
Antimodernism, Reactionary

Modernism and National

Socialism. Technocratic

Tendencies in Germany,

1890–1945

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Since the ‘classical’ studies of Fritz Stern, Kurt Sontheimer and George Mosse¹ the view has been wide-spread among historians that a uniquely German tradition of romantic ‘völkish thinking’ and ‘the politics of cultural despair’ contributed to the destruction of the Weimar Republic and the rise of National Socialism. The psychological strain of a fast and crisis-ridden industrialisation process is supposed to have provoked an antimodern sentiment in large parts of the population. The critique of modern technology, capitalism and a pluralistic society on the one hand and the irrational dream of a harmonious, truly German ‘community of the people’ on the other allegedly reached its logical culmination in the Nazi ideology of ‘blood and soil’, the cult of the charismatic leader and the totalitarian integration of all ‘worthy’ members of society, connected with the annihilation of all ‘unworthy’ members.

But this belief in a peculiarly German antimodernism reaching its climax in National Socialism had to raise the question of how, if they had rejected modern means, the Nazis could have achieved political propaganda successes, economic recovery, the mobilisation of society and spectacular military victories or indeed terror and mass extermination. One influential answer to this is Jeffrey Herf’s concept of ‘reactionary modernism’ which identifies the ‘reconciliation between the antimodernist, romantic, and irrationalist ideas’ and ‘modern technology’ as peculiar to the radical right in the Weimar Republic and National Socialism. In

¹ Fritz Stern, *The Politics of Cultural Despair. A Study in the Rise of the Germanic Ideology* (1961); 2nd edn. with a new preface, Berkeley: University of California Press, 1974); Kurt Sontheimer, *Antidemokratisches Denken in der Weimarer Republik. Die politischen Ideen des deutschen Nationalismus zwischen 1918 und 1933*, 2nd edn. (Munich: DTV, 1983); George L. Mosse, *The Crisis of German Ideology. Intellectual Origins of the Third Reich*, 2nd edn. (New York: Schocken Books, 1981). See also Georg Lukács, *Die Zerstörung der Vernunft* (Neuwied and Berlin: Luchterhand, 1962) and the later summary of the arguments in Henry J. Turner, ‘Fascism and Modernisation’, in *Reappraisals in Fascism*, Henry J. Turner, ed. (New York: New View Points 1975), 117–39.

combining 'political reaction with technological advance' they 'turned the romantic anticapitalism of the German right away from backward-looking pastoralism, pointing instead to the outlines of a beautiful new order'. According to Herf, this contradictory combination of reactionary political ideas and a modern reliance on instrumental reason and modern means made Nazism possible.²

In this article I want to put forward a critique of the concepts 'antimodernism' and 'reactionary modernism'.³ First I will attempt to show that a conservative acceptance of technology is not specific to the Weimar Republic, but was already dominant in imperial Germany. But, secondly, one has to agree with Herf on stressing the importance of the First World War for initiating a change in attitude towards a belief that the state has to accept responsibility for the running of the economy and large technological systems. This emergence of an ideology of technocratic planning will be exemplified by looking at two people who expressed these tendencies at length and with exceptional clarity: Walther Rathenau and Ernst Jünger. This concentration on a couple of figures to illustrate a more general trend of the time is obviously problematic and provokes the legitimate question of their representativeness (even though they were undoubtedly very influential in their time). But as the article is mainly concerned with critically evaluating theories of historians which causally link intellectuals and the reality of the Third Reich, the procedure seems appropriate for the task at hand. Nevertheless, it should be seen simply as a device enabling me to deal with a broad topic in the limited space of an article.⁴

After establishing the main features of the new attitude towards technology emerging after the First World War and shaping the thinking of the new right in the Weimar Republic, it will then be, thirdly, compared with the National Socialists' attitude. I will try to show that the Third Reich, while largely accepting technology, was much less technocratically oriented than the 'modernists' of the Weimar Republic. Avoiding any kind of purism, their pragmatic and often inconsistent use of technology is closer to the traditional attitude of the nineteenth century than to Ernst Jünger's enthusiastic embrace of technology in all its systemic consequences.

In concluding, I will reflect on the impact of my analysis on the concepts of 'antimodernism' and 'reactionary modernism'.

² Jeffrey Herf, *Reactionary Modernism* (New York: Cambridge University Press, 1984), pp. 1 f. See also the more recent restatement of his theory in 'Der nationalsozialistische Technikdiskurs. Die deutschen Eigenheiten des reaktionären Modernismus', in Wolfgang Emmerich and Carl Wege, eds., *Der Technikdiskurs in der Hitler-Stalin-Ära* (Stuttgart: Metzler, 1995), 72–93.

³ While many social theorists have become convinced that National Socialism is a modern phenomenon, the belief in its antimodern character is still widespread among historians. See for example 'Technik', in Wolfgang Benz et al., eds., *Enzyklopädie des Nationalsozialismus*, (Munich: DTV, 1997).

⁴ My new book, *Einer andere Moderne? Zivilisationskritik, Natur und Technik in Deutschland, 1880–1933*, (Paderborn: Schoenigh, 1999) deals at length with social movements expressing these technocratic tendencies.

I

The combination of a reactionary political orientation and a fully-fledged acceptance of technology can strike one as ‘paradoxical’⁵ only if one believes with Jeffrey Herf that technology is normally accepted by liberals, democrats or socialists and rejected by reactionaries. This assumption has some plausibility, if we take reaction to mean the political attempt to turn back the clock and restore a past society. But since neither the radical right in the Weimar Republic nor National Socialism harked back to a previous epoch, we have to interpret the term ‘reactionary’ in this context more loosely as authoritarian and right-wing. Can we really say that these political groups tend to have a problem with instrumental reason and technology?

It only takes a cursory glance at developing countries in the past and present to realise that anti-democratic and anti-liberal authoritarianism frequently goes together with efforts towards technological modernisation. This is also the case in regard to imperial Germany, where technological progress was largely accepted. Most of those social groups and individuals which were denounced as Luddites and enemies of progress both by progressive liberals of the time⁶ and by later historians, did not reject technology as such, but only particular aspects of technological development which threatened their material existence.⁷ The largest agrarian interest group ‘Bund der Landwirte’ did not fight industrialisation as a whole, but aimed for an ‘agrarian *and* industrial state’;⁸ the leader of the Pan-Germans, Heinrich Class, warned of the dangers connected with ruthless industrialisation, but in principle accepted its ‘necessity’;⁹ and scientists, stressing the need of a large rural population to keep up a high birth-rate, accepted that parts of the population surplus had to migrate into the cities to keep up industrial production.¹⁰ The military did not reject modern means, but accepted technological change on an unprecedented scale. New line-of-battle ships and submarines, smokeless gun-

⁵ Herf claims: ‘It is paradoxical to reject the Enlightenment and embrace technology at the same time.’ ‘With the exception of the reactionary modernists, those who rejected the Enlightenment and its legacy rejected technology, whereas those who defended the Enlightenment accepted the need for technical development’ (Herf, *Reactionary Modernism*, 3, 42).

⁶ For example J. Wernicke, *Der Kampf um den wirtschaftlichen Fortschritt* (Jena: Gustav-Fischer Verlag, 1910). In the following I will keep the references to a minimum, as this will be dealt with in detail in my forthcoming book (see footnote 4).

⁷ Agriculture, for example, used romantic notions to gain support in their fight for protective tariffs, but they simultaneously increased their production in the German empire by 73% and their productivity by 40% (H.-U. Wehler, *Deutsche Gesellschaftsgeschichte 1849–1914* (Munich: Beck, 1996), 1266, 685 f.). For the reaction of craftsmen see W. König, ‘Massenproduktion und Technikkonsum. Entwicklungslinien und Triebkräfte der Technik zwischen 1880 und 1914’, in *Propyläen Technikgeschichte*, Vol. 4, ed. Wolfgang König (Berlin: Propyläen, 1990), 263–552, at 547.

⁸ So the official voice of the BdL as quoted in Jens Flemming, *Landwirtschaftliche Interessen und Demokratie. Ländliche Gesellschaft, Agrarverbände und Staat 1890–1925* (Bonn: Verlag Neue Gesellschaft, 1978), 38 (emphasis in original). All quotations are translated by me.

