

Notes

1. Introduction: Metamorphoses of adaptation

- 1 Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage, 1992 [1986]), p. 28.
- 2 Cf. Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston: Beacon Press, 2001 [1944]).
- 3 Cf. Klaus Dörre et al., eds, *Große Transformation? Zur Zukunft moderner Gesellschaften*, special issue of *Berliner Journal für Soziologie* (Wiesbaden: Springer, 2019).
- 4 Cf. Heinz Bude, *Das Gefühl der Welt: Über die Macht von Stimmungen* (Munich: Hanser, 2016).
- 5 Émile Durkheim, *The Division of Labour in Society* (New York: Free Press, 2014 [1893]).
- 6 Ralf Dahrendorf, *Life Chances: Approaches to Social and Political Theory* (Chicago: Chicago University Press, 1980 [German 1979]).
- 7 Cf. Andreas Reckwitz, *The Society of Singularities* (Cambridge, UK, and Medford, Mass.: Polity, 2020).
- 8 Andreas Reckwitz, 'The Theory of Society as a Tool', in Andreas Reckwitz and Hartmut Rosa, *Late Modernity in Crisis: Why We Need a Theory of Society*, pp. 11–94 (Cambridge, UK, and Hoboken, New Jersey: Polity, 2023).
- 9 For more on the pitfalls of the meritocratic principle, see Michael J. Sandel, *Vom Ende des Gemeinwohls: Wie die Leistungsgesellschaft unsere Demokratie zerreit* (Frankfurt am Main: Fischer, 2020); Sighard Neckel, 'Die Wirklichkeit des Leistungsprinzips: Ansprüche, Krisen, Kritik', *Kurswechsel* 3 (2012), pp. 64–70; Pierre Bourdieu and Jean-Claude Passeron,

- Die Illusion der Chancengleichheit: Untersuchungen zur Soziologie des Bildungswesens am Beispiel Frankreichs* (Stuttgart: Klett, 1971).
- 10 Ronald Inglehart, *The Silent Revolution: Changing Values and Political Styles among Western Publics* (Princeton: Princeton University Press, 1977); Abraham Maslow, 'A Theory of Human Motivation', *Psychological Review* 50, no. 4 (1943), pp. 370–396.
 - 11 Cf. Beck, *Risk Society*, op. cit.
 - 12 Ulrich Beck, *The Reinvention of Politics: Rethinking Modernity in the Global Social Order*, trans. Mark Ritter (Cambridge, UK, and Malden, Mass.: Polity, 2005 [1997]).
 - 13 Cf. Stephan Lessenich, *Neben uns die Sintflut: Die Externalisierungsgesellschaft und ihr Preis* (Munich: Hanser Berlin, 2016).
 - 14 Beck, *The Reinvention of Politics*, op. cit., pp. 71–72.
 - 15 Cf. Eva von Redecker, *Revolution für das Leben: Philosophie der neuen Protestformen* (Frankfurt am Main: Fischer, 2020), p. 183.
 - 16 Cf. Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton and Oxford: Princeton University Press, 2015).
 - 17 Ibid.
 - 18 Others have developed this thought into widely circulated forecasts of the end of society as we know it. For example, collapsologists suggest that a complete failure of power systems would bring down the entire modern civilisation within just a few days, leading to 'starvation, destruction, migration, disease and war' (Jem Bendell); see, for example, Pablo Servigne and Raphaël Stevens, *How Everything Can Collapse: A Manual for Our Times* (Cambridge: Polity, 2020).
 - 19 Cf. Klaus Dörre, 'Risiko Kapitalismus', in Dörre et al., eds, *Große Transformation?*, op. cit., pp. 3–33.
 - 20 The Foundational Economy Collective, *Foundational Economy: The Infrastructure of Everyday Life* (Manchester, UK: Manchester University Press, 2018).
 - 21 Cf. Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (New York and Abingdon, UK: Routledge, 2012 [1904/05]).
 - 22 To borrow from Isaiah Berlin, one could call this a negative freedom from the problematic aspects of positive freedom. Respite, rather than opportunity, is the central motif here; cf.

- Isaiah Berlin, 'Zwei Freiheitsbegriffe' (1969), in *Freiheit: Vier Versuche*, pp. 197–256 (Frankfurt am Main: Fischer, 2006).
- 23 Cf. Hartmut Rosa, *Beschleunigung und Entfremdung: Entwurf einer kritischen Theorie spätmoderner Zeitlichkeit* (Berlin: Suhrkamp, 2013).

2. The party and the hangover: From surplus to survival

- 1 Bruno Latour, 'Europe as Refuge', trans. Andrew Brown, Bruno Latour's website.
- 2 Cf. Hartmut Rosa, *Unverfügbarkeit* (Berlin: Suhrkamp, 2020).
- 3 Ibid.
- 4 *Cambridge Dictionary*, website: <https://dictionary.cambridge.org/dictionary/english/adaptation>.
- 5 Karl-Heinz Hillmann and Günter Hartfiel, *Wörterbuch der Soziologie* (Stuttgart: Kröner, 2007), p. 29, trans. MD.
- 6 Talcott Parsons, *The Structure of Social Action: A Study in Social Theory with Special Reference to a Group of Recent European Writers* (New York: The Free Press, 1949).
- 7 Cf. Thomas Hobbes, *Leviathan: The Matter, Forme, and Power of a Common-Wealth Ecclesiastical and Civill* (N.p.: Floating Press, 2009 [1651]).
- 8 Cf. Durkheim, *Über soziale Arbeitsteilung*, op. cit.
- 9 Cf. Émile Durkheim, *Physik der Sitten und des Rechts: Vorlesungen zur Soziologie der Moral* (Frankfurt am Main: Suhrkamp, 1991 [1890]).
- 10 Talcott Parsons, *The Social System* (New York: Free Press, 1979).
- 11 Parsons, *The Structure of Social Action*, op. cit., p. 91.
- 12 Cf. Émile Durkheim, *Der Selbstmord* (Frankfurt am Main: Suhrkamp, 2019 [1897]).
- 13 Weber's metaphor of the 'iron cage' of rationality (more recently rendered as 'shell as hard as steel') refers to the way the process of advancing rationalisation in capitalist society penetrates every aspect of life, influencing consciousness and shaping personal action. Peter Baehr, 'The "Iron Cage" and the "Shell as Hard as Steel": Parsons, Weber, and the *Stahlhartes Gehäuse*

