his own way, Engels was more at home in the world than Marx, the philosophical political-economist—which helps to explain how he could emerge, while still very young, as one of the earliest empirical sociologists. Witness *The Condition of the Working Class in England*, with the subtitle 'According to My Own Opinions and Authentic Sources', composed during Engels's two-year stay in Manchester as a 24-year-old trainee at the local branch of his family's textile factory. Marx, whom Engels had sought out in Cologne in 1842 on his way to England, was deeply impressed by the book and declared that Engels had 'reached the same conclusion' as himself, but 'by a different path'—namely, that of empirical research.

So began a lifelong friendship and joint endeavour, which later produced, among other things, the *Communist Manifesto* of 1848, a milestone in the history of social-scientific theory and full of textual traces from Engels's book, as was the first volume of *Capital*, published two decades later. What we might call the worldliness of Engels's thought and research, his experience and his way of life, is also manifest in his virtually encyclopaedic intellectual output, driven by a hunger for facts that constantly sought out new themes, devouring entire libraries in his quest for the latest developments in knowledge. As an independent scholar he investigated the evolution of humankind, the historical anthropology of work, the origins of the family, early Christianity and German history, in particular the Peasant Wars, as well as taking on the emerging natural sciences in his *Dialectics of Nature*. While Marx could display a misanthropic streak, to put it mildly, the immediacy of Engels's access to the world was undoubtedly one reason why he was the more politically active of the two. For the most part it was he who maintained contact with the international socialist movements of the time; it must have helped that he could apparently speak twelve languages fluently and could get by in twenty more.

Theoretical supplement

I am nowhere near qualified to summarize the totality of Engels's scholarly output. With him, as with other great thinkers, one can return to

¹ Based on the plenary lecture at the International Engels Congress, University of Wuppertal, 19–21 February 2020. Translated by John-Baptiste Oduor.

his work again and again and always discover something new. As a macro-sociologist, with an interest in the driving forces that shape the development of complex contemporary societies, I have been struck by the extent to which Engels complemented the materialist conception of history, worked out (with his help) by Marx as a critique of nineteenth-century political economy, with something like a theory of the state and politics. While Engels himself understood his contribution to be a mere supplement to Marx's theory of historical materialism, I will argue that Engels can be considered the founder of an independent branch of materialist social theory, which contributed a much-needed expanded understanding of politics and the state.

What do I mean by 'something like a theory'? First, as far as the 'big picture' was concerned, Engels always relied on Marx's all-encompassing thought-system—partly because he trusted Marx for its development, but partly also, perhaps, by reason of his temperament as a researcher, which expressed itself in an insatiable and pre-systematic thirst for facts; facts that proved ever more resistant to systematization, the more of them he absorbed. Among the themes that attracted Engels's sustained attention was the development of the armed forces and the wars that accompanied the simultaneous rise of capitalism and the modern nation-state.² The connection of war and militarization to the political economy of the time, and to its future revolutionary overthrow, was far from clear, in part because of the elements of unpredictability already emphasized by Clausewitz—the contingencies and effects of 'relative autonomy' generated by the fog of war; the role of arms as, so to speak, a generator of historical accidents. Engels trained himself to become one of the leading military theorists of the time, a quirk that earned him the nickname of 'the General'. Later he would be considered a major authority on these matters, and not only for socialist military strategists like Lenin, Trotsky and Mao Zedong; later still, an embarrassment for the postwar socialists-turned-pacifists unwilling to recognize the strategic role of force in politics. His contribution in this field was due in

² Much of what follows is inspired by authors as different in perspective as Georg Fülberth and Herfried Münkler. See Georg Fülberth, *Friedrich Engels*, Köln 2018, and Herfried Münkler, 'Der gesellschaftliche Fortschritt und die Rolle der Gewalt: Friedrich Engels als Theoretiker des Krieges', in Samuel Salzborn, ed., '*... ins Museum der Altertümer*': *Staatstheorie und Staatskritik bei Friedrich Engels*, Baden-Baden 2012, pp. 81–104. See also Rüdiger Voigt, 'Militärtheoretiker des Proletariats? Friedrich Engels als Kritiker des preußischen Militärwesens', in Salzborn, ed., '*... ins Museum der Altertümer*', pp. 107–24.

part, I would argue, to a particular affinity between the nature of modern warfare in the context of capitalist development and Engels's readiness for undogmatic observation, which enabled him to lay the groundwork, at least, for a much-needed state-theoretical supplement to the political economy developed by Marx and himself.

