

Against Distinction: *Technology* and *technique* as “Broad Concepts” in Twentieth-Century American and French Intellectual History

The *New Yorker* recently profiled Sam Altman, thirty-one-year-old CEO of Y Combinator (YC), an illustrious “seed ‘accelerator’.” Over its eleven years of existence, YC has provided early-stage financial and emotional support to the founders of reddit, Dropbox, and Scribd, among other start-ups. The *New Yorker* piece reflects a familiar sort of Bay Area-pattern hubris: “[I]ike everyone in Silicon Valley, Altman professes to want to save the world.” But this hubris came with a twist: “unlike almost everyone there, he has a plan to do it.” Here, in Altman’s own words, is that plan: “YC somewhat gets to direct the course of technology.”¹

Depending on how you slice things, there’s somewhere between a little and a lot more to it than that. Altman’s hope is that at some point, a wide enough birth of society “view[s] YC as important” that their dictates can drive research, education, and innovation in society more generally. YC will press intrepidly onward, slowly replacing human labor-power with computers. Any surge in unemployment will be met with compensatory decreases in the average cost of living, increased prosperity for all, and better resources to precociously identify and incubate the world’s next round of Zuckerbergs. In the interim, Altman is basically setting up an intellectual infrastructure that hypothetically lacks only our consent to morph from its current state (a spooky living- room-brain-trust) into a full-fledged technocracy.

There are two elements of the Altman’s self-presentation that are curiously at odds. On the one hand, his plan is hyper-particular, detail-driven, and technical. It offers specific solutions to obvious problems that are often well-intentioned, if short-sighted. An Uber-like app to get voters to the polls. An injectable, bioengineered anti-aging formula. On the other hand, Altman’s

¹ Tad Friend, “Sam Altman’s Manifest Destiny: Is the head of Y Combinator Fixing the World, or Trying to Take Over Silicon Valley?” *New Yorker* (10 Oct. 2016).

plan is a Plan. Through technology, he will save the world. But at what point, and through what means, do these apps and algorithms actually qualitatively save the world? At what point do technologies become *technology*?²

This is not merely an American concern. While this country might be unique in the way in which it looks to Silicon Valley as a site of innovation and critical inquiry on what our future is and what it might be, we have entered an age in which the world over, progress is often identified with *technology*, and politics are often achieved through deploying *technology* with a lack of criticality at times comical, at times horrifying. But it is precisely in this abstract and enormous sense that the concept of *technology* has developed such a discursive hold in contemporary culture, scholarly and otherwise, in America as elsewhere. Before we hone the concept through filling it with specific content and meaning, we need to treat it as meaningful in the particular sense in which it has emerged *as* meaningful, which is to say, as general. In what context can “direct[ing] the course of technology” become a useful political platform? What is the intellectual history of the conceptual generality of *technology*?

Contemporary theoretical discourse provides us with two ready-made responses to this question through easy readings of Foucault and Marx. But instead of treating governmentality as a form of power-knowledge³ and technological progress as a form of the production of relative

² This paper uses italics to refer to the concept of *technology* and *technique* in English and French, respectively. I envision the distinction between technologies (specific objects and/or practices) and *technology* (a vague signifier often standing in for all human material life) as similar to that which Martin Heidegger draws between the ontic and the ontological in the opening pages of *Being and Time*, as elsewhere. By this logic, a chasm separates any theory of the fundamental essence of *technology* from any particular instances of the phenomenon. I do not seek a return to fundamental technology as Heidegger seeks a return to fundamental ontology.

³ *cf.* Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France, 1978-1979*, trans. Graham Burchell (London, 2008); Security, Territory, Population: *Lectures at the Collège de France, 1977-1978*, trans. Graham Burchell (London, 2007).

surplus value,⁴ I consider these interpretations as symptomatic of a deeper epistemological crisis in the historical present from which they have emerged. This paper draws together examples from twentieth-century France and the US to deliberately connect two concepts most often discussed in opposition to one another: American *technology* and French *technique*.⁵ For the American case, I examine the way that historians of technology have dealt with the ambiguous signifier at the sub-discipline's core. In the French case, I chart the way in which *technique* comes to occupy conceptual terrain first breached in the early twentieth-century and rendered more central to intellectual life in discussions of the relationship between human beings and the world in the Atomic Age. Both examples represent moments in which either *technology* and *technique* came to represent two pairs of muddled, contradictory strains of thought:

1. *Technology/technique* describe a perceived trans-historical reality—humans are *homo faber*, embodied, creating creatures.
 - a. *Technology/technique* describe the historical specificity of the material conditions of twentieth-century life.
2. *Technology/technique* delimit a particular sphere of human activity in distinction to cultural, social, economic, or scientific realms.
 - a. *Technology/technique* unite all human activity under a single paradigm or concept *as* technological or technical.