- Metaphor in *The Protestant Ethic and the Spirit of Capitalism*', *History and Theory* 40, no. 2 (2001): 153–169; cf. *Max-Weber-Handbuch: Leben – Werk – Wirkung*, ed. Hans-Peter Müller and Steffen Sigmund (Stuttgart and Weimar: Metzler, 2020).
- 14 Christian Marty, 'Freiheit', in Müller and Sigmund, eds., *Max-Weber-Handbuch*, op. cit., pp. 70–72.
 - 15 Karl Marx, *The German Ideology* (New York: International Publishers, 2004 [1845/46]), p. 53.
 - 16 Cf. Aaron Benanav, *Automatisierung und die Zukunft der Arbeit* (Berlin: Suhrkamp, 2021).
 - 17 Ibid.
 - 18 Herbert Marcuse, *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (Boston: Beacon, 1991 [1964]), p. 75.
 - 19 Cf. Max Horkheimer and Theodor W. Adorno, *Dialektik der Aufklärung: Philosophische Fragmente* (Frankfurt am Main: Suhrkamp, 2003 [1944]).
 - 20 Marcuse, *One-Dimensional Man*, op. cit., p. 95.
 - 21 Cf. Stephan Lessenich, *Die Neuerfindung des Sozialen: Der Sozialstaat im flexiblen Kapitalismus* (Bielefeld: transcript, 2009).
 - 22 Cf. Wolfgang Streeck, 'Citizens as Customers: Considerations on the New Politics of Consumption', *New Left Review*, no. 76 (2012), pp. 27–47.
 - 23 Cf. Philipp Staab, *Markets and Power in Digital Capitalism* (Manchester: Manchester University Press, 2024); Philipp Staab, *Falsche Versprechen: Wachstum im digitalen Kapitalismus* (Hamburg: Hamburger Edition, 2016).
 - 24 Cf. Holger Alda et al., 'Erwerbsverläufe und sekundärer Integrationsmodus: Ergebnisse einer empirischen Untersuchung der Beschäftigungs-Leistung-Historik (BLH) des IAB', *Berliner Debatte Initial* 6 (2003); Lessenich, *Die Neuerfindung des Sozialen*, op. cit.
 - 25 Cf. Wolfgang Streeck, *Zwischen Globalismus und Demokratie: Politische Ökonomie im ausgehenden Neoliberalismus* (Berlin: Suhrkamp, 2021).
 - 26 Cf. Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (London: Profile, 2019).

- 27 Cf. Staab, *Markets and Power in Digital Capitalism*, op. cit.; Philipp Staab and Thorsten Thiel, 'Privatisierung ohne Privatismus: Soziale Medien im digitalen Strukturwandel der Öffentlichkeit', in *Ein neuer Strukturwandel der Öffentlichkeit?*, ed. Martin Seeliger and Sebastian Seignani, pp. 277–297 (Baden-Baden: Nomos, 2021); Joseph Vogl, *Kapital und Ressentiment: Eine kurze Theorie der Gegenwart* (Munich: C. H. Beck, 2021).
- 28 Dahrendorf, *Life Chances*, op. cit.
- 29 Beck, *The Reinvention of Politics*, op. cit., p. 16.
- 30 Beck, *Risk Society*, op. cit.
- 31 Beck, *The Reinvention of Politics*, op. cit., p. 41.
- 32 Stephan Lessenich, 'Die Dialektik der Demokratie: Grenzziehungen und Grenzüberschreitungen im Wohlfahrtskapitalismus', in *Was stimmt nicht mit der Demokratie? Eine Debatte mit Klaus Dörre, Nancy Fraser, Stephan Lessenich und Hartmut Rosa*, ed. Hanna Ketterer and Karina Becker, pp. 121–138 (Berlin: Suhrkamp, 2019).
- 33 Ingolfur Blühdorn, 'Die Gesellschaft der Nicht-Nachhaltigkeit: Skizze einer umweltsoziologischen Gegenwartsdiagnose', in *Nachhaltige Nicht-Nachhaltigkeit: Warum die ökologische Transformation der Gesellschaft nicht stattfindet*, ed. Ingolfur Blühdorn et al., pp. 83–160 (Bielefeld: transcript 2020).
- 34 Ibid., p. 119.
- 35 Ibid., p. 124.
- 36 Ibid., p. 118, trans. MD.
- 37 Cf. Eva Wunderer, Frida Hierl and Maya Götz, 'Einfluss sozialer Medien auf Körperbild, Essverhalten und Essstörungen', *PiD – Psychotherapie im Dialog* 24 (2022), pp. 85–89.
- 38 Cf. Romain Felli, *The Great Adaptation: Climate, Capitalism and Catastrophe* (London and New York: Verso, 2021).
- 39 Ibid.
- 40 On the theoretical and practical parallels between neoliberal and technocratic ideas, see Ray Kiely, 'From Authoritarian Liberalism to Economic Technocracy: Neoliberalism, Politics and "De-Democratization"', *Critical Sociology* 43, no. 4–5 (2017), pp. 725–745; Patricio Silva, 'Neoliberalism, Democratization, and the Rise of Technocrats', in *The Changing Role of the State*

- in *Latin America*, ed. Menno Velingo, pp. 75–92 (London: Routledge, 1998).
- 41 Cf. Blühdorn, *Simulative Demokratie*, op. cit., p. 116.
- 42 Ibid.
- 43 Felli, *The Great Adaptation*, op. cit., pp. 89–90.
- 44 Ibid., p. 56.
- 45 Paolo Gerbaudo, *The Great Recoil: Politics after Populism and Pandemic* (London and New York: Verso, 2021), p. 10.
- 46 Cf. Ralf Dahrendorf, *Konflikt und Freiheit: Auf dem Weg zur Dienstklassengesellschaft* (Munich: Piper, 1972).
- 47 Cf. Wolfgang Streeck, *Gekaufte Zeit: Die vertagte Krise des demokratischen Kapitalismus* (Berlin: Suhrkamp, 2013).
- 48 Ibid.
- 49 The financial sector's share of total profits doubled from 15 to almost 31 percent between the 1960s and the year 2000, while significant growth in corporate and state debt made it increasingly difficult to fund public services. Although the collapse of Lehman Brothers in 2008 brought that cycle to a spectacular end, capitalism's growth and stability problems remained, as did its financialised structure; cf. Staab, *Markets and Power in Digital Capitalism*, op. cit., pp. 36–37. I use the term 'real economy' to reflect the way the financial sector operates outside the rules of the rest of the economy (while still functioning as part of it via the para-economic mechanism of credit); cf. Aaron Sahr, *Das Versprechen des Geldes: Eine Praxistheorie des Kredits* (Hamburg: Hamburger Edition, 2017); Aaron Sahr, *Keystroke-Kapitalismus: Ungleichheit auf Knopfdruck* (Hamburg: Hamburger Edition, 2017).
- 50 Cf. Joseph Vogl, *Das Gespenst des Kapitals* (Zürich: Diaphanes, 2011).
- 51 Streeck, *Gekaufte Zeit*, op. cit.; Wolfgang Streeck, *How Will Capitalism End? Essays on a Failing System* (London and New York: Verso, 2016).
- 52 Robert Gordon, *The Rise and Fall of American Growth: The U.S. Standard of Living since the Civil War* (Princeton and Oxford: Princeton University Press, 2016).

