

Circulatory Localities

The Example of Stalinism in the 1930s

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If October 1917 marked the victory of a particular form of Marxism in circulation, developed in Western Europe and adapted for Russia by leaders in exile, the 1930s have been considered a period of inward retreat in comparison to the ferment of borrowing of the 1920s. Beginning in 1931, the foreign engineers and workers who manned the factories of the First Five-Year Plan were sent home. From the arts to the sciences, Soviet professionals in all fields who maintained connections to foreign specialists were increasingly subject to accusation and ultimately, to systematic repression.¹ The Great Depression in capitalist countries and belief in the successes of the First Five-Year Plan contributed to a feeling of triumph and a certainty in the superiority of the Soviet system that in turn engendered an ideological, national Bolshevism.²

In the past 15 years, however, new research on Soviet history has shown to what extent the period of Stalin's consolidation of power remained open to borrowing. Circulation had as many implications for forms of economic

This reflection on circulations is derived from research, seminars, and conferences that I have conducted with Kapil Raj (EHESS) for the last several years. I sincerely thank the early readers of this text, whose remarks have considerably enriched and clarified it: Cécile Pichon-Bonnin, Kapil Raj, Susan Solomon, and the peer reviewers of *Kritika*.

¹ Some prominent titles among this abundant literature are Andrea Graziosi, "Visitors from Other Times': Foreign Workers in the Prewar Piatiletki," *Cahiers du monde russe et soviétique* 29, 2 (1988): 161–80; Jean-Louis Cohen, "L'oncle Sam au pays des Soviets: Le temps des avant-gardes," in *Américanisme et modernité: L'idéal américain dans l'architecture*, ed. Jean-Louis Cohen and Hubert Damisch (Paris: EHESS and Flammarion, 1993), 402–35; Sergei Zhuravlev, "Malen'kie liudi" i "bol'shaia istoriia": *Inostrantsy moskovskogo Elektrozavoda v sovetskom obshchestve 1920-kh–1930-kh gg.* (Moscow: ROSSPEN, 2000); A. O. Chubar'ian, ed., *Russkoe otkrytie Ameriki: Sbornik statei, posviashchennyi 70-letiiu akademika Nikolaia Nikolaevicha Bolkhovitinova* (Moscow: ROSSPEN, 2002); and Alan M. Ball, *Imagining America: Influence and Images in Twentieth-Century Russia* (Lanham, MD: Rowman and Littlefield, 2003).

² David Brandenberger, *National Bolshevism: Stalinist Mass Culture and the Formation of Modern Russian National Identity, 1931–1956* (Cambridge, MA: Harvard University Press, 2002).

organization and the administrative structure of the state as for culture (grand Stalinist cinema was Hollywood-like) or urban planning (modern functionalism was rejected in favor of a hierarchical city whose model was also sought abroad). One of the objectives of this article is to demonstrate, through five examples, that borrowing continued intensively throughout this period of official retreat and occurred in some of the most important areas of the construction of this new social system (without entering into the 1940s, however, which are much more complex and less studied, and which suggest the outline of new configurations). In so doing, this article intends to make another point. Scholarly literature on “transfers” is extremely rich. In economic, industrial, and technical as well as scientific or medical questions and in issues of architecture, literature, fine arts, and cinema, studies abound on the Soviets’ practice of borrowing from the capitalist countries of Europe and from the United States.³ These studies belong, for that matter, to a long, active, and sustained tradition going back well before the 18th century.⁴ For the last 10 or so years, however, historical scholarship has made it possible to delve deeper and to move beyond the mere identification and description of transfers. At stake is a type of history close to *histoire croisée*, but which places greater emphasis on what circulates. *Histoire croisée* is extremely useful as a means of liberation from traditional methods of comparison that “reify” differences or similarities.⁵ It introduces a reflexivity that allows for reciprocal questioning in every temporal and spatial dimension. Nevertheless, this approach is less sensitive to what circulates from one space to another. It is to circulation that I would now like to turn.

This reflection on circulation is equivalent neither to a comparison nor to the study of transfers, nor even to *histoire croisée*. This approach is inspired by pioneering research on the history of the Indian subcontinent: “Circulation is different from simple mobility, inasmuch as it implies a double movement

³ There is an immense literature on the question of transfers, and I cite only a few of these texts here: Antony Sutton, *Western Technology and Soviet Economic Development*, 3 vols. (Stanford, CA: Stanford University Press, 1968–73); Kendall E. Bailes, “The American Connection: Ideology and the Transfer of American Technology to the Soviet Union, 1917–1941,” *Comparative Studies in Society and History* 23, 3 (1981): 421–48 (this article problematizes the question of transfers in an interesting way); and James Clay Thompson and Richard F. Vidmer, *Administrative Science and Politics in the USSR and the United States: Soviet Responses to American Management Techniques, 1917–present* (New York: Praeger; South Hadley, MA: Bergin and Garvey, 1983).

⁴ See Hans Rogger’s studies: “Amerikanizm and the Economic Development of Russia,” *Comparative Studies in Society and History* 23, 3 (1981): 382–420; *Russia in the Age of Modernisation and Revolution, 1881–1917* (London: Longman, 1983); and “America in the Russian Mind: Or Russian Discoveries of America,” *Pacific Historical Review* 47, 1 (1978): 27–51.

⁵ Michael Werner and Bénédicte Zimmerman, “Beyond Comparison: *Histoire croisée* and the Challenge of Reflexivity,” *History and Theory* 45, 1 (2006): 30–50.

of going forth and coming back, which can be repeated indefinitely. In circulating, things, men, and notions often transform themselves. Circulation ... therefore ... implies an incremental aspect and not the simple reproduction across space of already formed structures and notions.⁶ Two major traits thus distinguish the circulatory approach from the transferential: on the one hand, emphasis is placed on the transformations that the entities in circulation undergo in the process of their displacement, and on the other, attention is drawn to the effects of the return movement on the point of departure: circulation is complete, even if the phenomena placed into circulation are no longer recognizable.

Circulation as a heuristic theme thus emerges at a moment when the approaches comprising the highly varied and dynamic landscape of *global studies* are proliferating remarkably. Within the field of history alone, one encounters the robust development of comparative history,⁷ *histoire croisée*, connected history,⁸ reciprocal history, transnational history,⁹ approaches that profess to be global,¹⁰ and others still. The terrain is complex and is rapidly becoming even more so. Each approach has its own history interlaced with the others and disposes of its own research agenda, its own means of analyzing objects and territories and of responding to questions that are continually unique.

From a different angle, if one rereads some of the great historians, it is evident that they were already on this path. Fernand Braudel gleaned from Marc Bloch that “There is no history of France, there is a history of Europe.” The direct implication is that history must be transnational.¹¹ In the same vein, Braudel adds this second remark by Bloch that seems to him not only to complete the first but to give it its meaning: “The only true history is universal history.” Braudel again emphasizes: “There is no history of Europe, there is a history of the world.” In regard to France, he writes once more: “A

⁶ Claude Markovits, Jacques Pouchepadass, and Sanjay Subrahmanyam, eds., *Circulation and Society: Mobile People and Itinerant Cultures in South Asia, 1750–1950* (Delhi: Permanent Black, 2003), 2–3. For a systematic development of the problematic of circulation, see Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900* (Houndmills, UK: Palgrave Macmillan, 2007).