When approaching the conceptual and intellectual history of *technology*, scholars now have something of a canon, however small, from which they might set off, depending on their disciplinary and geographical training. Ron Kline, Ruth Odenziel, Leo Marx, and Eric Schatzberg have been instrumental in eroding faith in any trans-historical meaning of the term in

⁴ This anti-humanist reading of Marx's mature social theory stems from a particular reading of *Capital* in light of the *Grundrisse* developed by Moishe Postone and his students. See Moishe Postone, *Time, Labor and Social Domination: A Reinterpretation of Marx's Critical Theory* (Cambridge, 1993).

⁵ Cf. Jean-Jacques Salomon, "What Is Technology? The Issue of Its Origins and Definitions," *History and Technology* 1 (1983–84), 113–16.

American intellectual history, arguing instead that *technology* only assumed its conceptual status as keyword in the 1930s.⁶ These scholars reflect a disciplinary heterodoxy particular to the history of technology as it has developed in, around, and across particular American institutions, one that includes collections of sources and modes of reading derived from social, cultural, and intellectual history, along with and alongside the history of science. For better or for worse—and burgeoning scholarship seems to intimate for better—this history of technology is a discipline which has spent a half-century deliberately enmeshed in the world of objects, and occasionally in search of a guiding concept.⁷

Indeed, the first issue of *Technology and Culture*—the flagship journal of the *Society for the History of Technology*—is a remarkable artifact, presenting ideas that seem either astonishingly prescient or astonishingly myopic, and rarely anything in between.⁸ Astonishingly prescient as many of the debates that have shaped the field are herein firmly articulated: the link

⁶ cf. Ruth Oldenziel, *Making Technology Masculine: Men, Women, and Modern Machines in America, 1870-1945* (Amsterdam, 1999); Ronald Kline, “Construing ‘Technology’ as ‘Applied Science’: Public Rhetoric of Scientists and Engineers in the United States, 1880-1945,” *Isis* 86 (1995): 194-221 and *The Cybernetics Moment: or why we Call our Age the Information Age*; Eric Schatzberg, “Technik Comes to America: Changing Meanings of *Technology* before 1930,” in *Technology and Culture* 47 (July 2006), 486-512; (Baltimore, 2015); Leo Marx, “The Idea of ‘Technology’ and Postmodern Pessimism,” in *Does Technology Drive History?* ed. Merritt Roe Smith and Leo Marx (Cambridge, MA, 1994).

⁷ See, for instance, Ron Kline’s gracious and rigorous Presidential Remarks from the fifty-fourth annual meeting of SHOT in Copenhagen, October of 2012. Even in a genre dominated by a citational strategy best described as gracious, Kline’s comments stand out, as when he affirms as “provocative” a question posed by David Edgerton in the SHOT Workshop that year: “What is the history of technology . . . the history of?” Ronald Kline, “Foundational Stories,” in *Technology and Culture* 54 (January 2013), 117-129.

⁸ Howard Mumford Jones, for example, stresses the remarkable elective affinities between intellectual history and the history of technology, brusquely highlights the ways in which some of the most precious-guarded ideological components of the technological society are literary in their origins and development, criticizes Lovejoy for not conceptually justifying the “idea-unit,” and ultimately stresses trade presses as good potential sites for the development of the history of technology, as they may be willing to print larger pictures and plates. Howard Mumford Jones, “Ideas, History, Technology,” *Technology and Culture* 1.1 (Winter, 1959): 20-27. Mumford Jones’s biographical note describes him as “possess[ing] such a wide range of intellectual interests that he has justifiably been termed ‘a modern Renaissance man.’”