It was not that Marx was uninterested in the wars of his time. For him, too, as a key passage in *Capital* put it, 'Force is the midwife of every old society pregnant with a new one.'³ At least until the 1880s, both Marx and Engels expected to see the end of capitalism in their own lifetimes, imagining peaceful transitions to be the exception. Where Engels had the advantage over Marx was in his practical experience, as a volunteer in the Prussian Artillery in Berlin 1841–42, as a participant in the 1849 Elberfeld uprising for the adoption of the Frankfurt Constitution, and in the swiftly repressed anti-Prussian rebellion of the Baden-Palatinate Army and the Baden Volkswehr—a painful defeat that remained with him for the rest of his life. Marx undoubtedly grasped the importance of this practice in military affairs and encouraged Engels to author a chapter on military history in the first volume of *Capital*. Engels agreed but, uncharacteristically, never delivered—an indication, perhaps, that his empirical material resisted subsumption into the commodity-fetish system of Marx's political economy.

This was not because the 'materialist conception of history' was economically determinist and therefore apolitical, as some might claim today. It's true that all the great social-scientific theories of the nineteenth century inclined towards determinist, even teleological, formulations, if only because they aimed to be ranked alongside the rising natural sciences. To the extent that these tendencies could be found in Marx's and Engels's work—and both thought that the path of history led ultimately in the direction of socialism—they were in good company. On the other hand, they differed from their contemporaries in that they were not only theorists of capitalist society but also practitioners of organized proletarian revolution; as such, they had to deploy the rhetoric of confidence in ultimate victory that is indispensable to a political movement but cannot always be reconciled with theory. Recall, too, that they both spent a good deal of time founding international workers' organizations and advising national ones, interrupting their more scholarly endeavours again and again to do so. Had their theory boiled down to the claim that

³ Karl Marx, *Capital: Volume I* [1867], trans. Ben Fowkes, London 1976, p. 916.

progress towards socialism would occur of its own accord, they could have spared themselves the effort. In fact, much of their attention from 1849 onwards was focused on political and military events, resulting in numerous journalistic and theoretical analyses. Once studies such as *The Eighteenth Brumaire*, *The Civil War in France*, and the long series of newspaper articles on the Crimean War and American Civil War are taken into account, it's clear that historical materialism grants historical agency a far larger and more systematically prominent place than most academic social science, of that time or since.

It is no surprise that Marx and Engels devoted so much thought to the conflicts of their time. As revolutionaries, the lessons that the inter-state wars of the present might hold for the class wars of the future and the overthrow of capitalism were vitally important for them. The experience of 1849 had cured Engels of any faith in improvised rebellions; those fighting for communism had to be the equals of their state and class opponents in terms of weaponry and discipline. In order to clarify what this meant, he set out to grasp precisely how capitalist-industrial developments were related to the rapid ongoing progress in military technology. Between 1861 and 1865, Marx and Engels followed every twist and turn in the American Civil War, which they identified correctly as the first modern war. Already in March 1862 they catalogued its novelties in one of their joint articles:

From whatever standpoint one regards it, the American Civil War presents a spectacle without parallel in the annals of military history. The vast extent of the disputed territory; the far-flung front of the lines of operation; the numerical strength of the hostile armies, the creation of which drew barely any support from a prior organizational basis; the fabulous costs of these armies; the manner of leading them and the general tactical and strategic principles in accordance with which the war is waged, are all new in the eyes of the European onlooker.⁴

At the end of the Civil War, nearly 700,000 lay dead on the battlefields or in the prison camps. Six years later, between March and May 1871, Marx and Engels watched the rise and fall of the Paris Commune: the rebellion of a section of the Parisian population against both the Prussian occupation and their own government, after its defeat in the Franco-Prussian War of 1870–71. In the crushing of the Commune and

⁴ Marx and Engels, 'The American Civil War', *Die Presse*, 26 March 1862, in *Marx-Engels Collected Works: Volume 19*, London 1980, p. 186; henceforward, *MECW*.

the mass executions that followed, some 30,000 people lost their lives; government forces numbered 900 dead.⁵