⁷ Deborah Cohen and Maura O’Connor, eds., *Comparison and History: Europe in Cross-National Perspective* (New York: Routledge, 2004).

⁸ Serge Gruzinski, *Les quatre parties du monde: Histoire d’une mondialisation* (Paris: La Martinière, 2004); Sanjay Subrahmanyam, *Explorations in Connected History: From the Tagus to the Ganges* (New Delhi: Oxford University Press, 2005).

⁹ See this analysis in C. A. Bayly et al., “On Transnational History,” *American Historical Review* 111, 5 (2006): 1441–64.

¹⁰ Consult the *Journal of World History* (Hawaii) and the Global Economic History Network of the London School of Economics.

¹¹ See this trend developed in Ian Tyrell, “American Exceptionalism in an Age of International History,” *American Historical Review* 96, 4 (1991): 1031–55.

history of France is, in itself, an admirable survey and, beyond its particular incidents, an illumination of the course of Europe and of the world.”¹² Why would this not be valid for Soviet history? Bloch’s and Braudel’s interrelated remarks are best understood as an invitation to a relational history, no matter the form. Formulating his own reading of Braudel, Maurice Aymard, the historian of capitalism and of the Mediterranean, noted that for Braudel “spaces exist as such only insofar as they are constructed by circulations: those of people, goods, cultural property, or even information.”¹³ It is this path that we will pursue.

The link between local histories (whatever the extent of the “locality” in question: region, country, continent, etc.) and world history, and even local history itself is formed through circulation. Even in the domain of the circulation of ideas, it is necessary not only to identify circulation but also to consider the entities in circulation at the level of their materiality.¹⁴ These entities are of every kind: people, objects, knowledge, and forms (including institutional ones), none of which circulates alone; these entities circulate with at least one, if not all of the others. It is people who transport, at the very least, languages and objects. Objects, in turn, are difficult to separate from the frameworks defining their use and from the know-how they imply, even though these aspects are always altered in circulation. Knowledge and forms are also always borne: through the materiality of the books, documents, and works by humans. There is no circulation of ideas or of anything in the ether, even though more abstract entities circulate alongside what is tangible and manifest: relationships based on things, for example, or attitudes toward reality that are continually reiterated by humans on the move, and so on. The local (or the locale or the locality) functions as a kind of mixer that stirs up and shuffles all this, creating novel configurations each time.¹⁵ The sole consideration of circulation, however, never provides the last word on these configurations. If there is no locality except that which is circulatory, formed in and by circulations, each site has its idiosyncratic logic that it is important to identify; this logic depends on the specific series of entities, involved in circulation of all kinds and occurring in all eras, that make up the site.

¹² Fernand Braudel, *L'identité de la France* (1986; Paris: Flammarion, 1990), 1: 16, citing Marc Bloch, *Apologie pour l'histoire ou Métier d'historien* (1949); and Bloch as cited by Emile Callot in *Ambiguïtés et antinomies de l'histoire et de sa philosophie* (Paris: Rivière, 1962), 121.

¹³ Maurice Aymard, “La structuration des espaces et des frontières,” in “Circulations et frontières: Autour du 101e anniversaire de Fernand Braudel,” special issue of *Cahiers du Centre de recherches historiques*, no. 42 (October 2008): 9.

¹⁴ See Susan Gross Solomon, “Circulation of Knowledge and the Russian Locale,” *Kritika* 9, 1 (2008): 9–26. This special issue of *Kritika* is devoted to “Circulation of Knowledge and the Human Sciences in Russia.”

¹⁵ This is an allusion to Andrew Pickering, *The Mangle of Practice: Time, Agency, and Science* (Chicago: University of Chicago Press, 1995).

It was local logic that had great power in the Stalin years. What contributed to the specificity of the Soviet Union under Stalin was the result of local inventions. Thus, after Stalin consolidated his power at the end of the 1920s, he assigned Molotov, his closest collaborator, to the post of president of the Council of People's Commissars in September 1929. From this point on began an uninterrupted series of measures that reinforced the verticality of the hierarchy—one is reminded here of Putin's term "vertical of power." Bosses who settled affairs through their *personal* relations with their deputies as they pleased were preferable to organs making *collective* decisions. Whereas a "council of deputies" had surrounded Rykov, Molotov's predecessor, and made important decisions, Molotov had only individualized relationships with his adjuncts. This principle progressively spread to all the commissariats of the people, industry included, and to the Communist International. Further still, all encounters between subordinates not directly initiated by a boss were banned, such as those of regional leaders on the occasion of congresses held in Moscow.¹⁶

The Soviet structure of power was rendered increasingly transparent to a gaze from on high, and the ensemble of society was subjected to the same scrutiny: society had to be immediately and wholly legible for Stalin. Though evidently in vain, the effort was nonetheless constantly renewed.¹⁷ This system of power, founded on its three, well-ordered pillars (the Party, the political police, and the government), had no model. The case was the same for the generalized purge of all the forces and all the individuals susceptible of turning, sooner or later, against Stalin (from national groups to his closest collaborators).¹⁸ In all these areas, Stalin was able to refer back to the historical construction of tsarist power, but he had no direct model: he did not copy.

¹⁶ Iosif Vissarionovich Stalin, *Pis'ma I. V. Stalina V. M. Molotovu, 1925–1936 gg.* (Moscow: Rossiia molodaia, 1995); Oleg Khlevniuk, *Master of the House: Stalin and His Inner Circle*, trans. Nora Seligman Favorov (New Haven: Yale University Press, 2009); Sabine Dullin, *Des hommes d'influences: Les ambassadeurs de Staline en Europe, 1930–1939* (Paris: Payot & Rivages, 2001); Hiroaki Kuromiya, "Edinonachalie and the Soviet Industrial Manager, 1928–1937," *Soviet Studies* 36, 2 (1984): 193. On the regional directors, see Khlevniuk, "Sovetskie regional'nye rukovoditeli: Politizatsiia nomenklatury," in *Kuda idet Rossiia? Krizis institutsional'nykh sistem: Vek, desiatiletie, god. Mezhdunarodnyi simpozium 15–16 ianvaria 1999 g.*, ed. T. I. Zaslavskaiia (Moscow: Moskovskaia vysshiaia shkola sotsial'nykh i ekonomicheskikh nauk, 1999), 97–101.

¹⁷ See Nicolas Werth and Gaël Moullec, *Rapports secrets soviétiques, 1912–1991: La société russe dans les documents confidentiels* (Paris: Gallimard, 1994).

¹⁸ Andrea Graziosi, Terry Martin, and Jutta Scherrer, eds., "La police politique en Union soviétique, 1918–1953," special issue of *Cahiers du monde russe* 42, 2–4 (2001); J. Arch Getty and Oleg V. Naumov, eds., *The Road to Terror: Stalin and the Self-Destruction of the Bolsheviks, 1932–1939* (New Haven: Yale University Press, 1999).