between the history of technology and the history of ideas, the problem of who writes the history of technology (and for whom it is and ought to be written), the relationship between technological and other forms of development and progress. In an off-handed remark, one scholar even posits a history of failure as a deeply worthwhile venture.⁹ Astonishingly myopic as there is an absolute dearth of reflection on the concept itself. The closest we get is Melvin Kranzberg's introduction, preoccupied with how a supposed Platonic distinction between mental and technical processes has prevented the history of technology from taking its rightful place at the center of the discipline. Yet the concept *itself* seems to require little boundary-work:

The justification, then, for our Society and for this publication is our subject matter: technology. There is little point in belaboring the obvious importance of technology: the use of tools, together with the development of moral sensibility . . . has enabled man to advance from an ape-like creature through the Stone and Bronze Ages eventually into an industrial society whose objects we see all around us and which conditions our daily lives. Furthermore, our hopes and fears for the future of mankind are largely bound up with technology.¹⁰

The question concerning technology *in* the history of technology seemed, in the 1950s, to be trans-historical; the question concerning why we hadn't concerned ourselves with technology *before* seemed, on the other hand, to be riddled with historical meaning. To ask why the historicity of technology had not heretofore been properly acknowledged required historical explanation. The contemporary significance of the history of *technology* appeared self-evident. In this manner, even while staking out a discipline in the gritty archive of human material evolution, the history of technology at its origin reified our love of shiny, new things: in this case, a new discipline. Preoccupied with the failure of the past and the self-evidence of the tools of the future, the progenitors of the history of technology in America failed to ask a pressing question of their own present: why is the history of technology emerging *now*?

⁹ Mumford Jones 25.

¹⁰ Melvin Kranzberg, "At the Start," *Technology and Culture* 1.1 (Winter, 1959), 2.

In hindsight, a necessary (though not sufficient) condition for the emergence of the discipline is a conceptual stabilization of *technology* itself. The early years of *Technology and Culture* at once depend upon and react against such a stabilization. Eric Schatzberg has claimed that the ultimate contours of *technology* in English stem from the work (and reception) of Thorsten Veblen. In Schatzberg's account, Veblen incorporates the German term *Technik* into the English term "technology," subtly but profoundly affecting the term's meaning. Whereas previously it narrowly referred to the *study* of the industrial and practical arts, *technology* came, for Veblen, to signify those arts and practices *themselves*. The term served, moreover, as the epistemological centerpiece of a thorough, skeptical, non-Marxist critique of industrial capitalism. Later scholars, Schatzberg argues, maintained the ontic *breadth* of the term while effacing its critical *depth*.¹¹ Charles Beard, for instance, would be instrumental in *celebrating technology* as a generalized term for industrial progress.¹² According to this interpretation, *Technology and Culture* would hinge upon the conceptual *breadth* of technology, while, through divorcing the concept from the narrative of progress, ostensibly restoring to it some degree of depth.

Per Schatzberg's reading, the broad concept of *technology* occurs through blurring an "important distinction" that exists in many Continental languages:

¹¹ Eric Schatzberg, "Technik Comes to America: Changing Meanings of *Technology* before 1930," in *Technology and Culture* 47 (July 2006), 486-512.

¹² "Not one whit less inflexible [than time] is technology—also a modern and Western Leviathan. Like time, it devours the old. Ever fed by the irrepressible curiosity of the scientist and inventor, stimulated by the unflinching acquisitive passion—that passion which will outlive capitalism as we know it and all other systems now imagined by dreamers—technology marches in seven-league boots from one ruthless, revolutionary conquest to another, tearing down old factories and industries, flinging up new processes with terrifying rapidity, and offering for the first time in history the possibility of realizing the idea of progress so brilliantly sketched by Abbé de Saint-Pierre." Charles A. Beard, "Time, Technology, and the Creative Spirit in Political Science," *American Political Science Review* 21 (1927): 4–5. In Schatzberg 509.

whereas a single term seems adequate in English, Continental languages use two, the cognates of *technique* and *technology*. The distinction is relatively clear: *technique* refers to the methods and procedures of material culture, especially in engineering and industry, while *technology* is concerned with the study of those activities, their principles. That both terms are generally translated as *technology* in English causes an important distinction to be lost.¹³