- 53 For example, the entire online advertising model – which accounts for more than 89 percent of Google’s profits and 98 percent of Facebook’s – is based on the promise that spending in the present (on advertising) will be rewarded in the future (with sales and profits); cf. Staab, *Markets and Power in Digital Capitalism*, op. cit., pp. 12–13; Vogl, *Kapital und Ressentiment*, op. cit.
- 54 Cf. Neil Fligstein and Zawadi Rucks-Ahidiana, *The Rich Got Richer: The Effects of the Financial Crisis on Household Well-Being, 2007–2009*, IRLE Working Paper 121–15 (Berkeley: IRLE, 2015); Moritz Kuhn, Moritz Schularick and Ulrike Steins, ‘Research: How the Financial Crisis Drastically Increased Wealth Inequality in the U.S.’, *Harvard Business Review*, 13 September 2018.
- 55 Salvatore Morelli, ‘Banking Crises in the US: The Response of Top Income Shares in a Historical Perspective’, *Journal of Economic Inequality* 16, no. 2 (2018), pp. 257–294; Vanda Almeida, ‘Income Inequality and Redistribution in the Aftermath of the 2007–2008 Crisis: The U.S. Case’, *National Tax Journal* 73 (1) (2020), pp. 77–115.
- 56 Esmé Berkhout et al., *The Inequality Virus: Bringing Together a World Torn Apart by Coronavirus through a Fair, Just and Sustainable Economy* (Oxford: Oxfam International, 2021); Chuck Collins, ‘U.S. Billionaire Wealth Surged by 70 Percent, or \$ 2.1 Trillion, during Pandemic’, Institute for Policy Studies website, 18 October 2021.
- 57 Branko Milanović uses the term ‘hyper-wealthy’ to describe individuals with net assets of at least one billion US dollars in 1987 or at least two billion in 2013. The share of global wealth owned by the richest one percent grew from 32 percent in 2000 to 46 percent in 2013. In the United States income and wealth inequality have risen to levels not seen since the early twentieth century; cf. Branko Milanović, *Die ungleiche Welt: Migration, das Eine Prozent und die Zukunft der Mittelschicht* (Berlin: Suhrkamp, 2016), pp. 52–53.
- 58 Cf. Daniel Bell, *The Coming of Post-Industrial Society* (New York: Basic Books, 1999 [1973]).

- 59 Polanyi, *The Great Transformation*, op. cit.
- 60 Andreas Reckwitz, *The End of Illusions: Politics, Economy, and Culture in Late Modernity* (Cambridge, UK, and Medford, Mass.: Polity, 2021).
- 61 Ibid., pp. 203–239.
- 62 Ulrich Bröckling, *The Entrepreneurial Self: Fabricating a New Type of Subject* (Los Angeles et al.: Sage, 2016).
- 63 Christoph Menke and Juliane Rebentisch, eds., *Kreation und Depression: Freiheit im gegenwärtigen Kapitalismus* (Berlin: Kulturverlag Kadmos, 2010), p. 7, trans. MD.
- 64 In contrast to Reckwitz's *Society of Singularities*, op. cit.
- 65 John H. Goldthorpe, 'The Service Class Revisited', in *Social Change and the Middle Classes*, ed. Tim Butler and Mike Savage, pp. 313–329 (London: UCL Press, 1995); Daniel Oesch, *Redrawing the Class Map: Stratification and Institutions in Britain, Germany, Sweden, and Switzerland* (Basingstoke and New York: Palgrave Macmillan, 2006).
- 66 Gøsta Esping-Andersen, ed., *Changing Classes: Stratification and Mobility in Post-Industrial Societies* (London, Newbury Park and New Delhi: Sage, 1993); Hans-Peter Blossfeld and Karl Ulrich Mayer, 'Berufsstruktureller Wandel und soziale Ungleichheit: Entsteht in der Bundesrepublik ein neues Dienstleistungsproletariat?' in *Soziologische Theorie und Empirie*, ed. Jürgen Friederichs (Opladen: Westdeutscher Verlag, 1991), pp. 235–260; Philipp Staab, *Macht und Herrschaft in der Service-welt* (Hamburg: Hamburger Edition, 2014); Friederike Bahl and Philipp Staab, 'Die Proletarisierung der Dienstleistungsarbeit: Institutionelle Selektivität, Arbeitsprozess und Zukunftsperspektion im Segment einfacher Dienstleistungsarbeit', *Soziale Welt* 66, no. 4 (2015): 371–387.
- 67 David Goodhart, *The Road to Somewhere: The Populist Revolt and the Future of Politics* (London: Hurst, 2017).
- 68 Cf. Heinz Bude, *Gesellschaft der Angst* (Hamburg: Hamburger Edition, 2014); Steffen Mau, *Lebenschancen: Wohin driftet die Mittelschicht?* (Berlin: Suhrkamp, 2012).

- 69 Alain Ehrenberg, *The Weariness of the Self: Diagnosing the History of Depression in the Contemporary Age* (Montreal et al.: McGill-Queen's University Press, 2010).
- 70 While neuroses tend to be attributed to inner conflicts over rigid social norms, depression is seen as an expression of an individual's personal inability to fulfil social expectations; cf. Alain Ehrenberg, 'Depression: Unbehagen in der Kultur oder neue Formen der Sozialität', in *Kreation und Depression: Freiheit im gegenwärtigen Kapitalismus*, ed. Christoph Menke and Juliane Rebentisch, pp. 52–62 (Berlin: Kulturverlag Kadmos, 2010), p. 54, trans. MD (emphasis in original).
- 71 Cf. Elin Thunman, 'Burnout als soziopathologisches Symptom der Selbstverwirklichung', in *Leistung und Erschöpfung: Burnout in der Wettbewerbsgesellschaft*, ed. Sighard Neckel and Greta Wagner, pp. 58–85 (Berlin: Suhrkamp, 2013), p. 66.
- 72 Herbert J. Freudenberger, 'Burn-Out: The Organizational Menace', *Training and Development Journal* 31, no. 7 (1977), pp. 26–27; Neckel and Wagner, eds., *Leistung und Erschöpfung*, op. cit.
- 73 Thunman, 'Burnout als soziopathologisches Symptom', op. cit., p. 66.
- 74 Cf. Seymour Martin Lipset, *Political Man: The Social Bases of Politics* (Garden City, New York: Doubleday, 1960); Ted Robert Gurr, *Why Men Rebel* (Princeton and Oxford: Princeton University Press, 1970).
- 75 Gurr, *Why Men Rebel*, op. cit.
- 76 Jan-Werner Müller, *Was ist Populismus? Ein Essay* (Berlin: Suhrkamp, 2016); see also Gerbaudo, *The Great Recoil*, op. cit.
- 77 In other words, the countries that abandoned the statist model of economic planning after 1989. The multiple successor states to the Soviet Union and Yugoslavia are counted separately.
- 78 International Resource Panel (IRP), ed., *Global Resources Outlook 2019: Natural Resources for the Future We Want* (Nairobi: United Nations Environment Program, 2019), pp. 7–8.
- 79 IRP, ed., *Assessing Global Resource Use: A Systems Approach to Resource Efficiency and Pollution Reduction* (Nairobi: United Nations Environment Program, 2017), pp. 18–29.