⁹ Daniel Frymann [that is Heinrich Class], *Wenn ich der Kaiser wär’ – Politische Wahrheiten und Notwendigkeiten*, 5th edn., (Leipzig: Dieterichsche Verlagsbuchhandlung, 1914), 127.

¹⁰ See for example Otto Ammon, *Die Bedeutung des Bauernstandes für den Staat und die Gesellschaft*, 2nd edn., (Berlin: Frundsberg, 1906 [1894]), 36 f., 24 f.

powder whose strength was increased threefold, better rifles and cannons, new means of communication such as wireless telegraph and telephone, revolutionary means of transport such as cars, lorries, airships and aircraft, all signified a dramatic technological shift.¹¹ The educated middle class, which has often been blamed for its rejection of modernity,¹² accepted technology to a large extent. In Sunday speeches they stressed the importance of the ‘spiritual’ in contrast to the vulgar ‘material’, but in everyday life they ‘obviously needed engineers’ and industry and were quite conscious of this.¹³ Even the youth movement, which is often cited as a prime example of a flight away from the industrial present, did not want to turn away from modernity. They enjoyed their hiking and appreciated nature, but they explicitly rejected the ‘nature enthusiasm of the eighteenth century’ and Rousseau’s ‘return to nature’¹⁴ and visited large cities and industrial sites on their tours through the country.¹⁵ And, as I have tried to show elsewhere,¹⁶ even critics of civilisation did not reject technology completely, but tried to find ways to use it in accordance with their ideas of a natural and cultured society.

II

People realised the importance of technology before 1914, but the First World War nevertheless came as a shock because it fundamentally questioned the widespread belief that technology was an occasionally difficult but potentially obedient servant of humanity. Not only the common soldiers in combat felt the overwhelming power of modern weapons, but so also did the military and political leadership, who were forced to change all of their plans to adapt to the realities of industrial and technological warfare. Strategies had to take account of the superiority of means of defence, and the long duration of the war, combined with the increased demand for military material, forced all belligerent nations to mobilise every sector of society. War was no longer a matter solely of the military sector as scientific achievements,¹⁷ the potential for industrial production and the mental preparedness for war were at

¹¹ If the military was sceptical about new technologies, it was largely because they could not see its potential and were afraid of investing in a flop. But problems and mistakes in evaluating new technology should not be confused with a general scepticism about new technology.

¹² Most influential is Fritz Ringer, *The Decline of the German Mandarins* (Cambridge, MA: Harvard University Press, 1969).

¹³ Friedrich Dessauer, *Streit um die Technik* (Frankfurt/M.: Verlag Josef Knecht, 1956), 24.

¹⁴ Quoted in Jakob Müller, *Die Jugendbewegung als deutsche Hauptrichtung neukonservativer Reform* (Zürich: Europa Verlag, 1971), 35. On their longer trips some groups even visited cities and factories and they all used trains and modern equipment without any hesitation.

¹⁵ Hermann Hoffmann quoted in Wolfgang Sauer, ‘Der Mythos des Naturerlebnisses in der Jugendbewegung’, in Joachim H. Knoll and Julius H. Schoeps, eds., *Typisch deutsch: Die Jugendbewegung. Beiträge zu einer Phänomenengeschichte* (Opladen: Leske & Budrich, 1988), 55–70, at 60.

¹⁶ Th. Rohkrämer, ‘Formen der konservativen Technikkritik in Deutschland 1890–1933’, in *Humanismus und Technik, Jahrbuch 1994*, Vol. 38 (Berlin, 1995), 18–34.

¹⁷ The most striking example was the artificial production of nitrogen, a technique which was only discovered shortly before the war. As nitrogen, which had been largely imported before 1914, was essential for the production of fertilisers and explosives, Britain’s naval blockade might well have led to a quick Allied victory, if science and technology had not provided a way to produce it artificially.

least as important for success as the armed forces themselves. These developments seriously questioned previous hopes by the German empire to subordinate modern means to traditional forms and ideals. The pressure to attempt total mobilisation in modern warfare forced nations to accept the industrial and technological logic unreservedly, that is to say, with all the often unwanted consequences a strong focus on efficiency implied.

A good example of the change of attitude in leading circles is Walther Rathenau.¹⁸ He was a leading protagonist in the new electrical industry and also showed ambitions in the political sphere. In 1914 he was put in charge of organising the change from a peacetime to a war economy. Although Rathenau only stayed in office until he had implemented an organisational structure, he unquestionably played a crucial role in preparing Germany for a longer war by establishing public control over the commercial use of scarce raw materials. In enabling the economy to cope with the trade blockade, his organisation made Germany's war effort sustainable over a longer period of time.

Rathenau was not only a leading man in the practical world, but also a prominent critic of modern civilisation. In his numerous pre-war publications he lamented the destruction of historic buildings, the decline of artistic production and even the replacement of a courageous and honourable nobility by a more pragmatic, positivistic and materialistic propertied middle class.¹⁹ While Rathenau accepted what he called 'mechanisation' (that is modern technology, instrumental reason and the drive for efficiency), regarding technological development as necessary to feed a growing population, he attacked the concomitant cultural and social developments of modern societies. His hope and belief was that the human soul could overcome these shortcomings in the future by replacing the motivation of material egoism in the economy by a motivation through love, respect for others and a sense of duty towards society. Not different institutions or material changes, but a different attitude (service to the nation instead of capitalist competition) would make it possible to realise a higher form of existence combining the achievements of technology with a renewed emphasis on moral values, a just and humane society, artistic productivity and a harmonious national culture.

With the First World War, this organiser of war industry fundamentally revised his world view, moving from pleading for a moral revival to advocating technocratic state measures. For Rathenau, the development towards a directed economy with stronger state involvement was not just an ad hoc wartime measure, but the beginning of a fundamental change which would destroy 'the gods which the world before August 1914 had worshipped'.²⁰ He expected the competitive principle of

¹⁸ A reliable biography is Ernst Schulin, *Walther Rathenau* (Göttingen: Muster-Schmidt Verlag, 1979).

¹⁹ Walther Rathenau, 'Mechanik des Geistes oder vom Reich der Seele', in Rathenau, *Hauptwerke und Gespräche*, (Munich: Gotthold Müller Verlag, 1977), 236; Rathenau, 'Kritik der Zeit' in Rathenau, *Hauptwerke und Gespräche*, 24, 34 f.

²⁰ Rathenau in a letter to Hermann Stehr (14 Aug. 1914) quoted in Ernst Schulin, 'Zu Rathenaus Hauptwerken' in Rathenau, *Hauptwerke und Gespräche*, 558.

capitalism to make room for a social economy (*Gemeinwirtschaft*) characterised by stronger state control, corporate structures and extensive social regulations. His pre-war belief in ethical change was replaced by the technocratic vision that an improved organisation of national economy would overcome the problems of 'mechanisation'. The future would see the emergence of a large semi-governmental economic structure which was supposed to combine entrepreneurial freedom with extensive controls by the state to ensure the common good.

The practical changes Rathenau proposed could not satisfy true socialists, but were surprisingly radical for a member of the bourgeoisie. He demanded an 'extensive, in parts nearly prohibitive, system of income duties, taxes and levies' to restrict luxury consumption, the prevention of speculation through controls and taxes, an extremely progressive property and income tax and the prohibition of every inheritance 'above a moderate property'.²¹ Social mobility should also be increased to give every citizen equal career opportunities,²² both to increase social justice and to make more efficient use of the nation's human potential. The state was supposed to ensure that priority was given to the common good. As 'the economy is not a private, but a public matter', the state should have extensive powers to prevent any inefficient, egoistic and malevolent use of entrepreneurial freedom.²³ The government should make it its policy to enforce the highest possible efficiency by centralising power generation and distribution, by improving productivity in industry through enforcement of rationalisation programmes (including the closing down of inefficient production sites), by reducing the existing variety to a few standardised products, and by organising distribution more efficiently by replacing the many small retailers by a few large warehouses. In short, Rathenau developed a comprehensive technocratic programme for a state-directed economy. His aim was an ethically superior and more efficient society, where the state ensured the primacy of public over private interest. His practical measures had little to do with his earlier idealist hopes or with the interests of an individual capitalist, but described a whole national economy and society arranged according to the organisational principles of a large and efficient company.