But this distinction is only “relatively clear” as a linguistic one, and even then only if we view languages as static entities. In fact, in modern German and French letters, such a distinction is somewhere between misleading and entirely false. In both France and Germany, *T/technologie* remained a hyper-specialized term until the latter half of the twentieth century, literally referring to the study of industrial processes as a scientific field. *Technik/technique*, on the other hand, were veritable conceptual battlegrounds and ultimately monolithic ür-categories that functioned as *technology* did in English, referring to the monolithic, imposing material processes of contemporary industrialized capitalism (as well as to all of those processes in their entirety).¹⁴

The problem of conceptual distinction that Schatzberg highlights is a very real one, but it is not a distinction between *technology* and *technics* that matters here, nor between the study of human activity and human activities themselves, nor between technology and science, nor between the potentialities and contingencies of human creativity and the monolithic inflexibility of industrial capitalism. The problem is the investment we have in the malleable, complex concept itself. Is the problem a lack of conceptual distinctions, or lives in which such distinctions no longer make sense?

¹³ 488-489.

¹⁴ The French example is discussed below. On *Technik* in the German context, see Martin Heidegger, “The Question Concerning Technology [*Technik*],” in *The Question Concerning Technology and Other Essays*, trans. William Lovitt (New York, 1977), 2-52; Oswald Spengler, *Man and Technics: A Contribution to a Philosophy of Life*, translated by Charles Francis Atkinson (New York, 1976).

Nearly fifteen years before *SHOT* cobbled together the first volume of *Technology and Culture*, this question presented itself with a forceful resonance in a newly-liberated France. The occasion was the nuclear detonations at Hiroshima and Nagasaki. In the French press, as in the world over, the days following the bombings found op-ed pages filled with every imaginable gradation of condemnation and celebration of the devastation wrought by Fat Man and Little Boy, along with more circumspect and philosophical considerations of what the detonation of the atomic bombs *meant*: meant for the world, meant for the War, meant for science, and meant for humanity in general.¹⁵ The tone of these French essays was particularly charged, and particularly French. French science had, after all, played a fundamental role in the development of nuclear physics.¹⁶ In those heady days as France rewrote its history, claimed the mantle of Resistance, and absolved itself of moral responsibility for the Occupation, few dignitaries attempted to directly unravel the complex networks of material and intellectual labor underlying atomic weaponry, that were, in part and in fact, French.¹⁷ Instead, they inserted the atomic bombs into two spheres of debate that had occupied the Third Republic throughout its existence.

One was the role of Catholicism and the Church in the Republic. This question had, of course, troubled France even before revolutionaries decapitated God's earthly body and

¹⁵ David Pace has summarized a number of relevant examples in "Old Wine—New Bottles: Atomic Energy and the Ideology of Science in Postwar France," *French Historical Studies* 17.1 (Spring, 1991), 38-61.

¹⁶ In 1935, Irene Curie and Frédéric Joliot were awarded the Nobel Prize for the discovery of artificial radioactivity, a research program they undertook in continuation of Marie and Pierre Curie's work on the isolation of radioactive elements. In April of 1939, a team of four French researchers narrowly beat an American group to the epistemological punch on chain reactions, publishing a piece in nature on the process of uranium fission that would ultimately level two Japanese cities. Under the Occupation, the country's nuclear program was less dismantled than it was smuggled out: stocks of heavy water to Algeria, stocks of physicists to New York. For an overview of French nuclear physics, see ch. 1 of Boris Dänzer-Kantof, *L'énergie de la France: de Zoé aux EPR, une histoire du programme nucléaire français* (Paris, 2013); see also Gabrielle Hecht, 23n.

¹⁷ One notable exception here is Frédéric Joliot-Curie, who was all too happy to remind French audiences of their nation's role in the development of nuclear physics.

intellectuals and politicians began to conceptualize what, precisely, civic religion could be or what it might look like.¹⁸ But a critical element of life in the Third Republic pushed many Catholic intellectuals to think long and hard about the role that religion was to play in modern life: its stability. The Third Republic seemed to mark the end of a century of political upheaval, at least until the First World War, and one of the chief victims of the new social cohesion of the French state was the authority of organized religion.¹⁹ Scholars have attributed the success of the Third Republic around the turn of the century to phenomena as disparate as various forms of associational life—guilds, unions, and so forth—and the expansion of the scientific management and control of bodies, institutions, populations, and state infrastructure, but in any case, the Church found itself in a denuded role.²⁰