Indeed, it seems possible that these features at the heart of Stalin's system of power were of his own invention and did not require the mobilization of the many types of circulation—administrative, organizational, economic, technical, artistic, and literary—that up until then had had an effect on Russia and would likewise influence the Soviet Union. Such a statement is made, however, pending inventory ... and archives. As for the relationship between invention and borrowing, the ethnologist André Leroi-Gourhan has convincingly shown that “the example of an invention wholly linked to a local milieu can only be identified somewhat arbitrarily.”¹⁹ Invention supposes borrowing, and vice versa. At the height of Stalin's rule in the 1930s, the phenomenon of circulation was fully evident even as “national Bolshevism,” which informed major aspects of Stalinist politics was emerging. Yet it is not a question here of *transfers* narrowly defined as the linear and unidirectional movement of a technique, an idea, or a manner of doing (such as the “technology transfer” coined in the 1960s) and wielded by some clearly defined agents.²⁰ The loop of circulation and the effects of return that we will encounter will show this well enough.

In any case, the identification of this Soviet moment of exchange illustrates the idea that places, even in their most strictly “local” definition, can and must be approached from the perspective of the circulations for which they are the setting. Since the last war, a major trend in philosophy, as in the wider social sciences, has proposed abandoning the concept of being in favor of that of relation. Interest in being was understood to be the concern of metaphysics, whereas the study of relations signaled a movement toward dynamic modes of construction, toward the social, and toward the issue of power. Relation was revolutionary, while being was considered conservative, if not fascist. Historians' interest in circulation, Braudel first among them, may be understood as having developed in this diffuse atmosphere. Certain ensembles could be conceived of as objects of study, traversed if not defined by circulation; the Mediterranean Sea has provided one such model that has yet to be exhausted.²¹ After so many studies on relations and circulation, it appears that it is henceforth possible to return toward an analysis of entities

¹⁹ André Leroi-Gourhan, *Évolution et technique: Milieu et techniques* (Paris: Albin Michel, 1973, orig. 1945), 392–95.

²⁰ Liliane Hilaire-Pérez and Catherine Verna, “Dissemination of Technical Knowledge in the Middle Ages and the Early Modern Era: New Approaches and Methodological Issues,” *Technology and Culture* 47, 3 (2006): 536–65. The authors make a clear distinction between circulation and transfer in the case of technical knowledge. They show that circulation must be distinguished from what was referred to in the 1960s as “technological transfer,” that is, the shifting of technical ensembles toward the Second and Third Worlds in expectation of an immediate effect on development.

²¹ As demonstrated by Denys Lombard, *Le carrefour javanais: Essai d'histoire globale*, 3 vols. (Paris: EHESS, 1990); or by the inventive contribution of Roy Bin Wong, “Entre monde et nation: Les régions braudéliennes en Asie,” *Annales HSS* 56, 1 (2001): 5–41.

and beings, since these can be studied on the basis of the circulations that constitute them. Taking into account entities and beings means that the incessant exchanges and encounters forming them can no longer be neglected. André Leroi-Gourhan had been describing the principle of reception studies in his work on borrowing since 1945; and although the idea had little following for many years, reception studies, as opposed to diffusion studies, are now no longer simple illustrations in the margins: they are becoming central for political, cultural, and economic studies.²² In every dimension, localities are circulatory.

This article seeks therefore to determine the role of circulation in the creation of a totalitarian phenomenon that is otherwise portrayed as entirely turned in on itself. Stalinism continually resorted to borrowing. In addition to the transformation of entities and the completion of circulation, some other features of methodological and analytical reflection will be encountered in the examples presented.

In this way, the article insistently poses the question: *what* or *who* circulates? It is a matter of avoiding the imprecision that characterizes a lot of studies dedicated to the circulation of ideas. Ideas inevitably imply human and material means. Whereas ideas are taken up in the concrete practices of travel, communication, and the formation of scientific disciplines or artistic fields, it is essential to identify the material aspect of the displacements at the core of these practices and to appraise the often neglected but obligatory transformations undergone by entities in the course of their circulation. Inspired at the outset by examples from the history of industry and technology, this article extends analysis to the cultural domain. Indeed, one theme has yet to be studied: the interconnectedness, unique to the 20th century, of technology, image, and power. Borrowing related to production techniques, on the one hand, and to the mechanical image, on the other, combine here to create what is a peculiar type of power but also a singular form of efficiency in techniques, be these material or representational.

One other aspect of circulation will also merit our attention: the role of its accompanying discourses. In this way, it is necessary at certain moments to speak of “Americanization” or of borrowing from Germany; it is suitable at other moments, on the contrary, to refrain. Within a national context that dates back to the rise of the nation in the middle of the 19th century, a political practice of discourse accompanies the placing of entities into circulation.

Furthermore, it is necessary to show that phenomena are always local (including when one pursues the objects of study in the course of their

²² “We have suggested that it is worthwhile to focus not on the emission of themes by a civilizing center but on the reception of these themes by each center that acknowledges or abandons them” (Leroi-Gourhan, *Évolution et technique*, 393). See the seminal study on cultural reception: Michel Espagne and Michael Werner, “La construction d’une référence allemande en France: Genèse et histoire (1750–1914),” *Annales ESC* 42, 4 (1987): 969–92.

transport). Inquiry into circulation must not be an excuse for disinterest in what occurs locally, under the pretext that entities merely circulate and move about. Circulation does not imply detachment from the ground. Nevertheless, attention to the local leads one to consider the nature of that which is produced. Here, even more than the term “hybridization,” the terms “composition,” “combination,” or “conjugation,” which sometimes appear in the writing of the actors themselves, are essential. Lenin, for example, spoke of “combination” in a famous text in 1918: “We will be able to realize socialism precisely to the extent that we will have succeeded in *combining* the power of the Soviets and the Soviet system of management with the most recent progress of capitalism.”²³ Evoking the process of scientific development, Max Weber, for his part, spoke of *integration*: knowledge of scientific concepts developed *in the past* appeared as a means of enriching the formation of personal concepts “by integrating the dimensions, the ‘particular aspects’ emanating from the imagination of other thinkers.”²⁴ Similar to those concepts or elements that have come from the past, there are also those that come from other spaces and places. They are integrated into an ensemble wherein origin becomes lost and where, under the performative effect of certain discourses that attribute an ancestral character to practices only just imported, the processes of naturalization rapidly take their course. In these hybridizations, or combinations, or conjugations, or compositions, or integrations, one would no longer recognize the ingredients of origin. What one designates as intrinsic, as purely local, is quite often the result of circulation—temporal or spatial—that has been naturalized, that is, for which the proof of importation has been lost.

Finally, the study of these few examples of circulation, pursuing a route or returning toward a country of origin and brought into play by Soviet impulse, calls attention to the fact that the Soviet Union itself was the center of an immense, worldwide zone of circulation, no less vast than, say, the zone of Fordian circulation.²⁵ Plentiful scholarship exists on the effects in capitalist countries of communism linked to the Soviet Union, on Moscow’s “eye” in sections of the Comintern, on more or less secret emissaries, and on the voyages of intellectuals and of militants toward the Mecca that was Moscow in order to discover the “light of Marxism” or simply enthusiasm for it; this literature also describes the fascination of the major actors in public health or industrial, administrative, or architectural rationalization for the Soviet plan

²³ Vladimir Lenin, “Ocherednye zadachi sovetskoi vlasti,” *Polnoe sobranie sochinenii* 36 (Moscow: Politizdat, 1969): 165–208 (emphasis mine), cited in Cohen, “L’oncle Sam au pays des Soviets,” 409.