Rathenau's ideas were new and original, but his rapid reorientation as well as the public interest in his ideas were partly due to the fact that the ground had already been prepared before the war. Many technically minded people had long been sceptical of capitalism. It seemed to hinder the realisation of important technical ideas due to a capitalist demand for short-term profits, seemed to get in the way of an efficient economy of scale, because the same goods were produced in different companies, and seemed to promote wasteful aberrations because of a lack of planning. For technicians and engineers it was only logical to develop the vision of a national economy organised as a single efficient machine. Furthermore, the German empire was marked by a change towards corporate capitalism, with many companies

²¹ Rathenau, 'Von kommenden Dingen', in Rathenau, *Hauptwerke und Gespräche*, 370, 373.

²² Rathenau, 'Von kommenden Dingen', 368.

²³ Rathenau, 'Von kommenden Dingen', 348.

merging or forming cartels. The electrical industry especially tried to profit from economy of scale in production of electrical equipment, from the higher efficiency of larger power stations and from a more balanced load when supplying power to large areas and diverse customers. The economic advantage of large 'networks of power',²⁴ the close cooperation with the state to establish monopolies whereby the coexistence of several parallel electrical networks could be avoided, the need for cooperation between different companies and banks to finance investments on an unprecedented scale, all this offered experiences which suggested that the trend was towards concentration and planning and that a national economy might also profit from replacing the chaos of competition by a larger economic strategy.

But there was also powerful opposition to a planned national economy. The large majority of employers, whilst being open to the merging of companies, to cartels and to agreements with the state to avoid damaging competition and achieve reliable conditions for investments, was eager to maintain capitalist independence. The exceptional situation of a war made them prepared to accept a state role in economic matters, but only as a strictly temporary emergency measure. Faced with the widespread public interest in the ideas of Rathenau²⁵ and like-minded people such as the economists Wichard von Moellendorf, Gerhart von Schulze-Gaevernitz, Edgar Jaffé and Werner Sombart, as well as the political scientist Johann Plenge, employers started a big campaign attacking the measures 'against which the most radical demands of socialist revolutionaries appear comparatively harmless'²⁶ and demanding the speedy return to a peacetime economy.²⁷

A continuation of the war economy after 1918 never stood a real chance. Employers and trade unions opposed it both in principle and because it had led to gross mismanagement and social injustices. But the ideas nevertheless maintained their importance in the Weimar Republic because they remained attractive among civil servants, the military and the middle class. They promised a third way between Marxist socialism and an unrestricted market economy, similar to that for which the imperial Verein für Sozialpolitik (Association for Social Policy) had searched; they promoted a strong state overcoming class divisions and the most severe social injustices, an idea particularly attractive to all those middle-class groups afraid of a revolution and of being squashed between the powerful employers' and working-class organisations; they raised the hope that a competitive society based on self-interest could be replaced by a more humane cooperative and 'organic' society; and they promised nationalistically and militaristically minded people the possibility of preparing Germany for a new and more successful war. If there was a need to reduce social tensions in order to turn society into a united front against potential

²⁴ Thomas P. Hughes, *Networks of Power. Electrification in Western Society, 1880–1933* (Baltimore: Johns Hopkins University Press, 1983).

²⁵ Schulin calls 'Von kommenden Dingen' one of the 'most widely read analyses of the war period' ('Zu Rathenaus Hauptwerken', 555). 65,000 copies were printed before July 1918.

²⁶ *Deutsche Arbeitgeber-Zeitung*, quoted in Schulin, 'Zu Rathenaus Hauptwerken', 580.

²⁷ Jürgen Kocka, *Facing Total War. German Society 1914–1918* (Leamington Spa: Berg, 1984), 110; Friedrich Zunkel, *Industrie und Staatssozialismus* (Düsseldorf: Droste, 1974), 31, 99 and passim.

enemy countries, if self-sufficiency was seen as a necessary preparation for a trade blockade in a future war and if industry should be capable of changing instantaneously to war production, then an economy directed by the state seemed to be the appropriate solution. For the promoters of a state-directed social economy the changes needed to cope with the demands of the First World War proved the superiority of their model. Despite all the problems connected with the war economy, for which they largely blamed the improvised character of the measures, they were convinced that the difficult times had proved the need for more planning. Only a state-directed economy would be able to cope with the demands of a long war of attrition in the industrial age. The deprivation of the population and the desolate state of the economy in 1918 were negligible in this line of argument in comparison with the state economy's ability to maintain the war effort for four years.

The belief in a state-directed social economy was not limited to the political right. Engineers of different political persuasions continued with their complaints that capitalism would thwart the potential of modern technology through its narrow focus on short-term profits;²⁸ demands for the rule of technical competence over the whole of society were voiced²⁹ and the economic crisis of 1929 saw the emergence of a technocratic movement which wanted to replace a capitalist by a technological logic.³⁰ But it was on the political right that technocratic ideas were mainly justified with reference to the First World War and the demands of modern warfare in general. Large parts of the so-called 'Conservative Revolution' (that is, the radical right who wanted to develop an up-to-date ideology for an authoritarian state instead of dreaming about a way back to the German empire) were convinced that Germany could re-emerge as a powerful nation only if it accepted economic and technical imperatives without reservation.³¹ Arthur Moeller van den Bruck, the old man of the Conservative Revolution, unhesitatingly incorporated modern industry and technology into his 'German socialism' (a concept which shows many parallels with the war economy);³² the philosopher Oswald Spengler urged the

²⁸ See for example the influential engineers Alois Riedler, Schenk, Weyrauch and Friedrich Dessauer as well as the position of the engineers' organisation VDI.

²⁹ Most importantly by the Reichsbund Deutscher Technik and engineers such as Dessauer.

³⁰ Stefan Willeke, *Die Technokratiebewegung in Nordamerika und Deutschland zwischen den Weltkriegen* (Frankfurt/M.: Lang, 1995). The most active voice of the technocracy movement, Hardensett, shared many conservative ideas, but was internationally and pacifistically oriented (Heinrich Hardensett, *Der kapitalistische und der technische Mensch* (Munich: Oldenbourg, 1932), 125).

³¹ One of the exceptions is Werner Sombart, one of Herf's prime examples of a 'reactionary modernist'. He is rather sceptical of technology and tries to find ways for its control ('Zähmung'), for example a strict control of the implementation of technology to avoid bothersome noise, disfigurement of the countryside and damage to human health, as well as a cultural committee with the power of banning inventions which are not beneficial to society (Werner Sombart, *Deutscher Sozialismus*, Charlottenburg: Buchholz & Weisswange, 266).

³² Arthur Moeller van den Bruck, *Das Dritte Reich*, 3rd edn., (published 1922) (Hamburg: Hanseatische Verlagsanstalt, 1931), especially 116 ff. See also his positive attitude towards Italian Futurism ('Die Probleme des Futurismus' (1912) and 'Die radikale Ideologie des jungen Italiens' (1913), reprinted in Peter Demetz, *Worte in Freiheit. Der italienische Futurismus und die deutsche literarische Avantgarde 1912–1934. Mit einer ausführlichen Dokumentation* (Munich: Piper, 1990), 228–40.

younger generation to devote their lives to 'technology instead of poetry' and to 'the navy instead of painting';³³ the eminent specialist in public law Carl Schmitt waited for a political force able to make productive use of technology;³⁴ and Ferdinand Friedrich Zimmermann alias Ferdinand Fried, the economic specialist of *Tat* (the most widely read journal of the Conservative Revolution), explicitly accepted the publications of Walther Rathenau as the basis of his own economic ideas and demanded the running of a national economy according to government plans.³⁵ But the person who eventually took this train of thought to its logical conclusion was Ernst Jünger, the most prominent representative of a group of young people proclaiming a new 'soldierly nationalism'.³⁶

As a young adolescent Jünger was one of the many middle-class volunteers who in 1914 saw the First World War as a chance to escape from the boredom of a secure everyday life. A sense of national duty seems not to have motivated him,³⁷ but the hope of finding his 'true self' and a more 'elemental reality' outside bourgeois society. This hope and desire to engage on an adventurous journey to discover one's authentic existence beyond the allegedly false conventions of civilised society was not a 'premodern' notion, but an expression of a 'romantic individualism' originating in the artistic way of life of early romanticism, giving the central motif to many modern writings and representing a common ambition for the avant-garde and life reform movements at the turn of the century.³⁸ In a similar vein, Jünger believed that society in the 'mechanical age' restricted the potential of a much richer self, while a more authentic life promised the discovery of one's own individuality and the experience of the 'multitude of life, its diversity and the glowing beauty of its intoxications'.³⁹

But Jünger was quickly forced to realise that his naive notions of a warrior's life had little in common with modern warfare. The First World War, which was dominated by technology and the large-scale production of weapons, might well

³³ Oswald Spengler, *Der Untergang des Abendlandes*, 9th edn., (Munich: DTV, 1988 [1918, 1922]), 57.