- 80 Karina Winkler et al., 'Global Land Use Changes Are Four Times Greater than Previously Estimated', *Nature Communications* 12, no. 1 (2021): 1–10, p. 2.
- 81 United Nations Environment Program (UNEP), ed., *Assessing Global Land Use: Balancing Consumption with Sustainable Supply* (Nairobi: United Nations Environment Program, 2014), p. 25; IPBES, ed., *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (Bonn: IPBES, 2019).
- 82 The Global Living Planet Index shows the populations of mammals, birds, reptiles and fish declining by an average of 68 percent between 1970 and 2016. Up to one million species are currently threatened with extinction, about half of them because of habitat destruction, cf. Food and Agriculture Organization (FAO) and UNEP, eds., *The State of the World's Forests 2020: Forests, Biodiversity and People* (Rome: Food and Agriculture Organization, 2020), p. 12; IRP, ed., *Assessing Global Land Use: Balancing Consumption with Sustainable Supply: A Report of the Working Group on Land and Soils of the International Resource Panel*, op. cit., p. 27; IPBES, ed., *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*, op. cit., p. 119.
- 83 Reckwitz, *The Society of Singularities*, op. cit.
- 84 Reliable sources on the total number of cars globally are few and far between, giving estimates at best: International Organization of Motor Vehicle Manufacturers (IOICA), 'World Vehicles in Use – All Vehicles', IOICA website, 2022; Andrew Chesterton, 'How Many Cars Are There in the World?', Cars Guide website, 20 September 2018.
- 85 Jeremy Rifkin, *Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism* (New York: St Martin's Griffin, 2015).
- 86 In order to meet the global demand for electricity for all ICT devices using pedal-powered generators, the entire world population would have to 'pedal round the clock in consecutive eight-hour shifts'; Steffen Lange and Tilman Santarius, *Smarte*

grüne Welt? Digitalisierung zwischen Überwachung, Konsum und Nachhaltigkeit (Munich: Oekom, 2018), p. 27.

- 87 Lange and Santarius, *Smarte grüne Welt?*, op. cit.
- 88 Lessenich, *Neben uns die Sintflut*, op. cit.; Göran Therborn, 'The Killing Fields of Inequality', *International Journal of Health Services* 42, no. 4 (2012), pp. 579–589.
- 89 Cf. Stephen Emmott, *Ten Billion* (New York: Vintage, 2013).
- 90 Jem Bendell, *Deep Adaptation: A Map for Navigating Climate Tragedy*, IFLAS Occasional Paper 2 (2018); see also Jem Bendell and Rupert Read, eds., *Deep Adaptation: Navigating the Realities of Climate Chaos* (Cambridge and Medford: Polity, 2018); Servigne and Stevens, *How Everything Can Collapse*, op. cit.
- 91 Mark Pelling, *Adaptation to Climate Change: From Resilience to Transformation* (London: Routledge, 2010).
- 92 Bendell, *Deep Adaptation*, op. cit.
- 93 Ibid.
- 94 Ibid.

3. Modernity adé

- 1 Theodor W. Adorno, *Critical Models: Interventions and Catchwords*, trans. Henry W. Pickford (New York: Colombia University Press, 2005 [original German 1969]), p. 150.
- 2 Reinhart Koselleck and Christian Meier, 'Fortschritt', in *Geschichtliche Grundbegriffe: Historisches Lexikon zur politisch-sozialen Sprache in Deutschland*, vol. 2, ed. Otto Brunner, Werner Conze and Reinhart Koselleck, pp. 351–423 (Stuttgart: Klett-Cotta, 1997).
- 3 Ibid., p. 352.
- 4 Ibid., p. 353.
- 5 Sighard Neckel, 'Im Angesicht der Katastrophe', *Blätter für deutsche und internationale Politik*, February 2021, pp. 51–58.
- 6 Tsing, *The Mushroom at the End of the World*, op. cit., p. 21.
- 7 The Shell Youth Survey has been surveying the attitudes and expectations of young people in Germany at regular intervals since 1953. The ninth survey in 1981 investigated a sample of

- 1,077 young people aged between 15 and 24; Jugendwerk der Deutschen Shell, ed., *Jugend '81: Lebensentwürfe, Alltagskulturen, Zukunftsbilder: Studie im Auftrag des Jugendwerks der Deutschen Shell* (Opladen: Leske Budrich, 1982).
- 8 Jugendwerk der Deutschen Shell, ed., *Jugend '81*, op. cit., pp. 384–385.
 - 9 Ibid., pp. 387–388, trans. MD (emphasis in original).
 - 10 The 2002 Shell Youth Survey was the first to identify a pragmatic attitude prioritising personal life, family and career. The same phenomenon was observed in the 2006, 2010 and 2015 surveys, with a growing aspect of politicisation. The 2019 survey found that the youth were more polarised, but still 'weaving these new orientations into a pragmatic underlying pattern'. Mathias Albert, Klaus Hurrelmann and Gudrun Quenzel, *Jugend 2019: Eine Generation meldet sich zu Wort* (Weinheim and Basel: Beltz 2019), p. 323, trans. MD; cf. Hurrelmann and Albert, *Jugend 2002: Zwischen pragmatischem Idealismus und robustem Materialismus* (Frankfurt am Main: Fischer, 2004); Hurrelmann and Albert, *Jugend 2006: Eine pragmatische Generation unter Druck* (Frankfurt am Main: Fischer, 2006); Albert, Hurrelmann and Quenzel, *Jugend 2010: Eine pragmatische Generation behauptet sich* (Frankfurt am Main: Fischer, 2010); Albert, Hurrelmann and Quenzel, *Jugend 2015: Eine pragmatische Generation im Aufbruch* (Frankfurt am Main: Fischer, 2015).
 - 11 In 2002, only 34 percent of all young people surveyed said they were interested in politics. In 1984, the figure was 55 percent, in the latest study (2019) it is 45 percent; Albert, Hurrelmann and Quenzel, *Jugend 2019*, op. cit., p. 49.
 - 12 Ibid., p. 20.
 - 13 Ibid.
 - 14 Beck, *Die Erfindung des Politischen*, pp. 57ff.
 - 15 Beck, *The Reinvention of Politics*, op. cit., pp. 32ff.
 - 16 This is also reflected in a representative psychological survey with 1,000 participants conducted by the Rheingold-Institut in August 2021, during the Covid-19 pandemic. Like the Shell Youth Surveys, it identified a major discrepancy between expectations for the future and realities in the here and

now. While 64 percent of participants were optimistic about their personal prospects, 59 percent were pessimistic about the future of society. Here, again, there are indications that experiences of self-efficacy and agency in the private sphere can rub off onto other areas. Many respondents agreed that their actions in the personal sphere contributed to a better future – for example, demonstrating civic courage (77 percent) or providing a good example for others (89 percent). Rheingold Institut, *Psychologische Grundlagenstudie: Zum Stimmungs- und Zukunftsbild in Deutschland: Ergebnisbericht*, Erstellt für Identity Foundation – Gemeinnützige Stiftung für Philosophie (Cologne: Rheingold Institut, 2021).