²⁴ Max Weber, *Essais sur la théorie de la science* (Paris: Presses Pocket, 1992), 176.

²⁵ The notion of an area of circulation comes from Raj, *Relocating Modern Science*, 226.

and order.²⁶ The stage was worldwide: a large number of areas of circulation intersected, coming into contact with, meeting, and cross-contaminating each other, as in the example of modern architecture and functional urbanism. Modernity, or what Michael David-Fox has referred to as *entangled modernities*, is unintelligible without taking into account these circulations and their confrontations on the ground.²⁷

Economic Organization: A Translation from the German

We are far from dealing solely with bipolar movements. Indeed, America dominated in production but not in economic organization. If there was a foreign source at the core of the economic thinking that led to the Five-Year Plan, it was Germany. Current depictions hastily attribute much greater importance to Americanism than to Germanism, the historical roots of which are much deeper in Russia.²⁸ Menshevik economists, including those who became Bolsheviks such as Iurii Larin, were well-versed in German cameral sciences and the administrative tools of these for the management of states: this was where some of the idea for a national economic plan was born. The organization of industrial mobilization in Germany during World War I (for example, the *Kriegsrohstoff-Abteilung*, which brought the distribution of raw materials under state control) played a large role in the establishment of a “supply plan” in Russia; the economists who set up this plan during the war were later to be encountered in the construction of the Soviet economy.²⁹ Walter Rathenau publicly formulated the idea of a *Planwirtschaft*. These borrowings enriched the extremely innovative work of conceptual elaboration

²⁶ Among recent scholarship, see Sophie Coeuré, *La grande lueur à l'Est: Les français et l'Union soviétique, 1917–1939* (Paris: Seuil, 1999); Susan Gross Solomon, “‘Being There’: Fact-Finding and Policymaking. The Rockefeller Foundation’s Division of Medical Education and the ‘Russian Matter,’ 1925–1927,” *Journal of Policy History* 14, 4 (2002): 385–416; Rachel Mazuy, *Croire plutôt que voir? Voyages en Russie soviétique, 1919–1939* (Paris: Odile Jacob, 2002); and Steven G. Marks, *How Russia Shaped the Modern World: From Art to Anti-Semitism, Ballet to Bolshevism* (Princeton, NJ: Princeton University Press, 2003).

²⁷ Michael David-Fox, “Multiple Modernities vs. Neo-Traditionalism: On Recent Debates in Russian and Soviet History,” *Jahrbücher für Geschichte Osteuropas* 55, 4 (2006): 535–55.

²⁸ Karl Schlögel, ed., *Russian–German Special Relations in the Twentieth Century: A Closed Chapter?* (Oxford: Berg, 2006).

²⁹ See the studies in French of Alessandro Stanziani: “Rationalité économique et rationalisation de la production en Russie, 1892–1930,” *Annales HSS* 1 (1996): 215–39; and *L'économie en révolution: Le cas russe, 1870–1930* (Paris: Albin Michel, 1998). To date, there is no evidence of the reception of Henri Fayol’s work, which would have contributed to the formulation of a national economic plan. In 1915, this French administrator published a theory of *Administration industrielle et générale* that garnered immediate international success. Following a German translation in 1919, the text was translated into Russian in 1923. Fayol proposed the definition of a “program of action” as the first step in administrative action. See Yves Cohen, “Fayol, un instituteur de l’ordre industriel,” *Entreprises et histoire* 34 (2003): 29–67.

undertaken by Soviet economists after 1919. International currents crossed: Jenő Varga arrived from Soviet Hungary to participate decisively in the conceptualization of a national plan, while the young Vasilii Leont'ev (Wassily Leontief), educated in economics, left Leningrad in 1925 to pursue studies in Germany, and thereafter, an immense career in the United States.

The USSR was not merely the site from which the practices and ideas of a radicalized socialism emanated. The Five-Year Plan was the end result of a long process of development that had originated in Western Europe; it returned there to the utter astonishment of modernists. Soviet leaders were, moreover, on the lookout for these positive echoes abroad that were provoked by their propaganda, and which served to revitalize propaganda that much more at home.

From Germany came the model of industrial organization that would constitute the backbone of the Soviet economy until its demise. This organization was a function of the decidedly Stalinist times and had as its principal architect Abram Gol'tsman. Gol'tsman was an early Trotskyist who rallied enthusiastically around Stalin at the end of the 1920s, exactly like Iurii Piatakov—another central leader in the construction of Soviet industry, a Trotskyist as well, a speaker of German, and an excellent connoisseur of Germany.³⁰ The initiative did not come from an economic organ. Gol'tsman belonged to the Workers' and Peasants' Inspectorate, the supervising apparatus for administrative and political organizations common to both the Party and the state. As the American historian David Shearer has shown in great detail, Gol'tsman, preoccupied with making Russia into an industrial power, had very little concern for the socialist character of this power. Gol'tsman designated it with the word *derzhava* (power), a rare word in the Soviet vocabulary and one that refers directly back to the expression *samo-derzhavie* (interpreted literally by autocracy and which served for the tsarist power as a means of designating itself). According to Shearer, Gol'tsman planned to construct a great industrial power on the foundation of a despotic state.³¹

Gol'tsman was named to the head of a commission for the reform of economic organization at the beginning of 1929. At the same time, the First Five-Year Plan was being launched, though it did not yet have the governmental form it would later acquire. The Soviet economy was thus steered by the Supreme Soviet of the National Economy, an institution based on a decentralized organization of regional economic councils and "trusts" (formed by branch and on a regional basis). It was these bodies that dictated their demands to the central administrations. Neglecting the American industrial model, decentralized as it was, Gol'tsman turned toward Germany and

³⁰ Andrea Graziosi, "G. L. Piatakov (1890–1937): A Mirror of Soviet History," *Harvard Ukrainian Studies* 16, 1–2 (1992): 127–34.

³¹ David R. Shearer, *Industry, State, and Society in Stalin's Russia, 1926–1934* (Ithaca, NY: Cornell University Press, 1996), 3, 83, 129.

made an inspiring voyage there. He visited the large factories of the Ruhr, IG Farben as well as metallurgic and mechanical factories, but above all the major cartels and *Konzernen* and practically all the most important industrial associations. Gol'tsman was interested in the relationships between production and commerce as organized within the cartels, in the specialization of the cartels' members, and particularly in the cartels' administrative and financial organization. His was a study in rationalization from the bottom up in borrowing what the Germans themselves called *Rationalisierung*. Gol'tsman's project was the result of observations made on this voyage, which served as the basis for the directive of 5 December 1929. This directive set forth the features of economic organization that would be in place until the end of the USSR, namely a strictly vertical organization of centralized branches in Moscow (the postwar reforms did not have any long-lasting influence on this model). David Shearer insists on the fact that Gol'tsman never evoked in his project either the socialist character or purpose of the state to be constructed, and that these concerns were also absent from the preoccupations of other architects of the Soviet industrial state.³² This project was in any case the fruit of an intense reflection on the available models, nourished by study, travel, lively controversies, confrontations, and practical experiments. It was this plan, a translation-adaptation of German organization, and a response in this way to the very source of inspiration, that impressed the world and enriched in a decisive fashion the European *planismes*.