³⁴ Carl Schmitt, *Der Begriff des Politischen. Text von 1932 mit einem Vorwort und drei Corollarien*, 2nd edn. (Berlin: Duncker & Humblot, 1963), 81 ff., esp. 94.

³⁵ Ferdinand Fried, *Das Ende des Kapitalismus* (Jena: Eugen Diederich, 1931), 144, 23 and 46.

³⁶ In recent years extensive secondary literature about Ernst Jünger has emerged, but for his politics in the Weimar Republic the most useful book is still Karl Prümm, *Die Literatur des Soldatischen Nationalismus der 20er Jahre (1918–1933). Gruppenideologie und Epochenproblematik*, 2 vols. (Kronberg/Ts.: Scriptor, 1974). Jünger's attitude towards technology is most convincingly dealt with in Michael Großheim, *Ökologie oder Technokratie? Der Konservatismus in der Moderne* (Berlin: Duncker & Humblot, 1995) and Rolf Peter Sieferle, *Die konservative Revolution. Fünf biographische Skizzen* (Frankfurt/M.: Fischer, 1995). See also Rohkrämer, 'Formen der konservativen zivilisations kritik'.

³⁷ Both later recollections and the fact that he had previously tried to get to Africa by joining the Foreign Legion suggest this.

³⁸ Christoph Hennig, *Die Entfesselung der Seele. Romantischer Individualismus in den deutschen Alternativkulturen* (Frankfurt and New York: Campus-Verlag, 1989). See also more generally Cornelia Klinger, *Flucht, Trost, Revolte. Die Moderne und ihre ästhetischen Gegenwelten* (Munich and Vienna: Hanser, 1995).

³⁹ Ernst Jünger, *Das Abenteuerliche Herz. Aufzeichnungen bei Tag und Nacht* (Berlin: Frundsberg, 1929), 25, 218.

reveal some hidden truth about the modern age, but it was clearly not an ideal opportunity for realising the romantic journey to the 'true self'. The demands of modern warfare were even more restrictive than modern society. Material necessities dominated over idealistic notions of self-realisation. As Jünger was forced to admit: 'The emotions of the heart and the systems of the mind can be disproved, while a material object cannot be disproved – and such a material object is a machine gun.' 'Free will, education, enthusiasm and ecstatic contempt of death are not enough to overcome the gravity of a few hundred metres, over which the magic of mechanical death reigns.'⁴⁰ Warfare in the industrial age turned out to be just another example of a contradiction inherent in the project of modernity: the modern concept of realising one's own potential and developing a singular individuality clashed with the power of 'second nature'; the technical apparatus designed to overcome natural limitations developed its own momentum and restricted human freedom by demanding the adaptation to a technological logic of action. The desire for adventure and emotional intensity is an integral part of modernity, but for achieving success the industrial world demands – in war as much as in peace – the precise work of every soldier or worker as a small cog in a large technical system.

As Jünger did not want to accept the role of a Don Quixote, he was forced to accept the challenge of modern technology. Inspired by Nietzsche, he could not reject technology, which was clearly the prime instrument of the human 'will to power' in modern times.⁴¹ As there was no escape from the all-pervasive power of technology, he had to find a way of integrating it into his world-view. The acceptance that it was not the 'abilities of the individual' which counted in modernity (in particular in modern warfare), but 'production, level of technology, education and railway systems'⁴² was a difficult step for Jünger as it challenged his hope and desire for a less civilised space in which one could realise an adventurous path of life. Technology confronted Jünger with a fundamental dilemma: it appeared to be part of an oppressive modernity suffocating all human desire for adventure and individual challenges, but at the same time it seemed to be the up-to-date expression of human vitality which was unscrupulous in choosing the most effective means for achieving its goals. On the one hand, he admitted a 'deep fear' of modern technology,⁴³ but on the other, his Nietzschean convictions ('*amor fati*') forced him to embrace all aspects of the modern condition. After a laborious struggle which finds reflection in the many different opinions expressed in his early writings,⁴⁴ he

⁴⁰ Ernst Jünger, *Der Arbeiter. Herrschaft und Gestalt* (Hamburg: Hanseatische Verlagsanstalt, 1932), 104, 105.

⁴¹ Steven E. Aschheim, *The Nietzsche Legacy in Germany 1890–1990* (Berkeley: University of California Press, 1993), 200.

⁴² Ernst Jünger, 'Sturm', in *Sämtliche Werke*, Vol. 15 (Stuttgart: Klett-Cotta, 1978), 16.

⁴³ Quoted in Klausfrieder Bastian, *Das Politische bei Ernst Jünger. Nonkonformismus und Kompromiß der Innerlichkeit* (Heidelberg: Verlag Lambert Schneider, 1963), 77.

⁴⁴ See Th. Rohkrämer, 'Die Verzauberung der Schlange. Krieg, Technik und Zivilisationskritik beim frühen Ernst Jünger', in Wolfgang Michalka, ed., *Der Erste Weltkrieg. Wirkung, Wahrnehmung, Analyse* (Munich: Piper, 1994), 849–74.

reached a position towards the end of the 1920s where he strongly rejected any glorification of nature or rural life by critics of civilisation as sterile ‘romanticism’, demanding an unreserved acceptance of modern life instead.⁴⁵

It was not the conservative acceptance of technology which was original about Jünger’s position (most critics of civilisation in the German empire had been aware of the need to find a *modus vivendi* regarding technology); nor was it the attempt to integrate it into his world view and employ it as a means for his own objectives (all users aim to do this; enlightened thinkers have no monopoly on the use of technology).⁴⁶ What was new about Jünger and other conservative revolutionaries at the end of the Weimar Republic were the two following convictions:

Firstly, while earlier conservatives had the confidence to believe that modern technology could be used at will, Ernst Jünger was correct in realising that technical developments and applications followed their own logic and thus placed demands on users. Different technical means could not be employed by any person for any purpose, but only by people prepared to accept fully all demands of the technical age, because individual technical means are part of an interdependent technical system and cannot exist in isolation. Furthermore he developed the conviction that a productive engagement with technology demanded a certain ‘language’. As users have to follow a certain code to live in the technical world and make use of technical means, modernity turns them not ‘just into subjects of technical processes, but simultaneously into their objects’. ‘The application of these [technological] means demands a specific lifestyle, which encompasses every single aspect of life. Technology is thus by no means a neutral force, no reservoir of effective and simply convenient means, which any traditional power can take from at pleasure’.⁴⁷ The First World War had taught Jünger an important lesson which the Weimar Republic could only reinforce: that modern technology places precise demands on its users, produces unintended results and becomes a force in its own right, shaping history in unexpected and often unwanted ways. More than the critics of civilisation in the German empire who had aimed for a technology controlled by traditional society, Jünger was aware of the inevitable price one had to pay for using technology.

Secondly, the First World War had radicalised the German right. The group of ‘soldierly nationalists’ in particular was more extreme in its militarism and expansionism than any pre-war group. Ernst Jünger and the people around him had no doubt that the re-establishment of German power had to be *the* central political goal. They were convinced about the primacy of a foreign policy based on power and were prepared to implement all domestic changes necessary for strengthening

⁴⁵ Ernst Jünger, ‘Oberfläche-Tiefe. Nationalismus und Jugendbewegung’, *Standarte* 1 (1926), 478. See also E. Jünger, ‘Großstadt und Land’, *Deutsches Volkstum*, 8 (1926), 577–81 and Jünger, *Der Arbeiter*, 160.

⁴⁶ The typically German contradiction Herf perceives in the concept of ‘reactionary modernism’ only exists if one assumes that enlightenment and technology belong together, an assumption with little basis in historical evidence.