- 17 Markus Promberger et al., 'Chancen des Resilienz begriffes für eine soziologische Armutsforschung', in *Resilienz im Sozialen: Theoretische und empirische Analysen*, ed. Martin Endreß and Andrea Maurer, pp. 265–294 (Wiesbaden: Springer, 2015); Bröckling, *Gute Hirten führen sanft*, op. cit.
- 18 Suniya S. Luthar, Dante Cicchetti and Bronwyn Becker, 'The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work', *Child Development* 71, no. 3 (2000), pp. 543–562.
- 19 Stefanie Graefe and Karina Becker, eds., *Mit Resilienz durch die Krise? Anmerkungen zu einem gefragten Konzept* (Munich: Oekom, 2021).
- 20 Internet platforms also promoted services promising to enhance personal well-being. The University of Pennsylvania and the Austrian Institut für Gesundheit und Entwicklung für Menschen und Organisationen (<https://www.resilienzstudie.com>), for example, offered personal resilience checks in connection with their research into the effects of the Covid-19 pandemic.
- 21 Carl Folke, 'Resilience: The Emergence of a Perspective for Social-Ecological Systems Analyses', *Global Environmental Change* 16, no. 3 (2006), pp. 253–267; Marjolein Sterk et al., 'How to Conceptualize and Operationalize Resilience in Socio-Ecological Systems?', *Current Opinion in Environmental Sustainability* 28 (2017), pp. 108–113.

- 22 Crawford S. Holling, 'Resilience and Stability of Ecological Systems', *Annual Review of Ecology and Systematics* 4 (1973), pp. 1–23.
- 23 Endreß and Maurer, eds., *Resilienz im Sozialen*, op. cit.
- 24 Cf. Stefan Kaufmann, 'Resilienz als Sicherheitsprogramm: Zum Janusgesicht eines Leitprogramms', in Endreß and Maurer, eds., *Resilienz im Sozialen*, op. cit., pp. 295–312; Andreas Folkers, *Das Sicherheitsdispositiv der Resilienz: Katastrophische Risiken und die Biopolitik vitaler Systeme* (Frankfurt and New York: Campus, 2018).
- 25 See, for example, Stefan Kaufmann's study of a framework drafted by the Homeland Security Studies and Analysis Institute, in Kaufmann, 'Resilienz als Sicherheitsprogramm', op. cit., p. 303.
- 26 Wolfgang Bonß, 'Karriere und sozialwissenschaftliche Potenziale des Resilienzbegriffs', in Endreß and Maurer, eds., *Resilienz im Sozialen*, op. cit., pp. 15–32.
- 27 The conflicts over wind farms, high-voltage transmission lines, and afforestation projects in developing countries provide a taste of the potential for discontent. For example, after COP26 the Indonesian environment minister backtracked on his country's commitment to end deforestation, on the basis that economic development came first. For the Glasgow Leaders' Declaration on Forests and Land Use see: <https://ukcop26.org/glasgow-leaders-declaration-on-forests-and-land-use/>. On this aspect more generally, see Franz Walter, *Die neue Macht der Bürger: Was motiviert die Protestbewegungen? BP-Gesellschaftsstudie* (Reinbek bei Hamburg: Rowohlt, 2013).
- 28 David Chandler and Julian Reid, *The Neoliberal Subject: Resilience, Adaptation and Vulnerability* (Lanham: Rowman & Littlefield Publishers, 2016); Stefanie Graefe, *Resilienz im Krisenkapitalismus: Wider das Lob der Anpassungsfähigkeit* (Bielefeld: transcript, 2019); Bröckling, *Gute Hirten führen sanft*, op. cit.
- 29 Chandler and Reid, *The Neoliberal Subject*, op. cit.
- 30 Ibid., p. 78.
- 31 Graefe, *Resilienz im Krisenkapitalismus*, op. cit., p. 130.
- 32 Ibid., p. 41.

- 33 Ulrich Bröckling, *The Entrepreneurial Self: Fabricating a New Type of Subject* (Los Angeles et al.: Sage, 2016).
- 34 Graefe, *Resilienz im Krisenkapitalismus*, op. cit., p. 139.
- 35 Ibid., p. 151.
- 36 Bröckling, *Gute Hirten führen sanft*, op. cit., p. 137, trans. MD.
- 37 Graefe, *Resilienz im Krisenkapitalismus*, op. cit., p. 143.
- 38 Andreas Reckwitz, 'Lehren aus der Coronakrise: Die Politik der Resilienz hat vier Probleme', *Der Spiegel*, 5 March 2021, trans. MD.
- 39 Ibid.
- 40 Ibid.
- 41 Ibid.
- 42 Andreas Reckwitz, 'Auf dem Weg zu einer Soziologie des Verlusts', *Soziopolis*, 6 May 2021, trans. MD.
- 43 Ibid.
- 44 In response to liberal modernisation, late modernity is also witnessing a resurgence of conservatism as the modern ideology concerned with the prevention of loss; cf. Karl Mannheim, *Konservatismus: Ein Beitrag zur Soziologie des Wissens* (Frankfurt am Main: Suhrkamp, 1984).
- 45 Reckwitz, 'Auf dem Weg zu einer Soziologie des Verlusts', op. cit.

4. Adaptive rebellion

- 1 Berlin, 'Zwei Freiheitsbegriffe', op. cit.
- 2 Hartmut Rosa, *Resonance: A Sociology of Our Relationship to the World* (Cambridge, UK, and Medford, Mass.: Polity, 2019), epub version.
- 3 'Social modernity'; see Oliver Nachtwey, *Germany's Hidden Crisis: Social Decline in the Heart of Europe*, trans. Loren Balhorn and David Fernbach (London and New York: Verso, 2018). Incidentally, this is also the juncture at which the seeds of the 'artistic critique' were planted in Western societies; Luc Boltanski and Ève Chiapello, *The New Spirit of Capitalism*, trans. Gregory Elliot (London and New York: Verso, 2007).

- 4 John Kenneth Galbraith, *The Affluent Society* (Boston: Houghton Mifflin, 1958).
- 5 Ludwig Erhard was West Germany's minister of economic affairs from 1949 to 1963 and Chancellor from 1963 to 1966. Ludwig Erhard, *Wohlstand für Alle* (Düsseldorf: Econ, 1957).
- 6 Marshall Sahlins, *Stone Age Economics* (London: Routledge Classics, 2017 [1972]).
- 7 David Graeber, 'Foreword', in Marshall Sahlins, *Stone Age Economics*, op. cit., pp. ix–xviii.
- 8 The concept of compliance is closely associated with Max Weber's exploration of legitimate authority. The term describes the phenomenon of submission to a legitimate order; cf. Max Weber, *Economy and Society: A New Translation*, ed. and trans. Keith Tribe (Cambridge, Mass., and London: Harvard University Press, 2019 [1921]), pp. 338–447; cf. Wolfgang Fach, 'Gouvernementalität und governance: Max Webers Herrschaftssoziologie heute', in Müller and Sigmund, eds., *Max-Weber-Handbuch*, op. cit., pp. 432–434.
- 9 Rosa, *Resonance*, op. cit., pp. 879–892.
- 10 Andrew Abbott, 'The Problem of Excess', *Sociological Theory* 32, no. 1 (2014), pp. 1–26.
- 11 Sahlins, *Stone Age Economics*, op. cit., p. 2.
- 12 Rosa, *Unverfügbarkeit*, op. cit.
- 13 Sahlins, *Stone Age Economics*, op. cit., p. 18. Here Sahlins is citing Frederick D. McCarthy and Margaret McArthur, 'The Food Quest and the Time Factor in Aboriginal Economic Life', in *Records of the Australian-American Scientific Expedition to Arnhem Land*, vol. 2: *Anthropology and Nutrition*, ed. C. P. Mountford (Melbourne: Melbourne University Press, 1960), p. 148.
- 14 Graeber, 'Foreword', op. cit.
- 15 Hartmut Rosa, 'Best Account: Outlining a Systematic Theory of Modern Society', in Reckwitz and Rosa, *Late Modernity in Crisis*, op. cit., pp. 95–157.
- 16 Sahlins, *Stone Age Economics*, op. cit., p. 14.
- 17 Ibid., p. 33.