The second axis of debate was a complex knot that bound together the concepts of knowledge, science, progress, statecraft, and the relationships between them. France, after all, was the home of Descartes, of Comte, of rationalism and positivism, of the belief that scientific discovery could ultimately engender increasingly equitable, functional, efficient societies.²¹

¹⁸ See, for example, Ronald Beiner, "Machiavelli, Hobbes, and Rousseau on Civil Religion," *The Review of Politics* 55.4 (1993), 617-638; Ruth A. Wallace, "Emile Durkheim and the Civil Religion Concept," *Review of Religious Research* 18.3 (Spring, 1977), 287-290;

¹⁹ The Pope, for his part, made patriotism to the Third Republic a requirement of the Church with the 1892 *Ralliement*. The relation between the state and Catholicism during the Third Republic is itself an incredibly complex phenomenon, coming to a head during the Dreyfus Affair. See, for example, ch. 3 of William Fortescue, *The Third Republic in France 1870-1940: Conflicts and Continuities* (London, 2000).

²⁰ The classic argument on Third Republic stability in the English literature is Philip Nord, *The Republican Moment: Struggles for Democracy in Nineteenth-Century France* (Cambridge, MA, 1998). See also Eugene Weber, *Peasants into Frenchmen: The Modernization of Rural France, 1870-1914* (Stanford, 1979); Susanna Barrows, *Distorting Mirrors: Visions of the Crowd in Late Nineteenth Century France* (New Haven, 1981).

²¹ I am less concerned with the historical veracity and consistency of rationalist and positivist thought in France than I am with its twentieth-century associations with science, *technique*, and unfettered progress (whether or not as myth). On this point, see the harsh critique of Georges Sorel in *The Illusions of Progress*, John and Charlotte Stanley, trans., (Berkeley, 1969).

The bombs provided obvious fodder for French positivists and Catholics to advance their own agendas before a public still grappling with how to interpret both the horror of Hiroshima and Nagasaki as well as the complexity of the modern infrastructure which made such events possible. The standard line of the Positivists was well-summarized by the title of an op-ed published by Le prince Louis de Broglie—another French Nobel laureate—in *France-soir* on August 10, 1945: “The man of the future could draw more energy from a few grams of matter than from coal, water, and petrol.”²² For de Broglie and his fellow scientists, nuclear destruction signified not the apocalypse, but the possible realization of the dream of positivism. The same scientific prowess that wrought eschatological destruction on two cities could ultimately come to undergird utopias the world over. Catholic thinkers such as François Mauriac tended to see precisely the opposite: the atomic bomb indeed represented the culmination of a dream of mastering nature, and this mastery had inaugurated an age so terrifying and destructive that only faith stood a chance at saving humanity. While the two sides couldn’t have been further apart on their diagnosis of the newly-atomic world, they did agree on a pivotal question of periodization: we had entered an atomic age, one that would be defined by the advanced manner way in which human beings had come to interact with their lived environment, by technical progress.

Technoscientific development would ultimately come to define much of French history in the post-War, and much ink has been spilled over how nuclear energy, Americanization (and anti-Americanization), and any number of technocratic institutions of state planning and higher education served as points of mediation and construction of identity in the French Empire, and

²² Le prince Louis de Broglie, "L'Homme pourra demain tirer plus d'énergie de quelques grammes de matiere que de la houille, de l'eau, et du petrole," *France-soir*, 10 Aug. 1945, 1-2.

later Republic.²³ What historians of France in general and historians of French science and technology in particular miss is that this so-called “atomic age” (and the narrative of intellectual history upon which it rested) was founded on shaky conceptual and intellectual ground. The infinite march of Rational progress may have appeared to many intellectuals as an actual possibility as manifested in the detonation of the atomic bombs, in the immense nuclear power grid built during reconstruction, or in the rigorous planning that would become a hallmark of the Fourth and Fifth republican economies.²⁴ But even as these technological marvels transformed France and the rest of the globe, intellectuals still struggled to find the epistemological and conceptual tools to evaluate, identify, critique, and even so much as understand the practices and implements at the heart of the transformations already underfoot. That thinkers mapped old conflicts onto new historical realities was hardly surprising. That they all tended to think of the bombs as lending ontological credence to very old epistemological narratives is, on the other hand, rather remarkable.