⁴⁷ Jünger, *Arbeiter*, 158.

Germany. The establishment of a planned economy, the introduction of a national socialism or the organisation of society according to military principles: all these measures were considered and adopted, because they promised to increase Germany's might. As Jünger believed that modern technology faced every modern human being with an 'inescapable either-or' of making full use of it or perishing, he was forced to opt for the unlimited use of technology as a necessary means of any efficient nationalistic and militaristic policy.

Throughout his work Ernst Jünger repeated the diagnosis of many critics of civilisation: the ascendancy of industry and technology had meant a 'total revolution' producing anonymous cities and a uniform society, destroying all individuality in human beings and leading to a growing alienation from the natural world.⁴⁸ But while his acceptance of technology had been fatalistic throughout most of his life (both before 1925 and after the early 1930s), the late Weimar Republic saw a complete turn from forced acceptance to enthusiasm. In *Der Arbeiter* ('The Worker'), his main work on technology published in 1932, Jünger blamed the wrong attitude of the middle class for the shortcomings of modernity. He believed that it was only their inability to adapt fully to the logic of technology that had led to a loss of control over the modern world. Filled with optimism that history was on his side, he expected that the coming full acceptance of technology would overcome its negative effects. A new type of human being would be in tune with technology and succeed in creating a harmonious world of humans and machines.

Jünger's vision of the future was clearly influenced by different developments of the interwar years which all seemed to point in a similar direction. He accurately recognised a general trend towards more planning under many different ideological guises. The economies in the First World War in all the belligerent countries, the technocratic movement in the United States, the development towards larger companies and more state intervention in capitalist nations (especially as a consequence of the world economic crisis), corporatist structures in fascist Italy, five-year plans and forced industrialisation in the Soviet Union, all seemed to suggest that the world was moving from an individualistic free-market economy to a collective and planned one. Taking these trends to their logical conclusion, Jünger proclaimed that the 'chaos' produced by economic liberalism would be replaced by a 'planned economy', achieving an 'organic construction, that is a close and conflict-free merging of life with all the means it has at hand'. A group of experts employed by the state would organise the technological world like one large machine and consequently overcome the problems of the present.⁴⁹

Many readers are left confused by the fact that Jünger avoids any clear political stance. His description could fit a fascist or bolshevist as well as an interventionist capitalist system. But this openness is not an omission, it is a central component of Jünger's argument. He was convinced that the political differences were nothing but surface phenomena, that is different labels for one fundamental change towards

⁴⁸ Jünger, *Arbeiter*, 162 (quotation), 61, 94, 98, 102 ff., 213.

⁴⁹ Jünger, *Arbeiter*, 68, 290, 226, 281.

increased planning. What he both diagnosed and welcomed was the emergence of a new order (first on the national, later also on the global level), where nature, human beings and machines would be united in one large technological system.⁵⁰

While the First World War had forced Ernst Jünger to *accept* modern technology, his belief in the power of technology to determine a whole culture made him *welcome* it. He hated modern society for its lack of order and its pluralism, diversities and contradictions and valued modern technology's alleged ability to overcome this chaos. For him it was positive, if technological logic could replace chaos by order, as he simply preferred any kind of order over any kind of disorder. Although he continued to dislike some aspects of technology, the conservative wish for a homogeneous culture triumphed.⁵¹

But who would be the carrier of all these far-reaching changes? Jünger's answer is the 'worker', by which he means every person for whom work is the centre of existence. While previous social groups had wanted to use technology for other means (the bourgeoisie, for example, for material benefits), this new type of human being would be interested in work and efficiency for its own sake. As Jünger states: in the age of the 'worker' there will be nothing, 'that will not be interpreted as work. Work is the speed of the fist, the thought of the heart, life day and night, science, love, the arts, religion and cults, war; work is the movement of atoms and the power which moves stars and solar systems'.⁵² In an act of 'heroic realism', the new human beings would accept the reality of the future world, abandoning any wish for pleasure and comfort and dedicating their whole life to work and interpret all events, human as well as non-human, as work.

In parts, Jünger's belief in the emergence of a universe dominated by work and functionality reflects the experience of the modern world that these secondary values become goals in themselves (the glorification of work and efficiency, the mania in sports to achieve new records, the continued effort of rich people to make money beyond anything they can ever spend, the race to the moon, etc.). But for him it is also a translation of Nietzsche's beliefs into the present, as he sees dedication to work motivated by the 'will to power'. Jünger's worker does not want luxury or comfort, but the feeling of having an impact and shaping reality. The eventual outcome is secondary to the joy of efficiently achieving a task, that is experiencing one's competence and power.

This new type of human being will eventually triumph, because his life is solely devoted to work. As traditional social groups want to use technology for dysfunctional goals such as an increase in consumption and physical wellbeing, they will be less powerful than the worker who is only aiming for an increase in efficiency and

⁵⁰ Technology should not be understood in the narrow sense, but should also include organisational structures (factories, educational systems etc.) necessary to make the system work.

⁵¹ 'The proof of this legitimation is given by controlling the things which have become all-powerful' (Jünger, *Arbeiter*, 76). The idea that any power legitimises itself by its capability of establishing order is developed more thoroughly in the work of Carl Schmitt (see for example his book *Der Leviathan*).

⁵² Jünger, *Arbeiter*, 65.

power. He is able to merge himself with technology and give coherent shape to the technological age, because he has an instrumental attitude to everything: all natural phenomena, all machines, even his own body and mind are just raw materials. They are turned into efficient machines and components of an ever more powerful technical system. The result is an endless increase in efficiency and power largely for its own sake.

If one believes in the emergence of the ‘worker’, then it is only plausible to expect that this new kind of human being will triumph over less single-minded people. As they are more determined in aiming for their goals, the workers will be able to realise their vision of a functional society. But since clusters of the new type of human being are simultaneously emerging at different places, trying to realise their own ambitions against those of other groups, Jünger envisaged a violent future with a whole ‘succession of wars and civil wars’.⁵³ The workers’ expansionist power politics make major military conflicts inevitable, and these conflicts in their turn will reinforce the pressure to sacrifice everything for efficiency’s sake just to maintain one’s existence. Communities or states will have to mobilise as fully as possible. They will be turned from passenger liners into battleships, work and war will become identical and every citizen will become a combatant.⁵⁴ Jünger even foresaw kamikaze fighters, envisaging the merging of heroic men and machines (an ‘organic construction’) in torpedoes directed by human pilots.⁵⁵

With this vision of the future, Ernst Jünger could combine his appreciation of the power of technology with his desire for adventure by imagining an immense global drama of war and creation. While the struggle of creation could satisfy his wish for self-realisation, the order which was to follow fulfilled his conservative dreams for a stable and homogeneous society. But what is more important in this context is that Jünger is not untypical of trends in right-wing thought in the Weimar Republic: the demand for total mobilisation to revise the Versailles Treaty and to fulfil Germany’s global ambitions often led to an unreserved acceptance of, or even enthusiasm for, the potential of technical means. The primacy of foreign policy ambitions implied the embrace of all means necessary to realise those ambitions, and most nationalists in the Weimar Republic realised that modern technology played a crucial part in any expansionist scheme.

III

We can thus conclude that Herf is right in stressing the right-wing acceptance of technology in the Weimar Republic. There is a general tendency towards more planning, economic concentration and rationalisation (directed or planned economies in fascist and communist countries, more state interventions in capitalist systems in the First World War and after, economic concentration into ever

⁵² Jünger, *Arbeiter*, 75.

⁵⁴ Jünger, *Arbeiter*, 75, 109.

⁵⁵ Jünger, ‘Über den Schmerz’ in Ernst Jünger, ed., *Blätter und Steine*, (Hamburg: Hanseatische Verlagsanstalt, 1934), 176 f.

larger corporations, the debate about Taylorism, Fordism and Americanisation, influential technocratic movements especially during the world economic crisis, etc.),⁵⁶ and some intellectually alert groups of the extreme right tried to integrate this trend into their world view. The phenomenon is neither as new nor as surprising or contradictory as Herf argues, but there is clearly a new quality in the unreserved acceptance of all aspects of technology. But now we come to question the last point of his argument: does National Socialism really fit into this tradition? Is it as technocratic as Walther Rathenau and as techno-enthusiastic as Ernst Jünger?

