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Technology, Accelerated History, and the Plurality of Historical Times

BY ISABELLA CONSOLATI · PUBLISHED 04/04/2023 · UPDATED 31/03/2023



Fritz Lang, frame from the film Metropolis, 1927.

In his works, Reinhart Koselleck does not dwell on the history of the concept of technology (the lemma *Technologie* does not even appear in *Geschichtliche Grundbegriffe*). However, technology as a concept constitutes the empirical basis of the modern conception of time and plays a major role in the genesis of contemporaneity. Koselleck demonstrates that the issue of technology lies at the very heart of the formation of contemporary culture and offers a solution to the rigid dichotomy between the realm of technology and that of values that has dominated its conceptualisation.[1]

Technology and the pathogenesis of modern society

The questions raised in *Critique and Crisis* are drawn from the context of the Cold War:[2] Koselleck espouses the Schmittian view that it is a global civil war and traces the clash between the "ideologies" of the two blocs back to the Enlightenment and the peculiar relationship between morality and politics that it developed. In a letter to Carl Schmitt,[3] Koselleck argues that the development of a technology whose potential for destruction eludes any political direction is one result of the specifically ideological impossibility of governing historical events, which is linked to the ambition of shaping the future and realising utopia in history. Thanks also to technological apparatuses that are beyond the control of individuals, the global crisis appears to elude a political resolution. The aspiration and question that Koselleck raises is whether and how, in this global conflict, the "still hidden power"[4] of the European continent, where those same conflicts that have now spread to the world stage originated, can be drawn out. The theme of technology as a superhuman and dangerously depoliticised factor emerges here, underlining and confirming the peculiar dialectic of the Enlightenment that the young Koselleck reconstructed.

Technical knowledge in administration and industry

The issue of technology played a completely different role in the social history of the Prussian reforms of the early nineteenth century. In *Preussen zwischen Reform und Revolution* ("Reform and revolution in Prussia"), Koselleck examines the actions of the administration and its attempts to prevent the outbreak of revolution through reforms. Here, technological innovation was, above all, the driving force behind the transformation brought about by the introduction of industrial forms of production. This did not automatically lead to a modernisation of the social structure, but rather to a meshing of the legal and administrative reforms, the persistence of the societal hierarchy of "estates," and the impetus for technological and industrial evolution that deformed traditional social structures by bringing new subjects onto the scene: the free workers who "live without laws"[5] and the "uneducated industrialists"[6] in whose ability to fill government roles no one, from the "estates" to the bureaucracy and reformers, had much faith. This was a social movement over which the administration gradually lost its grip as the social question became a constitutional one. As the decades passed, the state's plans for industry, one of the cornerstones of which had been the advancement of technology and support for its "autonomous" evolution, began to falter. A sign of this was the fact that civil

servants increasingly sought employment in the private sector rather than in government service: “the state still supplied the technological expertise, but no longer had it at its own disposal.”[7] The state thus relinquished control over the nascent industry, conceding all technical superiority to the new bourgeoisie. Koselleck does not say that this surrender, which crystallised during the *Vormärz* when the construction of the railways necessitated a major shift in the scale of investment and mobilised social forces that far exceeded the planning capacity of the administration, coincided with the collapse of the vision of technology as a means of governmental control over production as envisaged by the science of cameralism.[8]

Technical progress and acceleration

In papers dealing with the theory of historical time, the issue of technology is linked to the theme of acceleration as a peculiar feature of the contemporary experience of time. “Technological progress brought with it the need to think about a different, modifiable future,”[9] such that “[i]t is technical progress, together with its consequences, that delivers the empirical basis for ‘history pure and simple.’”[10] However, progress has its own inherent paradox that is the real mark of the contemporary world. In fact, Koselleck focussed on a specific facet of progress, namely acceleration. The development and refinement of the measurement and quantification of time, of “merchant time,”[11] spanned modern history from the fourteenth to the eighteenth century. Quantified and abstract time was synonymous with consistency, wisdom, and utility, but not yet with acceleration: “Only in the wake of the French and Industrial Revolutions did acceleration begin to become a universal principle of experience.”[12] Acceleration provoked a definitive departure from the Christian conception of history, and was different from the temporal compression (*Zeitverkürzung*) that the looming Apocalypse entailed, because it signalled a process immanent to history itself, in which the future no longer depended on transcendent factors. Although references to apocalyptic expectations and end times persisted in the modern philosophy of history, the difference lay in the fact that with technological progress, “the idea of acceleration acquires general confirmation in everyone’s everyday experience.”[13] Technology-driven acceleration occurred in the sphere of experience and not in the realm of expectation, so that with technical progress even catastrophe[14] became an empirical possibility.