For Marx and Engels then, it was clear that the path to socialism would involve the collective use of force. But where did the class struggle between labour and capital fit in a world of professionalized militaries equipped like those of the Unionists and Confederates, or the rising power of Prussia—not to mention the armies of the future? Marx and Engels seem to have tested out different solutions to this strategic riddle. At times they would back the capitalist state that appeared the most advanced from a world-historical perspective. For a while this was Germany in relation to France, at least under Louis Napoleon's Second Empire; and Tsarist Russia was always the land of 'Asiatic modes of production', the bulwark of reaction against which German progress must be defended if necessary. They also experimented with reductionist prognoses: the military strength of a state depended on its level of industrial development, therefore progressive states with societies ripe for socialism would defeat less developed ones.

A capitalist mode of destruction?

Gradually, however, and especially after Marx's death, a more nuanced approach prevailed, based on Engels's observation of two developments: first, the strengthening of states *vis-à-vis* their societies, through monopolistic possession of modern means of extermination; and second, the internal dynamics of military-technological advance, which resulted in the formation of a social mode of extermination distinct from the social mode of production, with its own dynamics of development complementing that of capitalism. Together, these two developments provide an explanation for what I will call the hypertrophy of the modern state in the twentieth century. Here, I will argue, Engels sketched out something that was not just 'like a theory', but which actually constituted the beginnings of a complementary theory of social development, analogous and

⁵ During the Vietnam War, an estimated 58,000 Americans lost their lives on Vietnamese soil, one fifth of these in friendly fire or non-combat activities (the figure roughly corresponds to the annual number of traffic deaths in the US during the 1960s). The insurgent and civilian losses on the Vietnamese side are harder to calculate because of the US's blanket use of destructive technologies. Estimates range from 3 million to 6 million—a 'kill ratio' of between 1:50 and 1:100, compared to 1:33 for the Paris Commune. The results of technological progress here are obvious.

parallel to Marx's economic theory; taken together, they provide a more realistic historical-materialist theory of capitalist society.

Let me begin with the technological aspect. The critique of historical materialism's alleged determinism comes in two versions: technological and economic. The *locus classicus* for the technological version is a famous passage from *The Poverty of Philosophy*:

Social relations are closely bound up with productive forces. In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations. *The hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist.*⁶

This was written not by Engels but by Marx himself, as early as 1847. 'Closely bound up with' (*eng verknüpft mit*) does not mean 'determined by', even if the metaphorically exaggerated final sentence, often torn from its context, has a deterministic ring. The very claim, however, that technological progress in the vulgar-utilitarian manufacturing plant—observable daily by a factory owner's son like Engels—should condition the progress of humankind must have seemed a provocation to the Hegelian idealists of the time; indeed, that was no doubt the intention. This is not the place to track how the theory of the transition from hand-mill to steam-mill and its relation to forms of social power was subsequently elaborated, in the direction of 'closely linked' (*eng verknüpft*) or of 'yielding' or 'producing' (*ergibt*); or, perhaps, of both. All that needs to be noted here is the central role that the development of technology played from the start in the historical-materialist thought of Marx, as well as Engels.

In 1855, at the height of the Crimean War, Engels produced an extensively researched overview of the development of armaments in all European states.⁷ As an industrialist, he found it useful not only to compare the progress of the destructive technologies of the time with that of the productive technologies, but to consider their inter-relationship. One question was whether military technology benefited more from civilian technology or vice versa—which of the two led the other. From a political-economic

⁶ Marx, *The Poverty of Philosophy* [1847], in *MECW: Volume 6*, p. 166.

⁷ See Engels, 'The Armies of Europe', published in three instalments in the American review *Putnam's Monthly* in August, September and December 1855: *MECW: Volume 14*, pp. 401–59.

perspective, military technology could be no more than a by-product of its civilian counterpart. But couldn't industrial mass production, based on standardized components—the essential prerequisite for what would become the 'Fordist' mode of production—be traced back to a certain Samuel Colt, whose invention allowed him to deliver 130,000 revolvers to the Northern states in the Civil War? Even more relevant for historical materialism was the question of whether, analogizing from the development of the means of production, the progress from hand-mill to steam-mill, one should postulate the 'relatively autonomous' development of what we might call the means of destruction—the replacement of the sword by the machine gun—as a second, parallel strand of historical development, entangled with the first but not identical to it.