Dispatching and the Hierarchy of Production: From the Lateral Model to the Vertical

Other episodes in the course of the 1930s illustrate the vigor of the circulations brought into play at peak moments of Stalinism. This was the case, for example, with the massive introduction of dispatching in Soviet industry, a phenomenon that is rather little noted by Soviet historiography and yet familiar to contemporaries of real socialism in 20th-century Europe.³³ We enter here into the vast domain of Russo-Soviet Americanism.

Numerous studies have been published in the last 20 years on Soviet borrowings from American experience, on the visits of American engineers to the USSR, and on those of the Soviets to the United States; on the journeys of patents, factories, architects, machines, artistic forms, and cinematographic experiments—to say nothing of science or principles of economic and industrial organization—to the country of proletarian revolution.

The best studies tackle several of these aspects. Jean-Louis Cohen and Hubert Damisch underscore in this way “the force with which the American

³² *Ibid.*, 115.

³³ The only scholar to address this point appears to be Mark R. Beissinger, *Scientific Management, Socialist Discipline, and Soviet Power* (Cambridge, MA: Harvard University Press, 1988), esp. 145.

model imposed itself on those claiming to be the builders of a new society that was nevertheless founded on opposite premises. Lenin's insistence on introducing Taylorism into the USSR found its echo in the slogan of the avant-garde clamoring, in the lines penned by Maiakovskii on the Brooklyn Bridge, for 'an Americanized man in an electrified country,' or in Eisenstein's or Barnet's films.³⁴

The introduction of dispatching reached its height during the Terror of 1937–38. Dispatching was a technique imported from the United States, and its introduction into the USSR of the 1930s gave it a rather original form. Even more so than in the West, dispatching became a familiar facet of ordinary Soviet and then socialist life. This scheme for the division of tasks was devised in the United States in the railroads and electrical networks. Spread to industry, it became a system for sequencing tasks and technical operations and a mode of directing circulation for products in the process of their manufacture. In the United States, this system was undoubtedly important, but secondary, and part of a whole ensemble of other measures.³⁵ The introduction of dispatching into the USSR lent it an entirely new significance. After a period of experimentation in the heavily industrial region of Leningrad, dispatching was set up in all enterprises during the course of the 1930s and carried out as systematically as the functional organization that had taken place in the 1920s. Dispatching was the target of a generalization in the industrial management apparatus at the end of 1937, which is to say at the height of the repressive terror that rained down on the country from 1937 to 1938.³⁶ Dispatching was installed in the central offices of the People's Commissariat of Heavy Industry (NKTP), the most important of all the commissariats. The dispatching bureaus were manned by young personnel who were being promoted just as the earlier generation of tried and true Communists was suffering a terrible reduction in its ranks.

The dispatch system was considered the miracle solution to problems in industrial administration. Dispatching possessed an intense technical quality and materiality, composed of cards that were inserted into large, slotted boards and electrical transmission systems that conveyed by signal or by telephone the measures to take in subordinate departments or workshops. This system is assumed to have resolved numerous problems that appeared in the course of the First Five-Year Plan. The foremost problem was the extreme difficulty of coordinating production within and between enterprises given the chronic irregularity in supplies. Neither raw materials nor the intermediary

³⁴ Cohen and Damisch, *Américanisme et modernité*, 6.

³⁵ See, for example, the respective chapters in these classics: Dexter S. Kimball, *Principles of Industrial Organization*, 4th ed. (New York: McGraw-Hill, 1933, orig. 1913); and William B. Cornell, *Organization and Management in Industry and Business* (New York: Ronald Press, 1947, orig. 1928).

³⁶ Beissinger, *Scientific Management*, 145.

parts arrived in adequate quantity at the right time and in the desired quality: this chronic malady set in at the moment the First Five-Year Plan was launched, and the Soviet economy was afflicted from this point on with an “arrhythmia” that could not be resolved.³⁷

Dispatching thus emerged as the material, technical solution to an economic problem. It was situated in a tradition of technical experiments intended to realize the ideal of automaticity promoted by Lenin’s texts. In the 1920s, “filing systems,” also imported from the United States, appeared to provide reliable material support for an administration rid of its bureaucracy. These filing systems were supposed to enable anyone situated at one extremity, from the worker on down to the likes of Lenin’s cook (who famously wrote that any cook should be able to run the state), to provide the proper stimulus to the administrative “line” (an explicitly Fordian metaphor). This stimulus in turn proceeded from card to card, resulting in the production, at the end of the sequence, of the appropriate administrative action. In implementing electric signaling devices and their modernist authority, dispatching, in addition to filing systems, offered a new panacea. A kind of material authority would come to alleviate the difficulties of coordination created by economic planning. In the 1960s and 1970s, the same appeal for a materialized automatic ideal was answered in the form of the ASU (*Avtomatizirovannaia sistema upravleniia*), or automated system of management. This was no longer based on a system of cards mingled with electricity but on the electronic system of files that was, literally, the computer. This computer-assisted “general automated system” was supposed to cover the entire economy with its vertical network, from the summit of Gosplan down to each individual economic unit.³⁸

All these “systems” yielded successively pitiful results, revealing themselves incapable of surmounting the difficulties that they were supposed to combat: bureaucratic suffocation and the absence of coordination in the economy as well as its inefficacy. Dispatching did retain one advantage, however; it succeeded “functional” organization, another American importation, in industry. Functional organization consisted of introducing parallel structures to the dominant, vertical hierarchical line. These parallel structures were dedicated to particular functions with the role of advising or of servicing, rather than commanding, in areas such as finance, accounting, rationalization, research, supplying, and maintenance.³⁹ A division devoted

³⁷ Collectif Urgense, “Un taylorisme arythmique dans les économies planifiées du centre,” *Critiques de l’économie politique* 19 (April–June 1982): 99–146.

³⁸ These points are developed in Yves Cohen, “Administration, politique et techniques: Réflexions sur la matérialité des pratiques administratives dans la Russie stalinienne (1922–1940),” *Cahiers du monde russe* 44, 2–3 (2003): 269–307.

³⁹ The classic study on this subject is Alfred D. Chandler, Jr., *The Visible Hand: The Managerial Revolution in American Business* (Cambridge, MA: Belknap, 1977).

to “rationalization,” for example, could exist at the central level of an enterprise and have direct relations with all rationalization bureaus organized at each of the other hierarchical levels, from department to workshop. This organization was implemented across Soviet industry in the course of the 1920s.