- 18 Sahlins himself concedes this, but argues that his theory is applicable to most hunter-gatherer societies; cf. Sahlins, *Stone Age Economics*, op. cit., pp. 36–37.
- 19 For example, contrasting the life of the hunter-gatherers with J. K. Galbraith's society of limited resources and unlimited desires (which he called the 'Galbraithian way'); see Sahlins, *Stone Age Economics*, op. cit., p. 2.
- 20 Karl Mannheim, *Ideologie und Utopie* (Bonn: Cohen, 1930).
- 21 The sociological schools discussed above focus either on order and stability or on power and liberty. In the former, adaptation occurs more or less automatically as the fundamental cultural consensus of the society (viz., Parsons). Sociologies centring on freedom tend to regard adaptation as the antithesis of a generative and transformative praxis. Instead, it is a synonym for the stabilisation of an inherently defective order.
- 22 Robert K. Merton, 'Social Structure and Anomie', *American Sociological Review* 3, no. 5 (1938), pp. 672–682.
- 23 Ibid., p. 678.
- 24 Ibid.
- 25 Ibid., p. 677.
- 26 Robert K. Merton, 'Social Structure and Anomie', in *On Social Structure and Science*, pp. 133–152 (Chicago: University of Chicago Press, 1996), here p. 151.
- 27 Karl Mannheim, 'Das Problem der Generationen', in *Wissenssoziologie: Auswahl aus dem Werk*, ed. Kurt H. Wolff, pp. 509–565 (Berlin and Neuwied: Luchterhand, 1964 [1928]).
- 28 Heinz Bude, *Deutsche Karrieren: Lebenskonstruktionen sozialer Aufsteiger aus der Flakhelfer-Generation* (Frankfurt am Main: Suhrkamp, 1987), p. 425, trans. MD.
- 29 Dieter Rucht, *Modernisierung und neue soziale Bewegungen: Deutschland, Frankreich und USA im Vergleich* (Frankfurt am Main and New York: Campus, 1994).
- 30 Cf. Boltanski and Chiapello, *The New Spirit of Capitalism*, op. cit.
- 31 While Dieter Rucht doubts whether Fridays for Future speaks for an entire generation, Klaus Hurrelmann and Erik Albrecht see climate issues as just the start of the politicisation of 'Generation Greta'; cf. Dieter Rucht, 'Jugend auf der Straße: Fridays

- for Future und die Generationenfrage', *WZB-Mitteilungen*, no. 165 (2019), pp. 6–9; Klaus Hurrelmann and Erik Albrecht, *Generation Greta: Was sie denkt, wie sie fühlt und warum das Klima erst der Anfang ist* (Weinheim and Basel: Beltz, 2020).
- 32 Mattias Wahlström et al., eds., *Protest for a Future: Composition, Mobilization and Motives of the Participants in Fridays for Future Climate Protests on 15 March 2019 in 13 European Cities* (N.p.: Protest Institute, 2019); Moritz Sommer et al., 'Fridays for Future: Profil, Entstehung und Perspektiven der Protestbewegung in Deutschland', *Internationale Politik* 74, no. 4 (2019), pp. 121–125.
 - 33 Sommer et al., 'Fridays for Future', op. cit., p. 10. Note that the study excluded subjects younger than fourteen years of age.
 - 34 Sommer et al., 'Fridays for Future', op. cit., p. 13.
 - 35 Wahlström et al., eds., *Protest for a Future*, op. cit., p. 9.
 - 36 Hurrelmann and Albrecht, *Generation Greta*, op. cit., p. 188.
 - 37 Laura Backes et al., 'Kinder der Apokalypse', *Der Spiegel*, 31 May 2019.
 - 38 It is no coincidence that the prominent German climate activists Luisa Neubauer and Alexander Repenning subtitle their book 'A History of Our Future'. *Beginning to End the Climate Crisis* is an appeal to what they call the 'possibilists': forward-thinking individuals who recognise possibilities and seek to realise them. Rather than looking for a secure future, they are thinking in the conjunctive: 'the future is no longer a promise'. Luisa-Marie Neubauer and Alexander Repenning, *Beginning to End the Climate Crisis: A History of Our Future* (Waltham, Mass.: Brandeis University Press, 2023 [2019]), p. 13).
 - 39 Adorno, *Critical Models: Interventions and Catchwords*, op. cit., p. 29.
 - 40 In 2021, the Fridays for Future movement laid out the following concrete demands for the first one hundred days of the new German government: a CO₂ budget in line with the 1.5°C target, no new natural gas infrastructure and a complete end to its use by 2035; an end to subsidies for fossil fuels and no expansion of lignite mining; a sevenfold increase in solar and wind power and removal of any political obstacles to their expansion; no manufacture of internal combustion engines from 2025 and

an immediate stop to all major roadbuilding projects; 14 billion euros annually for international climate financing; all trade agreements to conform with human rights and climate targets. The list is available online at <https://fridaysforfuture.de/forderungen/100-tage/> (as of June 2022).

- 41 Neubauer and Repenning, *Beginning to End the Climate Crisis*, op. cit., p. 53.
- 42 Ernst Friedrich Schumacher, *Small Is Beautiful: A Study of Economics as If People Mattered* (London: Blond & Briggs, 1973).
- 43 Sahlins, *Stone Age Economics*, op. cit., p. 2.
- 44 Ingolfur Blühdorn, 'Haben wir es gewollt? Vorüberlegungen', in Blühdorn et al., *Nachhaltige Nicht-Nachhaltigkeit*, op. cit., pp. 13–28, here p. 17.
- 45 Blühdorn, 'Die Gesellschaft der Nicht-Nachhaltigkeit', op. cit., p. 113, trans. MD.
- 46 Strategic in the sense that the cited scientific findings back up their own positions and neutralise those of their adversaries.
- 47 Ingolfur Blühdorn, 'Demokratie der Nicht-Nachhaltigkeit: Begehung eines umweltsoziologischen Minenfeldes', in Blühdorn et al., *Nachhaltige Nicht-Nachhaltigkeit*, op. cit., pp. 303–344, here p. 323.
- 48 Beck, *The Reinvention of Politics*, op. cit., p. 107–108.
- 49 Hartmut Rosa's concept of the 'medio-passive' builds on philosophical debates seeking a middle way between perpetrator and victim, dependency and autonomy, and active and passive. Such a medio-passive relationship to the world, he argues, can pave the way for a comprehensive transformation by doing away with the outdated sovereignty paradigm of modernity. Cf. Hartmut Rosa, '„Spirituelle Abhängigkeitserklärung“: Die Idee des Mediopassiv als Ausgangspunkt einer radikalen Transformation', in *Große Transformation? Zur Zukunft moderner Gesellschaften*, special issue of *Berliner Journal für Soziologie*, ed. Klaus Dörre et al., pp. 35–56 (Wiesbaden: Springer, 2019). For a discussion in English, see Hartmut Rosa, 'Resonance as a Medio-Passive, Emancipatory and Transformative Power: A Reply to My Critics', *Journal of Chinese Sociology* 10, art. no. 16 (2023).