While racism, one of the core elements of National Socialism, played no part in Ernst Jünger's thinking,⁵⁷ there is undoubtedly a far-reaching similarity in their extreme nationalism, militarism and anti-liberal authoritarianism. But what about a connection between Jünger's attitude towards technology and National Socialism? The opinions of the time were divided. While the Nazi press reviewed Jünger's 'Worker' rather critically,⁵⁸ a biography of him published in 1934 stressed the debt National Socialism owed to Jünger in learning to accept modern technology: 'Thanks to Ernst Jünger, technology is no longer a problem for the German youth . . . Jünger has freed us from a nightmare.'⁵⁹ But to claim such a direct influence of one individual writer on a whole political movement is problematic,⁶⁰ as the growing acceptance of technology was a much more general phenomenon on the extreme right of the Weimar Republic. What I will be concerned with is not a causal relation, but the question of similarities and differences between a position like Ernst Jünger's and that of National Socialism.

The debate about the relationship between National Socialism and modernity/modernisation, which started in the 1960s and which has flared up again over the last decade,⁶¹ has left many controversial points unresolved, but it has shown very clearly that most leading National Socialists accepted modern technology or were even enthusiastic about it. Hitler called himself a techno-enthusiast ('*Narr der Technik*'), Goebbels said programmatically that National Socialism 'consciously approves' of technology and a publication of the SS called it a 'weapon in the

⁵⁶ This is illustrated by my being able to use Walther Rathenau as an example of this change of attitude. See also Willeke (as footnote 31) and Mary Nolan, *Visions of Modernity. American Business and the Modernization of Germany* (Oxford: Oxford University Press, 1994). A good example of the influence of technocratic and authoritarian ideas on the popular imagination is Fritz Lang's film *Metropolis* (1926).

⁵⁷ While Jünger promotes the idea of the new heroic man, he believes in neither superior or inferior races nor the achievement of his ideal through eugenic measures, but in changes of attitude.

⁵⁸ Prüm, *Der soldatische Nationalismus*, 393.

⁵⁹ Wulf Dieter Müller, *Ernst Jünger. Ein Leben im Umbruch der Zeit* (Berlin: Frundsberg, 1934), 42.

⁶⁰ This is especially true, as Ernst Jünger had little political influence in 1932. His political engagement with 'soldierly nationalism' had ended in disappointment by the end of the 1920s. The most one can try to show is that Jünger expressed a wider cultural mood of the time, which made people susceptible to National Socialism.

⁶¹ A good overview is Axel Schildt, 'NS-Regime, Modernisierung und Moderne. Anmerkungen zur Hochkonjunktur einer andauernden Diskussion', *Tel Aviver Jahrbuch für deutsche Geschichte XXIII* (1994), 3–22. See also more recently Mark Roseman, 'National Socialism and Modernisation', in Richard Bessel, ed., *Fascist Italy and Nazi Germany. Comparisons and contrasts*, (Cambridge: Cambridge University Press, 1996), 197–229.

struggle for life'.⁶² Himmler and Darré were more critical, but Albert Speer, Fritz Todt and Robert Ley were also advocates of the unreserved embrace of modern technology.⁶³ Even the main representative of the völkish wing, Alfred Rosenberg, saw technology as an expression of an 'eternal Germanic drive',⁶⁴ and Peter Schwerber's book 'National Socialism and Technology', published in the Nazis' official series of pamphlets stressed technology's positive role. While it attacked the banking system and the primacy of profits in the capitalist system as an expression of allegedly Jewish materialism and greed, it praised the potential of modern technology and the deeds of entrepreneurs such as Krupp. The National Socialists, Schwerber claimed, accepted technology 'consciously and happily' as the foundation of the nation, of a high standard of living and of military strength.⁶⁵ With an equally strong belief in the positive role of modern technology in changing society, Franz Lawaczeck, one of the three founding fathers of the National Socialist engineers' association, Kampfbund Deutscher Architekten und Ingenieure, believed that the Third Reich could generate an abundance of cheap electricity that would promote small farms and businesses and promote a decentralisation of modern society.⁶⁶

In its presentation to the public, National Socialism also stressed its positive attitude towards technology. With the slogan 'Hitler above Germany', National Socialism drew attention to his use of an aeroplane. Hitler presented himself (wrongly) as the father of the motorway,⁶⁷ opened car exhibitions and promoted the idea of a cheap car for the mass of the people, not primarily for military or economic purposes.⁶⁸ He wanted to become a moderniser of German cities and had a book of photographs published in which he presented himself alongside cars, aeroplanes, ships and industrial sites.⁶⁹ Also, the hope that a '*Wunderwaffe*' might miraculously change the outcome of the war indicates a strong belief in the power of technology.

The National Socialist agricultural policy is an area which many historians have

⁶² Adolf Hitler, *Monologe im Führerhauptquartier 1941–1944*, ed. Werner Jochmann (Hamburg: Knaus, 1980), 275 (9 Feb. 1942); Joseph Goebbels, 'Rede zur Eröffnung der Automobilausstellung 1939', *Völkischer Beobachter*, 18 Feb. 1939; 'Mensch und Maschine', *Das schwarze Korps*, 28 Apr. 1938.

⁶³ Jost Dülffer, 'Albert Speer. Management für Kultur und Wirtschaft', in Ronald Smelser and Rainer Zitelmann, eds., *Die braune Elite. 22 biographische Skizzen*, 2nd edn., (Darmstadt: Wissenschaftliche Buchgesellschaft, 1990); Franz W. Seidler, *Fritz Todt. Baumeister des Dritten Reiches* (Berlin: Herbig, 1986); Ronald Smelser, *Robert Ley. Hitlers Mann an der 'Arbeitsfront'. Eine Biographie* (Paderborn: Schöningh, 1989).

⁶⁴ Alfred Rosenberg, *Der Mythos des 20. Jahrhunderts*, 27th edn., (Munich: Hoheneichen-Verlag, 1934), 142 f.

⁶⁵ Peter Schwerber, *Nationalsozialismus und Technik. Die Geistigkeit der nationalsozialistischen Bewegung*, Nationalsozialistische Bibliothek, 21 (Munich: Verlag Franz Eher Nachf., 1930), 3 (quotation).

⁶⁶ Franz Lawaczeck, *Technik und Wirtschaft im Dritten Reich. Ein Arbeitsbeschaffungsprogramm* (Munich: Weißsche Buchdruckerei, 1932).

⁶⁷ The association 'HAFRABA' had earlier promoted the idea of a motorway from Hamburg via Frankfurt/M. to Basel.

⁶⁸ Hans Mommsen with Manfred Grieger, *Das Volkswagenwerk und seine Arbeiter im Dritten Reich* (Düsseldorf: Econ, 1996).

⁶⁹ *Hitler wie in keiner kennt. 100 Bilddokumente aus dem Leben des Führers*, ed. Heinrich Hoffmann, Fotoberichterstatte der Reichsleitung (Berlin, 1933).

cited as one of the prime examples of the Nazis' alleged antimodernism. While it is true that the importance they attached to land and a large rural population was somewhat antiquated, one also has to remember that their policy was not directed against industry – they merely wanted a different balance between the primary and the secondary sector by strengthening the former.⁷⁰ Even more to the point: they did not want to maintain traditional farming methods, but promoted the use of machines, tractors, fertilisers and electrification. Their goal was to increase production to achieve a higher degree of self-sufficiency, and they were convinced that they needed modern technology to achieve it.⁷¹

If one cannot speak about a rejection of technology in relation to National Socialist agricultural policy (where the ideology of 'blood and soil' was most thoroughly applied), then obviously one can do so even less in relation to the industrial and military sectors. Thus we can safely conclude that National Socialism fully accepted technology. Like large parts of the political right of the Weimar Republic, the Nazis saw it as a necessary means for realising their vision of the future, especially their expansionist goals. Nevertheless there were important differences between visions such as the one Jünger had developed in 'The Worker' and the Nazi attitude towards technology:

1. While Ernst Jünger and other conservatives in the Weimar Republic had eventually realised that systematic work in large technological systems is a necessary prerequisite for efficiency under modern conditions (this was exactly their original contribution to a conservative understanding of modern technology), National Socialism largely maintained the belief held by earlier or less advanced techno-enthusiasts that exceptionally gifted personalities with strong willpower could overcome all the odds and turn technology into an obedient servant. It neither saw the need to speak the 'language' of technology and adapt to its imperatives, nor did it realise the dialectical connection between using technology and submitting to a technological lifestyle. In their conviction that technology would simply be a wonderful tool in their hands, National Socialists did not show any awareness of the power of technology over its users. Their naive optimism was immune to the disenchanting experiences of the First World War and the ensuing economic crises, because they had the Jews, the communists and the Versailles Treaty to blame for all such negative developments.