From the beginning of the 1930s, however, functional organization was on the wane. Indeed, it excessively complicated hierarchical relationships that again, and contrary to capitalist enterprise, had to manage competing demands: those of the Party, of supervising institutions, and of organs of the political police, not to mention those of the Commissariat of Justice, whose agents were assigned to certain industries.⁴⁰ Pursuing our example from above, the rationalization division at the center of an enterprise was then suppressed, and the different rationalization bureaus were no longer able to enter into direct contact with one another without passing through the hierarchical central line. A specialist wrote in 1935: “With dispatching, there is no more lateral command of the workshops” (*komandovanie so storony*, by which he meant functional): subordination was clearly vertical, with orders cascading down, and discipline successfully reinforced.⁴¹ The introduction of dispatching was one measure among many that indicated a consolidation of the vertical hierarchy. Dispatchers were placed in extremely high posts within the factory hierarchy, controlling even the planning bodies: they reigned over the ensemble of the distribution of tasks. In the postwar period, the dispatch system continued its transformative circulation and would even be exported to the new people’s democracies.⁴²

The example of dispatching illustrates the paradoxical type of Americanization to which Stalinist leaders’ continued Americanism gave rise. In no way did Americanization Americanize. As was the case everywhere, Americanization consisted of borrowing that was situated—and that therefore must be understood—within the formation of complex practices. Borrowing only partially contributed to the intelligibility of these practices, however; it must be understood as referential and as one reference among others, indicative in this particular case of the modernity of these practices. Dispatching contributed to the formation of a unique configuration in industrial organization, that of the Soviet configuration of the 1930s, which is

⁴⁰ See E. A. Rees, “Politics, Administration, and Decision-Making in the Soviet Union, 1917–1953,” in *Verwaltungsreformen im Ostseeraum*, ed. Erik Volkmar Heyen (Baden-Baden: Nomos Verlagsgesellschaft, 2004), 267.

⁴¹ G. V. Tshikhotskii, “Dispecherizatsiia v tiazheloi promyshlennosti,” in *Dispecherizatsiia v leningradskoi promyshlennosti*, ed. N. L. Zaitsev (Leningrad: Izdatel’stvo Informatsionno-izdatel’skbiuro LOUMP, 1935), 66.

⁴² As demonstrated by Valentina Fava, “Taylorism, Fordism, and Socialism: An Overview from the Škoda-Auto’s Point of View,” paper presented at the Twelfth Gerpisa International Colloquium, Paris, 9–11 June 2004.

to say one that was both localized and dated. Discourse on American modernity (and not only its material devices) was an intrinsic part of this. It was one of the discursive components of this practice as well as the incontestable and evident mark of a circulation.⁴³

Thus a fourth characteristic of this example: dispatching put American modernity on display and provided in this way an acknowledgment of circulations that was articulated in the operational practices themselves and yet remained distinct from them. The transformation undergone by the organizational form concerned was considerable, due in particular to the status bestowed upon it by the organizational tools. What characterized this transformation of an entity in circulation was its movement in the direction of the hyper-centralization affecting all governmental domains during this period. This transformation was thus swept up in a movement that overtook it. Finally, the place given to dispatching was situated at a particular moment. This moment when a technical system was given authority to manage industrial production at all levels, however, was also the moment of the Great Terror, when human beings became suspect. This distrust was a general principle of government that dispatching helped to put into place. Furthermore, in the enterprises and services as well as at the level of the commissariats, the *dispecheri* were young cadres promoted in place of those who had been suppressed.

Tractors: Complete Circulation

The changing fortunes of the tractor suggest yet another form of circulation that cannot be reduced to a simple technological transfer. The majority of tractors used in the Soviet Union during the 1920s were imported from the United States. These were John Deeres, but above all Fordson tractors made by Ford. To the extent that Henry Ford's venture inspired a pervasive Soviet passion, Ford's tractors received absolute preference. Workers and engineers made countless journeys to the Detroit factories, and many published accounts of their time in the River Rouge workshops or in another Ford factory. The books written by Henry Ford himself appeared in the USSR in

⁴³ On postwar industry in the world, indispensable reading is Jonathan Zeitlin and Gary Herrigel, eds., *Americanization and Its Limits: Reworking U.S. Technology and Management in Postwar Europe and Japan* (Oxford: Oxford University Press, 2000). Zeitlin's introduction and the contributions of Steven Tolliday and Duccio Bigazzi are particularly noteworthy. This work is pioneering in its attempt to consider the complex logic of local hybridizations and to distinguish studies of Americanization from the simplified vision of model transfer. It is undoubtedly a work of reference for circulation studies. See also Patrick Fridenson, "La circulation internationale des modes managériales," in *L'invention de la gestion: Histoire et pratiques*, ed. Jean-Philippe Bouilloud and Bernard-Pierre Lécuyer (Paris: L'Harmattan, 1994), 81–89; and Robert Boyer, "Introduction," *Between Imitation and Innovation: The Transfer and Hybridization of Productive Models in the International Automobile Industry*, ed. Boyer et al. (Oxford: Oxford University Press, 1998).

several simultaneous editions. Villages were named Fordson, and children too.⁴⁴ There was no automobile industry in the USSR until the beginning of the 1930s, when the automobile factory in Nizhnii Novgorod (later Gor'kii) and the tractor factories in Stalingrad and Cheliabinsk opened—all strictly based on the Fordian model.

The Fordson tractor underwent a strange industrial debut at the Putilov factory in Leningrad, an old heavy machinery factory from the tsarist era entrusted with some of the most delicate industrial experimentation. It was there, beginning in 1924, that the Fordson was copied part by part without authorization. The industrialization of mass-production methods was so rudimentary that even the designs drawn up from the parts were not reliable. The original parts passed from machine to machine to be reproduced. The precious tractors emerged one by one from the hands of the fitters, instead of from an assembly line that did not exist—and which moreover, had it existed, would not have been able to dispense with the skilled work of the fitters. When the First Five-Year Plan debuted, increasingly heavy imperatives came down from on high: a production goal of 3,000 tractors in 1929, of 12,000 in 1930, and 25,000 in 1931. The objective was a mass-produced Fordson tractor, but it was only at the beginning of 1932 that an assembly line for tractors was finally installed at the Putilov factory. At the same moment, the production of Fordson tractors was abandoned as the giant tractor factories called for in the First Five-Year Plan started up in Stalingrad and Cheliabinsk. The assembly line in Leningrad was, little by little, reconverted into a tank workshop.

From one decade to the next, several thousand foreign advisors came to the USSR. The number of foreign engineers reached 9,000 in 1932, the same year that saw the beginning of the very rapid diminishment in their numbers. Americans accounted for between 2,000 and 3,000 engineers, and Germans double that: these two nationalities represented almost all foreign specialists present on Soviet soil, assisting in the accelerated construction of planned industry.⁴⁵ Putilov had its share. In what terms can one understand what happened? Is it a matter of a “technological transfer” as Alan Ball has described, borrowing the discourse of the Soviets themselves?⁴⁶ What connection was

⁴⁴ Dana G. Dalrymple, “The American Tractor Comes to Soviet Agriculture: The Transfer of a Technology,” *Technology and Culture* 5, 2 (1964): 191–214; Boris M. Shpotov, “Russia and the Americanisation Process (1900–1930s),” in *L'américanisation en Europe au XXe siècle*, ed. Dominique Barjot, Isabelle Lescent-Giles, and Marc de Ferrières Le Vayer (Lille: Université Charles-de-Gaulle, 2002), 1: 303–14; and Yves Cohen, “The Soviet Fordson: Between the Politics of Stalin and the Philosophy of Ford, 1924–1932,” in *Ford, 1903–2003*, ed. Hubert Bonin, Yannick Lung, and Steven Tolliday (Paris: Plage, 2003), 531–58.