5. Criticality and critique: The avant-gardes of adaptation

- 1 Tsing, *The Mushroom at the End of the World*, op. cit., p. 28.
- 2 Ève Chiapello, 'Capitalism and Its Criticism', in *New Spirits of Capitalism*, ed. Glenn Morgan and Paul du Gay, pp. 60–82 (Oxford: Oxford University Press, 2013).
- 3 Mannheim, *Ideologie und Utopie*, op. cit.
- 4 Chiapello, 'Capitalism and Its Criticism', op. cit., p. 25.
- 5 Luc Boltanski, *Soziologie und Sozialkritik* (Berlin: Suhrkamp, 2010); Boltanski and Chiapello, *The New Spirit of Capitalism*, op. cit.
- 6 Streeck, *Gekaufte Zeit*, op. cit.
- 7 Boltanski and Chiapello, *The New Spirit of Capitalism*, op. cit.
- 8 Chiapello, 'Capitalism and Its Criticism', op. cit., pp. 60–82.
- 9 Boltanski and Chiapello, *The New Spirit of Capitalism*, op. cit.
- 10 The artistic critique has itself been criticised for accepting an erosion of civil rights and social security, and, as such, doing less to promote democracy than the preceding wave of social protests.
- 11 Chiapello, 'Capitalism and Its Criticism', op. cit., p. 16.
- 12 At the beginning of the pandemic it was believed that only certain high-risk groups would be severely affected.
- 13 For a detailed analysis of shifting views on working from home during the pandemic, see Infas and Institut für Wirtschaftsforschung, *Homeoffice im Verlauf der Corona-Pandemie*, Themenreport Corona Plattform, July 2021.
- 14 Steffen Mau, *Sortiermaschinen: Die Neuerfindung der Grenze im 21. Jahrhundert* (Munich: C. H. Beck, 2021).
- 15 Neckel, *Im Angesicht der Katastrophe*, op. cit.
- 16 Andreas Malm, *Corona, Climate, Chronic Emergency: War Communism in the Twenty-First Century* (London and New York: Verso, 2020).
- 17 This applies whatever the true origins of the Covid-19 virus, about which doubts remain. The widely accepted theory that the virus passed from animals to humans would place it in the context of increased likelihood of zoonoses when settlement expansion brings people into closer contact with wild animals;

- cf. Malm, *Corona, Climate, Chronic Emergency*, op. cit. If the virus ultimately transpires to have originated in a laboratory, the pandemic will have been even more obviously anthropogenic.
- 18 Frank Adloff and Sighard Neckel, 'Wettlauf gegen die Zeit: Agenda für eine neue Regierung im Klimajahrzehnt', *Blätter für deutsche und internationale Politik*, October 2021, pp. 55–62.
 - 19 Suddenly, the telecommunications engineer found herself responsible for a service deemed of vital importance for society. Hospitals and supermarkets were recognised as essential services. At least for a time, there was a broadly shared realisation that the superficial temptations of the modern economy could not exist without the underlying collective practices of reproduction. It is the key workers in this 'foundational economy' who ensure the technical and social reproduction of society; cf. The Foundational Economy Collective, *Foundational Economy: The Infrastructure of Everyday Life* (Manchester, UK: Manchester University Press, 2018).
 - 20 Eva Barlösius, *Infrastrukturen als soziale Ordnungsdienste: Ein Beitrag zur Gesellschaftsdiagnose* (Frankfurt am Main and New York: Campus, 2019).
 - 21 In this research project, students conducted and evaluated seventy-nine narrative interviews with essential workers from the fields of health, education, childcare, public order and material infrastructure. The interviews were conducted between spring 2020 and spring 2022. The goal was to explore the experiences of essential workers and their thoughts about society. The research covered four fields: healthcare, education/childcare, public order and material infrastructure. The interviews focussed on the subjects' views on the response to the pandemic and their associated ideas about society. The analysis employed the documentary method developed by Ralf Bohnsack on the basis of Mannheim's sociology of knowledge to elucidate subjective meaning and implicit forms of knowledge. I am grateful to the participants in my master seminar on criticality and criticism, who conducted the fieldwork and analysis. The interviews were conducted in German; the extracts have been translated into English. Cf. Ralf Bohn-

- sack, Iris Nentwig-Gesemann and Arnd-Michael Nohl, *Die dokumentarische Methode und ihre Forschungspraxis*, Grundlagen qualitativer Sozialforschung (Wiesbaden: Springer, 2013).
- 22 Annekatrin Schrenker, Claire Samtleben and Markus Schrenker, 'Applaus ist nicht genug: Gesellschaftliche Anerkennung systemrelevanter Berufe', *Aus Politik und Zeitgeschichte* 71 (2021), pp. 13–15, trans. MD.
- 23 Ibid.
- 24 Roughly 70 percent of essential workers in Germany earn less than the average wage. In comparison to the labour market as a whole, they are more likely to be on temporary contracts and more likely to be worried about their own economic situation – even though they are actually more likely to be covered by collective pay agreements (because of the prominent role of the public sector in these spheres); cf. Schrenker, Samtleben and Schrenker, 'Applaus ist nicht genug', op. cit., p. 14.
- 25 Nicole Mayer-Ahuja and Oliver Nachtwey, *Verkannte Leistungsträger:innen: Berichte aus der Klassengesellschaft* (Berlin: Suhrkamp, 2021).
- 26 Roughly 70 percent of police employees in Germany are male, cf. Statistisches Bundesamt, 'Pressemitteilung Nr. 57', 18 September 2020, https://www.destatis.de/DE/Presse/Pressemitteilungen/2020/09/PD20_No57_742.html.
- 27 Original German: 'Leben in der Lage'; more literally 'living in the situation'.
- 28 Reckwitz, *The Society of Singularities*, op. cit.
- 29 On the distinction between input and output legitimacy, see Fritz W. Scharpf, *Regieren in Europa: Effektiv und Demokratisch?* (Frankfurt am Main and New York: Campus, 1999).