Crowns rolling in the gutter

Who is destroying whom in the technologically revolutionized relations of destruction developed by modern industrial societies? Engels's reflections on warfare indicate that what he increasingly considered important was that the main beneficiary of military progress in the trinity of society-economy-state was the state. Only states had the resources to acquire the new, large-scale and centralized means of destruction and to build and maintain the labour forces, known as 'armies', required for their deployment. With this, however, the weight of the state relative to its economy and society inevitably grew beyond the role allocated to it by mid-nineteenth century political-economic theory—making the state decidedly more than a mere 'committee for managing the affairs of the bourgeoisie',⁸ or a 'superstructure' of the capitalist mode of production. The sheer scale of the new, state-owned powers of destruction was bound to unleash a competition between states that was additional to the rivalry between emerging monopolies and cartels in the capitalist economies—a competition *sui generis* for ever-more terrifying capacities for extermination, which to the societies involved could appear far more dangerous than the periodic crises caused by economic competition.

Under these conditions, was the successful revolutionary deployment of force to liberate society from the plague of capitalism a realistic prospect? Towards the end of his life, Engels seems to have felt compelled to smuggle the class war for socialism into the 'world war of a hitherto

⁸ Marx and Engels, *Manifesto of the Communist Party* [1848], in *MECW: Volume 6*, p. 486.

unprecedented expansion and violence' which he so presciently foresaw on the horizon; his detailed knowledge of the arms race then underway left him in no doubt as to its scale. In 1887, nearly three decades before the onset of World War One, he wrote:

Eight to ten million soldiers will be at each other's throats and in the process, they will strip Europe barer than a swarm of locusts. The depredations of the Thirty Years' War compressed into three to four years and extended over the entire continent; famine, disease, the universal lapse into barbarism, both of the armies and the people, in the wake of acute misery; irretrievable dislocation of our artificial system of trade, industry and credit, ending in universal bankruptcy; collapse of the old states and their conventional political wisdom to the point where crowns will roll into the gutters by the dozen, and no one will be around to pick them up; the absolute impossibility of foreseeing how it will all end and who will emerge as victor from the battle . . . That is the prospect for the moment when the systematic development of mutual one-upmanship in armaments reaches its climax and finally brings forth its inevitable fruits.⁹

The latest estimates are that 9.5 million died during a war unlike any seen before. For Engels, however, not even an event of this monstrous magnitude could bring the dialectic of history's advance towards socialism to a standstill. At the end of the coming world war, he proclaimed, with that mixture of prediction and battle cry so characteristic of the early socialists, stood nothing other than the victory of the international working class:

Only one consequence is absolutely certain: universal exhaustion and the creation of the conditions for the ultimate victory of the working class. This is the pass, my worthy princes and statesmen, to which you in your wisdom have brought our ancient Europe. And when no alternative is left to you but to strike up the last dance of war—that will be no skin off our noses. The war may push us into the background for a while, it may wrest many a conquered base from our hands. But once you have unleashed the forces you will be unable to restrain, things can take their course: by the end of the tragedy you will be ruined and the victory of the proletariat will either have already been achieved or else will be inevitable.¹⁰

This was not wholly unrealistic, as the revolutionary wave of 1917–19 would later testify. Engels's claim was that, in the wake of the forthcoming

⁹ Engels, 'Introduction to Sigismund Borkheim's pamphlet *In Memory of the German Blood-and-Thunder Patriots, 1806–1807*' [1887], in *MECW: Volume 26*, p. 451.

¹⁰ Engels, 'Introduction to Sigismund Borkheim's pamphlet'.

world war, the armed working classes of the then devastated countries would turn against their class enemies and, in a popular uprising, finally overthrow capitalism. After 1918 he could have pointed to the swathe of democratic reforms won in many countries—universal suffrage, trade-union rights, collective bargaining—as well as to the Russian Revolution, which was certainly assisted by the strategic operations of the German General Staff. As Engels understood, war waged as national struggle with conscript armies could serve to strengthen the working class in both the defeated and the victorious countries; the same was true initially after 1945.