2. On a more practical level, Nazi policy never aimed for the consistency and all-pervasive planning necessary to realise a technocratic state. One can find technocratic tendencies, but more characteristic, as historians such as Hans Mommsen and Martin Broszat have shown, are the many compromises with different social groups and large numbers of competing persons and institutions. Society was not supposed to function like a machine, but according to Darwinist social principles, according to which the strongest would prevail. This produced a 'leadership chaos' which

⁷⁰ Hans-Erich Volkmann, 'Die NS Wirtschaft in Vorbereitung des Krieges', in Militärgeschichtliches Forschungsamt, ed., *Das Deutsche Reich und der Zweite Weltkrieg*, Vol. 1: *Ursachen und Voraussetzungen der deutschen Kriegspolitik*, (Stuttgart: DVA, 1979), 177–370, at 191.

⁷¹ Volkmann, 'Die NS Wirtschaft', 298–300, 217 f.

clearly weakened the efficiency of the Nazi system.⁷² Continuous improvisation instead of long-term strategies, the lack of clear bureaucratic structures and areas of responsibilities, the thwarting of long-term plans by the sudden decisions of leading National Socialists, the short-term exploitation of resources, the lack of control of efficiency via a fully functional financial system, the destruction of social relations and open exchange of information, all demonstrate a lack of understanding of the functioning of modern industry and technology.⁷³ Hitler's reliance on the 'creative power and ability of individual people' and his and Speer's order to the military personnel to ask industry for new or better weapons, if they needed them,⁷⁴ shows a lack of understanding of the need for coordinated and systematic research as well as of the logic of technical developments and innovations. A clear decline in patents and developments was the inevitable consequence.

3. The National Socialist cultural policy was also marked by inconsistencies. While the modernists on the left and right demanded that all cultural forms should reflect the functions of the technical age by abandoning all unnecessary decoration ('form follows function'), National Socialism corresponded with the popular taste, which more often than not did not want a correspondence between material reality and form, but an emotional compensation for the deficits of a functional modernity. In contrast to Jünger's futurist demand for a functional logic and a technical style, which was to penetrate and determine all aspects of society and human existence, National Socialism rejected purist attempts to close the gap between technology and culture, favouring an undogmatic mix instead. In literature, novels about exceptional engineers and technological achievements⁷⁵ co-existed with sentimental stories about rural life; for the national party meeting in 1934 (communicated to us mainly through the modern medium of film, via the famous *Triumph of the Will*) the historic city of Nuremberg was used as background for Hitler's arrival in his aeroplane, for mass rallies and military parades with modern armaments; the 'beauty of work' programme promoted swimming pools, grass and gardens, but also an increase in productivity; and the attempt to increase agricultural production was connected with an invention and promotion of

⁷² Ian Kershaw, *The Nazi Dictatorship. Problems and Perspectives of Interpretation*, 3rd edn. (New York: Arnold, 1993), 63. R. Overy rightly stresses that it took Germany until 1937 to regain the level of production of 1929. Productivity remained markedly lower than in Great Britain and the United States (R. J. Overy, *The Nazi economic recovery 1932–1938*, 2nd edn. (Cambridge: Cambridge University Press, 1996)).

⁷³ Hans Mommsen, 'Nationalsozialismus als vorgetäuschte Modernisierung', in Hans Mommsen, ed., *Der Nationalsozialismus und die deutsche Gesellschaft. Ausgewählte Aufsätze*, (Reinbek: Rowohlt, 1991), 312–34.

⁷⁴ Hitler quoted in Karl-Heinz Ludwig, *Technik und Ingenieure im Dritten Reich* (Düsseldorf: Droste, 1974), 228; Conversation between Hitler and Speer (4 Apr. 1942) quoted in Ludwig, 248. For statistics of patents, see Ludwig, 227.

⁷⁵ Hans-Joachim Braun, 'Konstruktion, Destruktion und der Ausbau technischer Systeme zwischen 1914 und 1945', in Wolfgang König, ed., *Propyläen Technikgeschichte*, Vol. 5 (Berlin: Propyläen, 1992), 9–279, at 264 f.; Hans-Werner Niemann, 'Die Beurteilung und Darstellung der modernen Technik in deutschen Romanen des 19. und 20. Jahrhunderts', in *Technikgeschichte*, Vol. 46, no. 4 (1979), 306–21, at 317 f. A representative example is the novel by Arno Thauß, *Der Mann, der das Gas bezwang* (1933).

‘traditions’ such as wearing traditional costumes, engaging in folk dance or accompanying the passing on of the farm to the son with a festive ritual.⁷⁶

This decoration of modern reality with all forms available from past and present as well as the ousting of a more critical ‘decadent art’, was artistically simplistic, because it was directed against any critical reflection on developments in society. But it corresponded with the modern trend towards cultural forms which satisfy the mass of the population and anticipated the distinction in design between public and private. This is particularly clear in Nazi architecture. It did not break completely with the modern functional style, but used it primarily for commercial buildings, in road construction and town planning. Official buildings were designed in the classical or monumental style, and residential housing was ideally built in accordance with a traditional regional style. While the industrial sphere was thus supposed to be functional and the political sphere awe-inspiring, the private sphere was aiming to give a feeling of warmth and cosiness, even if one could only afford blocks of flats constructed out of standardised parts for the mass of the population.⁷⁷

National Socialism did not share Jünger’s concept of a ‘heroic realism’ (which was also not alien to other modernists with their celebration of an inhumane coldness). It accepted that even people who want to be heroes have secret selves, whose ‘tastes lie toward safety, soft beds, no work, pots of beer and women with “voluptuous” figures.’⁷⁸ They thus used heroic imagery on an ideological level, but tried to keep the sacrifices of their followers to a minimum. To avoid dissatisfaction and unrest, grain was imported to feed the population, although it slowed the armament programme, social policy was supposed to win popular support and entertainment dominated in radio and film over boring propaganda. As Goebbels said about radio and cinema: ‘The [radio] programme . . . should present education, stimulation and entertainment in a clever mixture. Relaxation and entertainment have to be considered foremost, because the large majority of listeners often lead a hard and relentless life . . . They have a right to find relaxation and recovery in their few hours of leisure and quiet.’⁷⁹ ‘The darker the streets are, the lighter our theatres and cinemas have to be . . . The harder the time is, the brighter must our art be to console the human soul.’⁸⁰

As a consequence, between 60 and 70 per cent of radio programmes and more

⁷⁶ Peter Reichel, *Der schöne Schein des Dritten Reiches. Faszination und Gewalt des Faschismus* (Frankfurt/M: Fischer, 1993), 232 ff.; J. E. Farquharson, *The Plough and the Swastika. The NSDAP and Agriculture in Germany 1928–45* (London: Sage-Publications, 1976), 203–20.

⁷⁷ Barbara Miller Lane, *Architektur und Politik in Deutschland 1918–1945* (Braunschweig: Vieweg, 1986); Reichel, *Der schöne Schein*, 287 ff.; Werner Durth, ‘Architektur und Stadtplanung im Dritten Reich’ and Ronald Smelser, ‘Die Sozialplanung der deutschen Arbeiterfront’, both in Michael Prinz and Rainer Zitelmann eds., *Nationalsozialismus und Modernisierung*, (Darmstadt: Wissenschaftliche Buchgesellschaft, 1991).

⁷⁸ G. Orwell, ‘The Art of Donald McGill’, *The Collected Essays. Journalism and Letters of George Orwell*, ed. Sonia Orwell and Ian Angus, Vol. 2 (London: Secker & Warburg, 1968), 163. Also see Parin’s distinction between satisfaction in a role and the ideology of a role Paul Parin, *Der Widerspruch im Subjekt* (Frankfurt/M.: Syndikat, 1978), 123.