⁴⁵ Ball, *Imagining America*, 138.

⁴⁶ *Ibid.*, 137.

there between the “Fordson-Putilovets” built in the Leningrad factory and the Fordson built by Ford?

No entity remains unaffected in circulation, whether this entity is an idea, a language, a person, a technical object, know-how, a mode of organization, or a word. As Liliane Hilaire-Pérez and Catherine Verna remark, “The creation of hybrids—‘creative imitation’—was intrinsic to dissemination, as each locality followed its own path.”⁴⁷ This proposition nonetheless goes against common sense. A concern with notions of passage and displacement is already the preoccupation of very particular research. Furthermore, it is generally considered that artifacts resist change, and that they resist all the better for being hard, material objects. On this perspective of transformation by circulation offered during a conference on circulations, a colleague objected: “Objects resist! A coffee grinder remains a coffee grinder after having traversed hundreds of kilometers. Even ideas resist displacement.” But what would this transportable, immutable identity be? Is any entity perceptible outside of the practices of which it is an element, and which define it? The use of an object depends on its environment. An electric coffee grinder would be used much differently in a locale where it was a rare and expensive object, for example, than in a setting where such an appliance was an ordinary, standard object of day-to-day life: a coffee grinder that was a rarity would be carefully used and maintained and would occupy a place of importance among culinary paraphernalia. Practices such as these thus have an immediate effect on the materiality of the object in question. For the last 15 or so years, historians and sociologists of technology as well as designers themselves have designated as a major theme of their studies the importance of use in the definition and even in the conception of objects.⁴⁸ Displaced ideas are for their part reconfigured through their integration into practical discursive ensembles, in the logic of which they are understood, and wherein they recover meaning. Thus, in the Soviet Union, did the American machine Americanize industry by the sole fact of its presence? It is easy for me to poke fun today at scholars in the social sciences who used to proffer such simplistic ideas. Scholars in the social sciences believed or still believe in the transformative power of objects as such. But let us consider the workers and the directors of Putilov grappling with the American machines: the impatience with which they awaited these machines owed a lot to the hopes borne at every level of the hierarchy, and even by Stalin himself.

It was the month of August 1930, and not even one-third of the annual plan for the production of tractors was ready. The program for July—1,500

⁴⁷ Hilaire-Perez and Verna, “Dissemination,” 537.

⁴⁸ David Edgerton, “De l’innovation aux usages: Dix thèses éclectiques sur l’histoire des techniques,” *Annales HSS* 53, 4–5 (1998): 815–37; Nelly Oudshoorn and Trevor Pinch, eds., *How Users Matter: The Co-Construction of Users and Technology* (Cambridge, MA: MIT Press, 2003).

tractors—had not been carried out. One hundred five foreign machine tools should have arrived between December and February. Only 58 arrived at the end of June and in July. The available equipment did not suffice to produce a series of parts (motor block, chassis, and crankshaft) at the rate of 1,500 per month. From the internal press of the factory to *Pravda* in Moscow, the press denounced the negligence of the factory management. Indeed, tractors were not only the favored tool for the mechanization of agriculture but a political object—a political, technical object responsible for proving that the collectivization of the countryside could outclass private agriculture. In tandem with the worker and the harvester, tractors were to tear out the roots of capitalism in the country. The manufacture of tractors was under Stalin's direct control; and the Ford tractor, copied part by part, was for some time at the center of the Soviet political game. If the leadership of the factory was attacked in the press, it had to hurry to respond yet take the time to respond appropriately. A draft of a response preserved in the archives presents one by one the problems posed by the introduction of the American machines, even in insufficient number.

Vasilii Grachev, the director of the Red Putilov factory, explains first that the missing tractor parts had been completed before July with imported parts. The stock of the latter was depleted in July. The machines, however, arrived without the ordered cutting implements. These tools were small segments of metal in special steel 15 to 20 centimeters long; the tool department in the factory had to recreate these in its own fashion, that is, different from the American tools intended for these machines. One part of the machine tools arrived without the proper voltage. There were no technicians or workers sufficiently qualified or experienced in these engines. The regional committee of metallurgists promised 50 metalworkers. Only six arrived. "Due to a total lack of educated workers," it was necessary to assign workers who knew absolutely nothing about production to the new machine tools, and the lack of team leaders and fitters caused frequent halts in production. The homemade cutting tools did not entirely hold up, and their failure gradually affected the functioning of a series of shops. Furthermore, the crude parts to be refined by these American machines also had to be suitable for them. These parts were cast parts from other factories in the region of Leningrad, and before subjecting them to the machines and delivering them to the cutting tools, it was necessary, Grachev wrote, to "Americanize" them, given that they were so far from expected standards. In this way, the motor block delivered by the Banner of Work factory required 14 additional operations. More widely, Grachev continued, "certain factories with which we cooperate did not do their work in July." The result was that the normal speed of these machines had to be reduced by two or three ... when they had several speeds. If these machines had only one speed, as often happened, then other tools

and other parts had to be used ... to “rebuild the machines”! Added to this was the considerable turnover suffered by Soviet factories and fueled by the massive shortage of skilled workers.⁴⁹

Where is the Americanism? Where is the Americanization? What we have here is myriad practices that must be tailored to the object, which is in turn immediately transformed in all its characteristics. Above and beyond the object, the issue is one of interdependences. The American object, locally recast, gradually adapts all the other practices to its reconstructed self. The circulating object has been localized, seized by the locale. Again, we find ourselves at Putilov, which was an old mechanics factory and not an industrial plant sprung up without roots in the middle of distant steppes. At Putilov, the foreign machines were often parked in the open air of the factory courtyard awaiting better days and rusting over well before a report, sounding the alarm, could reach the right desk and initiate another series of interdependent bureaucratic, journalistic, and repressive practices.⁵⁰

There emerged a Fordson tractor with the allure of its American counterpart in overall appearance but certainly not on the level of its parts. It retained its Ford name and its glory for having been supposedly manufactured according to American methods. But it continually broke down in the fields since no one was familiar with, or knew how to recreate, the complex series of operations necessary for the production of cam shafts and worm drives, the most delicate parts of all. Charles Sorensen, one of Henry Ford’s closest collaborators, visited Putilov in 1929, and his account of his visit is particularly savory on this point.⁵¹

The grand era of the Soviet tractor truly began with the launching of the factories in Stalingrad and Cheliabinsk that produced not the Fordson but the much heavier International Harvester; and in Khar’kov, which produced a tractor equipped with tracks based on a Caterpillar model. These factories progressively increased their production capacity from the beginning of the 1930s and received contracts in due form. Their architect was none other than Albert Kahn himself, the builder of Ford’s mythic factories. Two gigantic automobile factories based on the Fordian model were built in Moscow and in Nizhnii Novgorod.⁵² An analysis of their methods of manufacture

⁴⁹ Tsentral’nyi gosudarstvennyi arkhiv Sankt-Peterburga f. 1788, op. 23, d. 135, ll. 537–39 (draft article by Grachev for *Pravda*, August 1930).

⁵⁰ See Cohen, “Soviet Fordson.”

⁵¹ Charles Sorensen with Samuel T. Williamson, *My Forty Years with Ford* (New York: Norton, 1956), 202.