The bombs had momentarily lent specific content to a new, generalized mode of discussing the role of human activity in and on the world. The terminology, in this case, was that of *technique*. Across the Anglo-French divide, philosophers and historians have long pivoted back to Socratic thought to explain a lack of philosophical and humanistic engagement with technical and material reality. In the French context, Bernard Stiegler uses a tendentious,

²³ See, for example Gabrielle Hecht, “Rebels and Pioneers: Technocratic Ideologies and Social Identities in the French Nuclear Workplace, 1955-1969,” *Social Studies of Science* 26:3 (August 1996): 483-530; “Political Designs: Nuclear Reactors and National Policy in Postwar France,” *Technology and Culture* (October 1994): 657-685; *The Radiance of France: Nuclear Power and National Identity after World War II* (Cambridge, MA, 2009). See also Richard Kuisel, *The French Way: How France Embraced and Rejected American Values and Power* (Princeton, 2012).

²⁴ On economic planning in twentieth-century France, see Richard F. Kuisel, *Capitalism and the State in Modern France: Renovation and Economic Management in the Twentieth Century* (Cambridge, UK, 1981).

Derridean reading of the distinction between *techne* and *episteme* to articulate the entirety of Western thought as developed in opposition to *technique*.²⁵ Whatever the philosophical utility of Stiegler's reading, it does not hold up in the context of modern French intellectual history. However stark one might find Descartes' readiness to retreat into the depths of his own consciousness to serve his metaphysical engagements, in his *Optics*, there is a deep worldliness that is not by any means isolable from his more properly philosophical pursuits. French rationalism has historically been defined less by a distinction between rational and technical activity so much as it by an absolute lack of differentiation between them.²⁶

The distinction emerged, rather, in the early twentieth century, and forcefully. In 1899, Emile Durkheim published a short note entitled "Technology" in his *Année Sociologique*.

The various instruments used by humans (tools, weapons, clothing, utensils of all sorts, etc.) are products of collective activities. They are always symptomatic of a determined state of civilisation, such that there are well-defined relations between them and the nature of the society that employs them. The determination of these relations constitutes therefore a sociological problem and technology, considered in this aspect, is a branch of sociology. It is as such that it figures here [in the *Année Sociologique*].²⁷

This brief note on the 592nd page of a 610-page volume is indicative of the status of *technique* and technology in French thought at the dawn of the twentieth century: acknowledged, and ancillary. In 1927, the anthropologist Marcel Mauss rebooted the *Année*, which had halted publication during the First World War, and the newfound prominence of *technique* could not be any more striking:

'Homo Faber', says Bergson. These formulae signify only the obvious or they signify too much, because the choice of such a sign hides other equally obvious signs. This formula has the merit, however, of reclaiming for techniques a place of honour in the history of humanity. It recalls a forgotten philosophy. And we would happily adopt it, along with

²⁵ Bernard Stiegler, *Technics and Time 1: The Fault of Epimetheus*, trans. Richard Beardsworth and George Collins (Stanford, 1998).

²⁶ On *technique* and epistemology in Descartes see Georges Canguilhem, "Descartes et la technique," in *Travaux du IXe Congrès International de Philosophie* (Paris, 1937), 77-85

²⁷ Emile Durkheim, "Technologie," *Année Sociologique* 4 (1899): 593-94

others, on one condition: that it denote, not a ‘creative power’ which too much resembles the ‘dormitive force’ of opium, but a characteristic feature of communal life, and not of the individual and profound life of the spirit. A practical art has two roots—the invention of the movement or the implement, and the tradition of its use, indeed the use itself—and in both respects it is essentially a social thing . . . The point . . . which has never been sufficiently developed, is the degree to which all of social life depends upon techniques.²⁸

Between these two quotations lies a proper name: Bergson. It is difficult to overstate the significance of Henri Bergson on French thought in the first half of the twentieth century. An intellectual giant and Nobel laureate, Bergson developed a genuinely novel philosophy of time and creativity that represented a harrowing movement away from Rationalism. As with Heidegger’s fundamental ontology some years later, Bergson’s philosophy self-consciously developed itself in opposition to an imagined whole, a schematization of how the entirety of Western thought had gone horribly awry. Bergson’s forgetting of Being was the forgetting of *doing*: humans were active and creative animals at a more primordial level than they were rational ones, and the project of philosophy was thus one of recovering the knowledge lost in our push toward rational inquiry.²⁹

By the time Mauss rebooted the *Année*, a full-fledged rejection of Bergsonism was underway in French thought, a rejection of which Mauss was to some extent representative. Too many had found in the “‘creative power’” of *homo faber* that Bergson had counterpoised to Rationalism the “‘dormitive force’ of opium.” Yet, when reconfigured around the very spirit of

²⁸ Marcel Mauss, “The Divisions of Sociology,” in *Marcel Mauss: Techniques, Technology, and Civilisation*, ed. Nathan Schlanger (New York: 2006): 49-56, 50-51.