6. Protective technocracy

- 1 Joseph Schumpeter, *Capitalism, Socialism and Democracy* (London and New York: Routledge, 1994 [1943]), p. 302.
- 2 Sophie Haring calls this 'the rule of necessity'; cf. Sophie Haring, 'Herrschaft der Experten oder Herrschaft des Sach-

- zwangs? Technokratie als politikwissenschaftliches „Problem-Ensemble“, *Zeitschrift für Politik* 57, no. 3 (2010), pp. 243–264.
- 3 Blühdorn, *Simulative Demokratie*, op. cit.
 - 4 From Plato's philosopher king and Aristotle's 'bad forms' of constitution to Rousseau's belief that democracy was suitable only for small communities and Kant's outright aversion; cf. Blühdorn, *Simulative Demokratie*, op. cit., pp. 25ff.
 - 5 Max Weber, *Economy and Society: A New Translation*, ed. and trans. Keith Tribe (Cambridge, Mass., and London, Harvard University Press: 2019 [1921]), p. 408.
 - 6 Blühdorn, *Simulative Demokratie*, op. cit., pp. 25ff., trans. MD.
 - 7 Schumpeter, *Capitalism, Socialism and Democracy*, op. cit., pp. 289–295.
 - 8 Ibid., p. 291.
 - 9 Ibid., pp. 291–293.
 - 10 Blühdorn, *Simulative Demokratie*, op. cit., p. 40.
 - 11 Jürgen Habermas, *Theorie des kommunikativen Handelns*, vol. 2: *Zur Kritik der funktionalistischen Vernunft* (Frankfurt am Main: Suhrkamp, 1981).
 - 12 For a detailed description, see the Civilopedia website, 'Synthetic technocracy', https://www.civilopedia.net/gathering-storm/governments/government_synthetic_technocracy.
 - 13 Ibid.
 - 14 The economic (or socialist) calculation debate; cf. Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth* (Auburn: Ludwig von Mises Institute, Auburn University, 1990 [1920]).
 - 15 Evgeny Morozov, 'Digital Socialism? The Calculation Debate in the Age of Big Data', *New Left Review*, no. 116/117 (2019), pp. 33–67.
 - 16 Nick Dyer-Witheford, 'Red plenty platforms', *Culture Machine* 14 (2013), pp. 1–27.
 - 17 Daniel Saros, *Information Technology and Socialist Construction: The End of Capital and the Transition to Socialism* (London: Routledge, 2014); Morozov, 'Digital Socialism?' op. cit.; Jochum and Schaupp, 'Die Steuerungswende', op. cit.; Jasper Bernes, 'Planning and Anarchy', *South Atlantic Quarterly* 119, no. 1 (2020), pp. 53–73.

- 18 The Cybersyn project was launched by Salvador Allende's socialist government in Chile in the early 1970s. Its purpose was to coordinate the economy in real time using computerisation, cutting out market mechanisms. The heart of the system was a network of telex machines sending factory data to a central operations room in the capital. The plan was also for consumers to communicate their needs directly to the central computer via TV devices in private households. Cybersyn was never fully completed and was dismantled following Augusto Pinochet's military coup in 1973. The subsequent period saw the introduction of extreme free-market policies in Chile.
- 19 Bernes, 'Planning and Anarchy', op. cit.
- 20 Morozov, 'Digital Socialism?' op. cit.; Jochum and Schaupp, 'Die Steuerungswende', op. cit.
- 21 Leigh Phillips and Michal Rozworski, *The People's Republic of Walmart: How the World's Biggest Corporations Are Laying the Foundation for Socialism* (London and New York: Verso, 2019).
- 22 Schumpeter, *Capitalism, Socialism and Democracy*, op. cit.
- 23 James E. Lovelock with Bryan Appleyard, *Novacene: The Coming Age of Hyperintelligence* (Cambridge, Mass., and London: MIT Press, 2020). Lovelock is best known as the co-author of the Gaia hypothesis, according to which the earth and its biosphere form a single self-stabilising system.
- 24 Beck, *The Reinvention of Politics*, op. cit.
- 25 Stephan Lessenich, 'Die Dialektik der Demokratie: Grenzziehungen und Grenzüberschreitungen im Wohlfahrtskapitalismus', in *Was stimmt nicht mit der Demokratie?*, ed. Ketterer and Becker, op. cit., pp. 121–138.
- 26 Reckwitz, *The End of Illusions*, op. cit.
- 27 Streeck, *Zwischen Globalismus und Demokratie*, op. cit.
- 28 Malm, *Corona, Climate, Chronic Emergency*, op. cit.
- 29 Benjamin Bratton, *Revenge of the Real: Post-Pandemic Politics* (London and Oxford: Verso, 2021).
- 30 Ibid., pp. 33–45.
- 31 Ibid., p. 43.
- 32 Ibid., p. 145.
- 33 Ibid., p. 156.

- 34 Max Weber, 'Science as a Vocation' (1917/19) and 'Politics as a Vocation' (1919), in *Max Weber's Complete Writings on Academic and Political Vocations*, ed. and intro. by John Dreijmanis, trans. Gordon C. Wells (N.p.; Algora, 2008).
- 35 Max Weber, 'Science as a Vocation', op. cit., p. 35.
- 36 Max Weber, 'Politics as a Vocation', op. cit., p. 173.
- 37 Ibid., p. 207.
- 38 Max Weber, *Economy and Society: A New Translation*, ed. and trans. Keith Tribe (Cambridge, Mass., and London, Harvard University Press: 2019 [1921]), p. 134.
- 39 Thorstein Veblen, *The Engineers and the Price System* (Kitchener, Canada: Batoche Books, 2001 [1921]), p. 46. Cf. Dieter Senghaas, 'The Technocrats: Rückblick auf die Technokratiebewegung in den USA', in *Texte zur Technokratiediskussion*, ed. Claus Koch and Dieter Senghaas, pp. 282–295 (Frankfurt am Main: Europäische Verlagsanstalt, 1970), p. 285.
- 40 Thorstein Veblen, *The Engineers and the Price System*, op. cit.
- 41 Senghaas, 'The Technocrats', op. cit., p. 286.
- 42 These included the Technical Alliance, the Continental Committee on Technocracy, and Technocracy, Inc.
- 43 Cf. Jacques Ellul, *The Technological Society* (London: Cape, 1965); Jean Meynaud, *Technocracy* (London: Faber, 1968); for a detailed discussion of the development of technocratic ideas, see Vincent August, *Technologisches Regieren: Der Aufstieg des Netzwerk-Denkens in der Krise der Moderne: Foucault, Luhmann und die Kybernetik* (Bielefeld: transcript, 2021).
- 44 Helmut Schelsky, *Der Mensch in der wissenschaftlichen Zivilisation* (Cologne and Opladen: Westdeutscher Verlag, 1961).
- 45 Ibid., p. 25, trans. MD.
- 46 Ibid., p. 31, trans. MD.
- 47 Offe was thinking of developments such as the destruction of traditional rural ways of life through technocratic agricultural policies. In a planetary technocracy of the kind sketched out by Bratton, one could imagine legitimacy issues arising from the need to reduce material consumption; cf. Claus Offe, 'Das politische Dilemma der Technokratie', in *Texte zur*

Technokratiediskussion, ed. Koch and Senghaas, op. cit., pp. 156–171.

48 Ibid., p. 163, trans. MD.

49 Ibid., p. 166.