⁷⁹ Quoted in Reichel, *Der schöne Schein*, 168.

⁸⁰ Quoted in Reichel, *Der schöne Schein*, 180.

than 50 per cent of film production could be classified as pure entertainment, while the amount of political indoctrination was strictly controlled.

As a whole National Socialism had, one can conclude, a positive attitude towards technology, although some critical arguments can be identified. Different opinions could exist, because technology was not seen as a value or a force in itself. If one accepts that the creation of a pure 'Aryan' race and German expansion were the two main goals of National Socialism, then the attitude towards technology could vary and alter, because its value was determined by the question whether it threatened or helped to achieve those goals. A few National Socialists were against technology, because they believed that it would undermine the strength of the 'Aryan race', but most were convinced that the National Socialist goals could only be achieved by means of a full embrace of modern technology. Like the group of those right-wing extremists in the Weimar Republic which Herf has named 'reactionary modernists' (but also like many other conservatives), National Socialism accepted technology as an important tool in achieving their militaristic and racist goals.

But while the modernists on the right tried to face the fact that technology also places demands on its users and thereby alters them and society, National Socialism drew on less sophisticated beliefs more typical of conservatives in imperial Germany. As they had enough scapegoats to blame for all problems, they could uphold the belief that technology would become an obedient servant, if only there was a determined political will. In holding previous political systems, their political opponents and the Jews responsible for unintended and unwanted aspects of the technical age, they did not acknowledge the full consequences of using modern technology and ignored the functional demands of large technical systems. This helped them in gaining and maintaining political power, because they did not challenge the existing order as fundamentally as somebody like Jünger and were more open to pragmatic compromises.⁸¹ But they paid the price of a low economic efficiency.

For National Socialism, there was no reason to follow the modernists' attempt to create a culture reflecting the industrial age with its stress on functionality and minimal means. Instead of developing a technological aesthetic, they stuck to the nineteenth-century notion that outside the sphere of production aesthetics meant decoration, something applied to the surface of objects to hide their ugly reality. The technical age was accepted as a practical necessity, but not celebrated in a technical style; people had to fulfil their function, but relaxation and distraction were granted; and culture was consciously employed as an escape from a dreary or horrifying material reality. In this respect, the National Socialists arrived at a more sustainable lifestyle within modern reality than the modernists: in their openness to compromise in all but their core beliefs they accepted that the demands of the

⁸¹ Before Jünger became appalled by the crimes of National Socialism in power, his criticism of the party in its movement phase had mainly been directed against their lack of uncompromising radicalness (Karlheinz Weißmann, 'Maurice Barrès und der "Nationalismus" im Frühwerk Ernst Jüngers', in Günter Figal and Heimo Schwilk eds., *Magie der Heiterkeit. Ernst Jünger zum Hundertsten* (Stuttgart: Klett-Cotta, 1995), 141 f.).

modern functional age were only bearable if allowance was made for compensation and escapism.⁸² National Socialism was popular and politically successful because it acknowledged and tolerated different forces and desires in human beings, thereby avoiding purist extremes. Ironically, the Nazis' simplistic world-view (with their trust in the positive potential of a pure Nordic race and their identification of scapegoats to explain away unintended and undesired developments) allowed them to absorb pragmatically a whole variety of impulses of the time and thereby integrate different important social groups.

Herf is right in arguing against earlier opinions that National Socialism cannot be understood as completely antimodern, because it made full use of technology. But his attempt to identify one peculiar tradition of 'reactionary modernism' which prepares the ground for National Socialism is not convincing. First of all, and most importantly, he constructs and solves a problem that does not exist. It is simply not strange or 'paradoxical to reject the Enlightenment and embrace technology at the same time',⁸³ but common practice in nineteenth- and twentieth-century Germany as well as in many other countries. Instrumental reason and technology are available for an endless number of different purposes, many of which are not humane or enlightened.⁸⁴ Secondly, National Socialism does not have just one cultural root. It was eclectic, drawing on many different traditions and reacting pragmatically to the circumstances of the time. As its attitude towards technology was mainly pragmatic, it could take many different forms. The attempt to maintain power and achieve its central policy goals largely determined its usage of technology, not a preconceived world view.

If my argument is right we are left with one last point: why is it so important to historians and their public to see National Socialism as not fully modern? Why was Stern's book, *The Politics of Cultural Despair* so well received that the *Times Literary Supplement* regards it as one of the twenty-two most influential books of the 1960s⁸⁵ and the term 'reactionary modernism' has found wide acceptance? Without doubt it is of the highest importance to study the origins of a regime which committed unequalled crimes and to deal critically with all those aspects of German history which made its rise to power possible. But why this widespread refusal to accept that National Socialism existed within the framework of modern societies and showed specifically modern features? Why associate romantic dreams like 'nature

⁸² It is true that some art consciously avoided functioning as compensation, because it aimed to motivate people to make material reality more humane instead of just making it appear more humane. This is a laudable attempt, but my conclusion still remains the same: as they did not succeed in changing material reality, the compensatory model proved more successful.

⁸³ Herf, *Reactionary Modernism*, 3.

⁸⁴ By definition instrumental reason is concerned with the means, not with the ends. All modern technology has for example its 'potentiel de guerre', as Ernst Jünger convincingly showed in his early work (Jünger, *Das Abenteuerliche Herz*, 80).

⁸⁵ *Times Literary Supplement*, 6 Oct. 1995, 39. See more generally about the book Jerry Z. Muller, "'The Politics of Cultural Despair' Revisited", in Marion F. Deshmukh and Jerry Z. Muller, eds., *Fritz Stern at 70*, German Historical Institute, Occasional Paper No 19 (1997), 21–32

mysticism⁸⁶ or the utopian vision of the 1960s rebellion of youth with National Socialism,⁸⁷ but not a technocratic emphasis on instrumental reason and technical fixes? Why deny that the widespread acceptance of dangerous and inhumane (pseudo)-scientific ideas such as racism, mad ideas like a Jewish world conspiracy and the desire for an authoritarian, non-pluralistic national community can result from a crisis of modernity?

If the dividing line between National Socialism and modernity is drawn categorically, the critical scrutiny of German history can easily turn into an apologia for modernity. One has to agree with Zygmunt Bauman that ‘the interpretation of the Holocaust as a singular eruption of pre-modern (barbaric, irrational) forces, as yet insufficiently tamed or ineffectually suppressed by (presumably weak or faulty) German modernization’ can also fulfil the function of ‘marginalising the crime and exonerating modernity’.⁸⁸ Instead of calling Theodor W. Adorno and Max Horkheimer ‘strangely apologetic’, as Herf does, because they allegedly mistook a uniquely German phenomenon by interpreting it as the darkest side of modernity,⁸⁹ it is more convincing to argue that the stress on the non-modern character of National Socialism can serve to pull the sting out of all the Nazi crimes and belittle the dangerous aspects of modernity which *Dialectic of Enlightenment* tries to analyse.⁹⁰ Instead of distancing modernity from National Socialism, we should learn to accept that it was by no means a necessary, but was a possible development within modernity. In that sense, National Socialism shows modernity’s most fatal potential.⁹¹

⁸⁶ Mosse, *The Crisis of German Ideology*, 2.

⁸⁷ Stern, *The Politics of Cultural Despair*, Preface to 2nd ed. (1974).

⁸⁸ Zygmunt Bauman, *Modernity and Ambivalence* (Cambridge: Polity Press, 1991), 18.

⁸⁹ Herf, *Reactionary Modernism*, 10.

⁹⁰ Zygmunt Bauman, *Modernity and the Holocaust*, 3rd edn. (Cambridge: Polity Press, 1993), 10. Theodor W. Adorno/Max Horkheimer, *Dialectic of Enlightenment* (New York: Herder & Herder, 1972).

⁹¹ Detlev Peukert, *Max Webers Diagnose der Moderne* (Göttingen: Vandenhoeck, 1989), 82. Peukert’s characterisation of National Socialism as a ‘pathology of modernity’ seems less convincing, as it disguises a value judgment by using a medical term. The term also draws a categorical distinction which does not account for ‘pathological’ aspects such as militarism or eugenics in non-fascist societies and a continuation of ‘non-pathological’ trends in fascist societies.