²⁹ This paragraph does little justice to a thinker whose thought defies typical logics of summary. Bergson’s definitive text remains *Creative Evolution*, trans. Arthur Mitchell (New York, 1998). The definitive text on French Bergsonism is Giuseppe Bianco, *Après Bergson: Portrait de groupe avec philosophe* (Paris, 2014). See also Michael Haar, *La philosophie française entre phenomenology et métaphysique* (Paris, 1999). The English-language literature on Bergson is immense, though until recently outmoded. A resurgent interest in vitalism in the era of biopolitics along with a recurrent fascination with Deleuze (upon whom Bergson was a key influence) has driven this body of scholarship more closely toward certain contemporary concerns. Deleuze’s own summation of Bergsonian thought remains among the best. See Gilles Deleuze, *Bergsonism*, trans. Hugh Tomlinson (New York, 1988).

rational inquiry it had rejected, Bergsonism would steer the direction of French thought in a very particular direction: toward *technique*.

Technique, in this context, is every bit as general as *technology* was in the first issue of *Technology and Culture*. It lends credence to the idea that “all of social life depends upon techniques.” In the years to come, *technique* would develop a similar, diffuse utility in describing the entire sweep of human history in general and the material conditions of modern life in particular. In 1935, three sweeping, interdisciplinary publications solidified the hold of *technique* on French discourse.

- *A la lumière du Marxisme* united a group of French Marxists in the name of advancing the agendas and ideals of socialist science in France. *A la lumière* used distinctions in the way the French and Soviet states valued and engaged *technique* as bellwethers of greater ideological changes underfoot. It additionally used *technique* often interchangeably with dialectical materialism itself.³⁰
- *Techniques, l’histoire, et la vie*: a 1935 special edition of the *Annales d’histoire économique et sociale* in which Lucien Febvre and Marc Bloch gathered together a collection of essays as a sort of prolegomena for the history of *technique*, and of techniques. The difference between these two histories stemming from the conceptual decision lay at the heart of several of the issue’s contributions.³¹
- “Techniques of the Body”: an essay by Marcel Mauss in the *Journal de Psychologie* which saw in bodily techniques—everything from the particular way in which women gave birth to that in which armies marched—the only possible point of entry onto the “Total Man,” a psycho-social-biological unit that represented at once the individuals created in the context of particular cultures and our epistemological point of entry onto those cultures.³²

The nuclear bomb only resonated as the triumph or the failure of (French) Rationalism with the emergence of a concept that allowed the march of the long history of science and the sublime terror aroused by new technologies of warfare to ambiguously bleed together in a single,

³⁰ Cercle de la Russie neuve, *A la lumière du marxisme* (Paris, 1935).

³¹ *Annales d’histoire économique et sociale* 7.36 (1935).

³² Marcel Mauss, “Techniques of the Body,” in Marcel Mauss: *Techniques, Technology, and Civilisation*, ed. Nathan Schlanger (New York, 2006): 77-96.

convoluted concept, that of *technique*. As in the American context, *technique* served to unite intellectuals in the around a broad, contradictory spectrum of ideas and commitments to address a concept that, depending on the context, could refer to either *savoir-faire* in and of itself, or on the specific material reality of the present. These sorts of concepts are potent in the formation of disciplines. The frameworks they enact drive practitioners to epistemological innovation and boundary-work. Yet they also stand in ambiguous relation to actual cases within which we might observe them. If Sam Altman is ever given reigns the course of *technology*—and he's already met with the Secretary of Defense—it will certainly be on the basis of his work with particular technologies. From that position, however, he will fill that hollow signifier with material content and round out its edges via decision-making and resource-allocation. A broad concept will yield to specific policy and practice. If we are to continue to live in a society wherein broad concepts register as politically and culturally meaningful, we should, at least, attempt to understand what such concepts (and their scope) signify.