Inter-state dimensions

If in the end capitalism remained largely intact, this was not solely due to the domestic balance of forces. As early as 1918, the internal order of the emerging nation-states had come to depend in part upon their international military position. On seizing power, the Bolshevik government immediately had to construct its own regular state military—the Red Army, under Trotsky's command—to defend itself in a 'civil war' that was in fact primarily a foreign invasion. Engels would not have been surprised. In Germany, the social-democratic legal scholar Hugo Sinzheimer, founding father of German labour law and Frankfurt's provisional police chief during the uprising of November 1918, warned a mass rally not to fight for a soviet republic—a *Rätorepublik*—straight away, as this would inevitably, as in Russia, call forth an invasion by Western Allied forces. Elected eighteen months later to the Constituent Assembly, Sinzheimer was one of the drafters of the Works Council Article of the Weimar Constitution.

Historical research has shown that the European powers' ruling circles expected the war on which they embarked in the summer of 1914 to be, like the skirmishes that preceded it, of short duration. Engels knew better, perhaps because he was among the few who properly understood the destructive power accumulated in the arsenals of the now fully industrialized nation-states. If not only capitalist relations of production but also inter-state relations of destruction persisted after 1918—if, in other words, states succeeded rather quickly in re-organizing their societies around national identities, whether by granting concessions to the working classes, by repressively incorporating them, or both—this was partly because in the industrial era, a well-armed enemy state can

inflict more damage on a society than any endogenous economic crisis. The foreign state appeared more dangerous than domestic capital. No socialist revolution could protect you from it, but only a domestic army, just as the nineteenth-century Prussian Army had protected the German states from the Tsarist threat. For this reason the threat of international war blocked the path of class war: domestic relations of production were shored up by inter-state relations of force; class wars risked the danger of national defeat in state wars; and domestic elites could proclaim themselves the protectors of their peoples against other peoples' means of destruction, proclaim the nation to be one great family—men protecting their mothers, wives and children—and make the distribution of the national means of production seem secondary to their defence.

Not that class war disappeared completely. After 1918 a new configuration of states and classes began to emerge out of inter-state and inter-class conflict, once again shaped by the character and distribution of the modern means of destruction. Original class theory could offer little here by way of explanation. Engels's late work, I suggest, took the state and its potential for violence seriously, without being able or willing to incorporate it systematically within the framework of a 'materialist conception of history', conceived as a political economy that began from an analysis of commodity fetishism. Following the emergence of the Russian Revolution from the First World War, a more or less stable projection of class conflict onto the state system emerged in the confrontation between the state-socialist Soviet Union and the capitalist states of 'the West', in particular the US and UK as ascending and descending hegemonic capitalist powers.

With time, a division of labour emerged within the Soviet Union between the state—which, as a state among states, had to rely for its security on a professional army and on regular international diplomacy—and the Party as a world-revolutionary force, intervening in the internal affairs of other countries through its Comintern agents and its national sister parties, which swiftly became dependencies of the CPSU and instruments of the Soviet state. The contradictions that Stalin's foreign policy entailed at home and abroad cannot be dealt with here. It is enough to note the bloody purge of the officer corps in 1938 to secure Party control over the armed forces in the face of looming war with the Third Reich and, relatedly, the Hitler–Stalin Pact in the run-up to the Second World War. This was to be a war between three versions of modern industrial society—

capitalism, fascism, communism—all upheld by nation-states armed to the teeth with the latest technologies of destruction; the socialist Soviet Union perhaps to a slightly lesser extent than the capitalist powers.

The hypertrophy of states in the twentieth century is a result of the ever-deadlier means of extermination at their disposal, which reached their historical highpoint in the atomic age that opened in 1945. After the US invention of the nuclear bomb, its replication under Stalin made the USSR the second of the two global superpowers. For a time, this most deadly of all means of destruction compelled both sides to live with each other, dividing the world between them. Under the banner of ‘peaceful coexistence’, the US and the Soviet Union attempted to undermine each other’s domestic order while studiously avoiding resort to their continuously upgraded means of mutually assured destruction—a systemic rivalry dressed up as a class struggle between states: between the peoples of labour and the peoples of capital, nationally united through democracy or dictatorship, or a mixture of the two.