The acceleration that became an experience invested the political and social world with an irrepressible democratic momentum: “The enemies of the railroad recognized and feared the democratizing effect of the railroad.”[15] Within this framework, the machine ceased to be the metaphor that described the order of society, inhabited as it was by a geometric and no longer arithmetic progression. Society began to be thought of as an entirely new type of machine, a computational one, anticipating something that would be taken up later in the mid-twentieth century in the field of cybernetics and artificial intelligence.

Accelerated history is not only modern

Technological progress introduces acceleration into the very constitution of contemporaneity, turning the difference between a before and an after into a mobile criterion of distinction and hierarchisation of historical experiences within the contemporary world itself. “In this regard” wrote Koselleck “accelerated history still remains a history that is not only modern.”[16] The concept of the “contemporaneity of the non-contemporaneous” that is so central to the mature Koselleck is, in fact, closely linked to the issue of technological progress and the theme of acceleration. There is, Koselleck wrote, a specific non-contemporaneity that arises from technological evolution when looked at from a global perspective: “One could think, for instance, of the enormous precedent of scientific, economic, and technical developments which, coming from England, spread to the United States and to many, but not all, European countries and finally to Japan. Measured against such precursors or trailblazers, all the remaining countries and peoples fall into their wake and have to catch up.”[17] In an accelerated era, political planning appears both necessary to keep pace with technological evolution, but also inherently lagging behind a forward movement that overtakes it. Taking this as a starting point, Koselleck resumes his criticism of the idea that history is at our disposal, that it can be “created,” and of those whom Marx, in *The German Ideology*, refers to as “manufacturers of history.”[18] Technology sustains the myth of the feasibility of history as much as it constantly undermines it. Referring back to the epochal analysis in *Critique and Crisis,* Koselleck argues that unfettered progress brings with it the potential for catastrophe and mass annihilation made possible by technology, as demonstrated by the atomic bomb. Yet, despite the technological capacity to modify nature itself through genetic manipulation or biochemistry,[19] there are natural limits – mainly related to ecological and demographic factors – that

cannot be overcome by any kind of technical progress.[20] The environmental crisis is a crisis of scientific and technological progress, as diagnosed by ecological critique. The relationship between critique and crisis re-emerges here in another guise, that is, in the difficulty of resolving the crisis politically, because "the ecological crisis … could be solved – if it can be solved at all – by facilitating scientific research and technological progress. However, the very nature of technological progress is also that one cannot predict when, where, and how quickly something will be invented, nor what will be invented."[21] Thus, "[…] freedom of action in the political domain seems to shrink the more it becomes dependent upon technical factors, so that – paradoxical as it might seem – these could turn out to represent a coefficient of deferment in political calculation."[22] This contradiction inherent in technical progress remains unresolved, however much Koselleck points to a valorisation of the plurality of historical times and experiences as a possible solution. Since acceleration has overshadowed and obscured other forms of experience, it thus seems possible "to look back at the experiences of previous eras in order to historically relativise progress,"[23] an endeavour that led Koselleck to dedicate an increasing amount of attention to the anthropology of historical experiences of time.

Translated by Vanessa Di Stefano

You can comment in German, English, French or Italian under the italian version of the blog contribution.