Just as class conflict became international conflict after 1918, so after 1945 international conflict shaped class conflict, as both sides suppressed their domestic class-political opposition, treating it as a fifth column of the enemy state. In Washington and Moscow, foreign policy in the shadow of the bomb served to defend and propagate competing forms of social organization, reflecting the fronts of nineteenth-century class conflict, and to mobilize ‘class brothers’ in the rest of the world in the interests of their own state blocs. During the Cold War, the US managed, more or less, to eliminate the communist-sympathizing opponents of its system both at home and in the lands of the US imperium, while by the 1980s the USSR had begun to disintegrate under the pressure of its pro-Western, and therefore pro-capitalist, opposition.

Merchants and mercenaries

Engels can thus be seen as opening an additional line of historical-materialist research, in which the means of destruction exist alongside the means of production, and state formation frames and overlaps with class formation—a line that does better justice to the realities of the bloody twentieth century than a production-centric theory of history. The narrative suggested here could be continued through categories already found in Engels: technological progress as a driving force of

political and societal development and of the liberation of state politics from its theoretical subordination to the economy, as a result of states' control over the modern means of extermination. By the late twentieth century, the horizons of technological development were to be found not so much in the private sector of the economy as in armaments programmes. This was particularly the case in the world's most powerful state, the US: from air and space travel to the so-called 'peaceful use of nuclear energy', up to the micro-electronic IT advances revolutionizing the capitalist economy today.

As for political history, one could point to Reagan's plan to out-arm the Soviet Union through the Star Wars programme; the 'globalization' of American military power after 1989, only put into question thirty years later by the breakneck development of the means of both production and destruction in China; the disintegration of national liberation movements on the periphery, in face of their hopeless military inferiority, and their replacement by religious-fundamentalist movements, whose followers don't mind losing their lives in pursuit of millenarian goals. In so far as we are permitted to be spectators, we are currently observing a further radical transformation through new micro-electronic forces of destruction, which enable unlimited spying on actual and potential opponents, and—with the use of drones—their individual elimination. The social organization of this labour of extermination corresponds to the re-privatization of a large swathe of warfare: the outsourcing of death missions to private companies, who now master and develop the new technologies better and more cost-effectively; and the replacement of the conscript citizen-soldiers of European and American modernity by professionalized special services—the replacement, if you like, of the standing army by a flexibly adjustable posse of hi-tech merchants and mercenaries of death.

These dramatic consequences for the structures and functions of the modern state would have been a matter of keen interest to Engels, even if they did not fit easily into the early version of the materialist conception of history, most prominently expressed in the first chapters of *Capital*. The personalized extermination of individual enemies by drones and special ops, networked through advanced information technology, largely relieves regimes of the need to mobilize consent on the home front for military operations far away: no one has to be forced to participate, to risk their life for their state, and the number of Western

military casualties is reduced. Moreover, with improved technology, even collateral damage can be limited, and the War on Terror—a new interface of extermination, police and social work—if it is to be won, cannot be publicly spoken of anyway. (If, in the not so distant future, robots were pitted against robots—Tesla drones against Huawei drones, for example—the battle would no doubt be screened as entertainment.)

Similarly, the problem of state-building in the country of a defeated enemy, as in Japan and Germany after 1945, might also become obsolete. As Iraq and Afghanistan have shown, state-wrecking can suffice—failed states or no states are perfectly tolerable for the victors, so long as a militarily subjugated population can be prevented from organizing itself as a collective subject, through individual surveillance and selective elimination. Consider, for example, the type of warfare revealed in the letter to the Israeli Prime Minister from 43 officers and soldiers of the elite Secret Service Unit 8200, announcing their refusal to continue to serve:

The Palestinian population under military rule is completely exposed to espionage and surveillance by Israeli intelligence . . . Information that is collected and stored . . . is used for political persecution and to create divisions within Palestinian society by recruiting collaborators and driving parts of Palestinian society against itself . . . Intelligence allows for the continued control over millions of people through thorough and intrusive supervision and invasion in most areas of life.¹¹

Protest of this kind is more important than ever. But it is different indeed to the nineteenth-century soldiers' uprising that Engels and the early socialists hoped for, when the participants would turn their weapons on their native class enemy. Can a computer server be turned against the ruling class?

¹¹ Peter Beaumont, 'Israeli intelligence veterans refuse to serve in Palestinian territories', *Guardian*, 12 September 2014. During the Israeli security forces' 'Operation Cast Lead' in the Gaza Strip between 27 December 2008 and 18 January 2009, there were six Israeli casualties and 1,398 Palestinian, a ratio of 1:233.