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1. Cfr. Eric Schatzberg, *Technology. Critical History of a Concept*. Chicago/London: The University of Chicago Press, 2018. [↩]
2. Reinhart Koselleck, *Critique and Crisis. Enlightenment and the Pathogenesis of Modern Society*. Cambridge, Mass.: MIT Press, 1988, 5 (Reinhart Koselleck, *Kritik und Krise. Eine Studie zur Pathogenese der bürgerlichen Welt.* Frankfurt am Main: Suhrkamp, 1976, 1). All translations in this essay are my own unless otherwise indicated. [↩]
3. Koselleck to Schmitt (5 November 1954), in Reinhart Koselleck and Carl Schmitt, *Der Briefwechsel (1953-1983) und weitere Materialen.* Frankfurt am Main: Suhrkamp, 2019, 66-69. [↩]
4. "die noch verborgene Macht": Koselleck, *Briefwechsel*, 68. [↩]
5. "ohne Vorschrift leben": Horst Krüger, *Zur Geschichte der Manufakturen und der Manufakturarbeiter in Preussen. Die mittleren Provinzen in der zweiten Hälfte des 18. Jahrhunderts.* Berlin: Rütten & Loening, 1958, 185, cited in Reinhart Koselleck, *Preussen zwischen Reform und Revolution. Allgemeines Landrecht, Verwaltung und soziale Bewegung von 1791 bis 1848*. Stuttgart: Ernst Klett Verlag, 1967, 118. [↩]
6. Koselleck, *Preussen*, 348. [↩]
7. "Der Staat stellte noch die technische Intelligenz, aber er verfügte nicht mehr über sie." See Koselleck, *Preussen*, 617. [↩]
8. Guido Frison, "Linnaeus, Beckmann, Marx and the foundation of technology. Between natural and social sciences: A hypothesis of an ideal type," *History and Technology. An International Journal* 10, no. 2-3 (1993), 161-173. [↩]
9. "Der technische Fortschritt führte zu Zwängen, eine veränderte und veränderbare Zukunft": Reinhart Koselleck, "Zur Begriffsgeschichte der Zeitutopie," in *Begriffsgeschichten. Studien zur Semantik und Pragmatik der politischen und sozialen Sprache*. Frankfurt am Main: Suhrkamp, 2006, 252-273, here 263. [↩]
10. Reinhart Koselleck, "History, Histories, and Formal Time Structures," in *Future Pasts. On the Semantics of Historical Times*, translated from German by Keith Tribe. New York: Columbia University Press, 2004, 93-104, 96 ("Es ist der technische Fortschritt samt seinen Folgen, der

das empirische Substrat der 'Geschichte *schlechthin*' liefert." See Reinhart Koselleck, "Geschichte, Geschichten und formalen Zeitstrukturen," in *Vergangene Zukunft. Zur Semantik geschichtlicher Zeiten.* Frankfurt am Main: Suhrkamp, 1989, 130-143, here 134). [↩]

11. Jacques Le Goff, "Church Time and Merchant Time in the Middle Ages," *Social Science Information* 9 (4), 151-167. [↩]
12. Reinhart Koselleck, "Does History Accelerate?" in *Sediments of Time. On Possible Histories*, translated from English by Sean Franzel and Stefan-Ludwig Hoffmann. Stanford: Stanford University Press, 2018, 79-99, here 87 ("Erst seit der Französischen und der industriellen Revolution beginnt der Satz von der Beschleunigung ein allgemeiner Erfahrungssatz zu werden": Reinhart Koselleck, "Gibt es eine Beschleunigung der Geschichte?" in *Zeitschichten. Studien zur Historik*. Frankfurt am Main: Suhrkamp, 2000, 150-176, here 160). [↩]
13. Reinhart Koselleck, "Temporal Foreshortening and Acceleration. A Study on Secularization," in *Religion and Politics. Cultural Perspectives*, ed. Bernhard Giesen and Daniel Šuber. Leiden/Boston: Brill, 2005, 207-230, here 224 ("[Der Beschleunigungssatz] gewinnt nun [...] seine allgemeine Bestätigung in der Alltagserfahrung von jedermann": Reinhart Koselleck, "Zeitverkürzung und Beschleunigung. Eine Studie zur Säkularisation," in *Zeitschichten*, 177-202, here 198). [↩]
14. Jonathon Catlin, "Catastrophe," *Geschichtstheorie am Werk* (Issue: *KOMPOSITA*), 7.3.2023, URL: https://gtw.hypotheses.org/13325 (30.3.2023). [↩]
15. Koselleck, "Does History Accelerate?" 87 ("Daß die Eisenbahnen [...] eine demokratisierende Wirkung auslösten, das wird selbst von den Gegnern dieses Vehikels gesehen und befürchtet": Koselleck, "Gibt es eine Beschleunigung der Geschichte?" 160-161). [↩]
16. Koselleck, "Does History Accelerate?" 92 ("Damit bleibt gleichsam auch die beschleunigte Geschichte immer noch Geschichte, die nicht nur Neuzeit ist": Koselleck, "Gibt es eine Beschleunigung der Geschichte?" 166). [↩]
17. Reinhart Koselleck, "The Eighteenth Century as the Beginning of Modernity," in *The Practice of Conceptual History. Timing History, Spacing Concepts*. Stanford: Stanford University Press, 2002, 154-169, here 159 ("Man denke etwa an den enormen Vorlauf wissenschaftlichen, wirtschaftlichen und technischen Entwicklung, die

von England ausgehend auf die USA übergriffen haben und auf einige, nicht alle, europäischen Staaten und schließlich auf Japan. Gemessen an derartigen Vorläufer- oder Vorreiterfunktionen geraten alle übrigen Länder und Völker in den Sog, aufholen zu müssen." See Reinhart Koselleck, "Das achtzehnte Jahrhundert als Beginn der Neuzeit," in *Epochenschwelle und Epochenbewusstsein*, ed. Reinhart Herzog and Reinhart Koselleck. Munich: Wilhelm Fink Verlag, 1987, 269-282, here 273). [↩]

18. Koselleck, "On the Disposability of History," 201 ("Fabrikanten der Geschichte." See Koselleck, "Über die Verfügbarkeit der Geschichte," 272). [↩]
19. Cfr. Reinhart Koselleck, "Allgemeine und Sonderinteresse der Bürger," in *Begriffsgeschichte. Studien zur Semantik und Pragmatik der politischen und sozialen Sprache.* Frankfurt am Main: Suhrkamp, 2000, 516-528, here 524. [↩]
20. Reinhart Koselleck, "Some Questions Regarding the Conceptual History of 'Crisis,'" in *The Practice of Conceptual History*, 247 (Reinhart Koselleck, "Einige Frage an die Begriffsgeschichte von 'Krise,'" in *Begriffsgeschichten*, here 216). [↩]
21. "daß […] die ökologische Krise nur durch ein Weitertreiben der Wissenschaft, durch technischen Fortschritt lösbar ist. Aber es gehört ebenso zur Erfahrung des technischen Fortschritts, daß man nicht voraussehen kann, wann wo was und wie schnell etwas erfunden wird." See Koselleck, "Zur Begriffsgeschichte der Zeitutopie," 273. [↩]
22. Reinhart Koselleck, "History, Histories, and Formal Time Structures," in *Future Past*, 93-105, here 96 ("Im Gegenteil scheinen die politischen Handlungspielräume zu schrumpfen im Maß, als sie von technischen Gegebenheiten abhängig werden, so daß diese sich – scheinbar paradox – als ein Verzögerungskoeffizient politischer Planung erweisen können." See Reinhart Koselleck, "Geschichte, Geschichten und formale Zeitstrukturen," in *Vergangene Zukunft*, 134). [↩]
23. "So bleibt uns die Chance, auf die Erfahrungen früher Zeiten zurückzublicken, um […] den Fortschritt historisch zu relativieren." See Reinhart Koselleck, "'Fortschritt' und 'Niedergang'. Nachtrag zur Geschichte zweier Begriffe," in *Begriffsgeschichten*, 159-181, here 180. [↩]