⁵² Kurt S. Schultz, “‘Building the Soviet Detroit’: The Construction of the Nizhnii-Novgorod Automobile Factory, 1927–1932,” *Slavic Review* 49, 2 (1990): 200–12; Boris M. Shpotov, “Ford in Russia from 1909 to World War II,” in *Ford, 1903–2003*, ed. Bonin et al., 505–29; and Richard C. Austin, *Building Utopia: Erecting Russia’s First Modern City, 1930* (Kent, OH: Kent State University Press, 2004).

and of their products that does not readily accept the image promoted by their designers remains to be carried out.

Let us note here that the Soviet tractor returned home to Uncle Sam, completing a cycle of circulation. If foreign engineers had accompanied the technical and industrial installation of tractors, it was agronomists who accompanied these into the fields. Since the importation of tractors in the 1920s, American specialists had established themselves in the Soviet countryside and even set up an experimental base there bearing the name Verbliud, or Camel, not far from Rostov-on-Don. Experimental farming was conducted there, intended equally as training for technicians who would then be able to branch out into reformed Soviet agriculture. For the Americans, it was not only a practice in utopia but an experiment in mechanized farming on a very large scale that was likewise unknown on the American continent.⁵³ The experts in the countryside encountered problems comparable to those of their counterparts in the factories, however. As objects, the tractors were as otherworldly for the peasants as the semi-automatic, specialized machines were for the workers. These tractors, moreover, were no more automatically adapted to the practices in which they were expected to take part than the nightmarish machine tools from the “Putilovtsy.” The cycle from scrap iron to scrapheap was brief. The literature on the history of techniques is replete with splendid and clever objects that were prevented from circulating by unexpected obstacles —due to what Deborah Fitzgerald describes as the interdependence among objects, know-how, management practices, hierarchical forms, available materials, and the frameworks of use.⁵⁴

For American agronomists, Soviet experimentation proved extremely valuable at home since mechanization, taken over by the state in the Soviet Union, remained a private affair in the United States. Soviet wheat fields were four to five times bigger than the largest American farms; and in the wake of the Soviet experiment, the agronomists became prescribers of the American tractor industry. For its part, American assistance transformed

⁵³ Around 1929, the largest American farm was 100,000 acres, or roughly 40,000 hectares, whereas the largest Soviet farm spanned over 160,000 hectares. See Deborah Fitzgerald, *Every Farm a Factory: The Industrial Ideal in American Agriculture* (New Haven: Yale University Press, 2003), 182. I would like to thank Nathalie Jas and Sergei Zhuravlev for bringing this book to my attention.

⁵⁴ Take the example of the mechanical clock introduced at the end of the 15th century in Persia, where the “synergy of resources” enabled increased outputs when adopted and massive failures in its absence. The example is given in Hilaire-Pérez and Verna, “Dissemination,” and is originally drawn from Parviz Mohebbi, *Techniques et ressources en Iran du VIIe au XIXe siècle* (Tehran: Institut français de recherche en Iran [IFRI], 1996); and Carlo M. Belfanti and Fabio Guisberti, “Institutions and Technical Change in Early Modern Europe,” *History and Technology* 16, 3 (2000): 217–22. On frameworks of use, see Patrice Flichy, *L’innovation technique: Récents développements en sciences sociales. Vers une nouvelle théorie de l’innovation* (Paris: La Découverte, 1995).

itself into “counter-development,” serving the country of origin as much, if not more than the host country.⁵⁵

The City: From the Linear to the Centered Model

We have observed successions in modes of borrowing: the economy that was a blend of centralization and decentralization was replaced in 1929 with generalized centralization by sector, inspired by the German *Konzernen*. Functional organization was then succeeded in 1934–37 by the vertical hierarchical system of dispatching. This in no way presents a complete picture of the economy, however, and even less so of the Soviet Union: the spotlight is aimed at only some aspects of an administrative and likewise societal dynamic of construction, and these alone are unable to account for everything. The point raised here, in regard to these questions, is that the waves of borrowings under Stalinism succeeded the borrowings of the 1920s. The comparison established here between phenomena of industrial organization reveals a strong gain in centralization. It is the same for models of cities. Although an unanticipated result of this research, the issue of city planning is perfectly coherent with the Stalinist mode of government by great leader. We will see also that the city offers another example of looped circulation.

Only a few limited aspects of the Soviet experience with architecture and urbanism are evoked here. Let us begin with the fate of the “socialist city” (*sotsgorod*). In 1930, the president of the Russian (not Soviet) Council of People’s Commissars, Nikolai Miliutin, published a book on the “socialist city” that proposed the most advanced concept of the functional city in existence at the time.⁵⁶ Miliutin’s concept was based on diverse borrowings from Western work on the modern city, the principal model of which was the linear city formulated in 1882 by Arturo Soria y Mata and partially realized in the area around Madrid in 1894.

Other sources inspired by this seminal experiment were the Frenchmen Charles Gide, the great economic theorist of cooperation, and Georges Benoit-Lévy, an active partisan of linear city-gardens. We discover Ford here, too: he had proposed a linear city traversing the countryside, linking residences and industrial manufacture. Yet the Soviets furthered Ford’s design beyond the bounds of what he himself ever imagined. Miliutin explicitly applied the “assembly-line” form to his concept of a “socialist city”: manufacturing entities were situated one after the other in line, forming a sequence the length of the linear city, while those having to do with more basic aspects of existence (housing, education, leisure, health) were linked by parallel bands

⁵⁵ Mark Hobart, ed., *An Anthropological Critique of Development: The Growth of Ignorance* (London: Routledge, 1993), cited in Fitzgerald, *Every Farm a Factory*, 182.

⁵⁶ For this entire paragraph, see Nikolai Miliutin, *Sotsgorod: Le problème de la construction des villes socialistes* (Besançon: Éditions de l’Imprimeur, 2002). Jean-Louis Cohen’s introduction to the volume is of particular interest.

that followed the line of production. Marked by principles of repetition and alignment that were at the same time aesthetic and productive, unbridled Fordism could be applied to the city.

While the debate on the socialist city concluded in 1931, the Soviet city most akin to the linear city borrowed a great deal from Miliutin's design. The city in question was the one established at Magnitogorsk, around the giant metallurgic factory that was the jewel of the First Five-Year Plan. The project was designed by a German urban planner, Ernst May, who had assisted with the urbanization of Stalingrad when the tractor factory was built there.⁵⁷ It was in the West, however, owing to the German architectural milieu and above all, to Le Corbusier, that Miliutin's *sotsgorod* found its most distinct posterity. While Miliutin prudently "distanced himself little by little from modern architecture," his trace is apparent in much of Le Corbusier's work of the 1930s. It is, above all, evident in the concept of the "industrial linear city," introduced in 1945, which influenced the architecture of reconstruction up until Marne-la-Vallée.⁵⁸ We have here the example of complete circulation: the linear city, in the course of its transformations, was decisively transmitted by the Soviet Union but did not become really established in this locality. An urban form in any case was produced, like so many others, in the very course of circulation.

The work of Miliutin is part of a lengthy history of Russian urbanism and of its formation through exchange and circulation.⁵⁹ Soviet urbanism was inscribed in this long tradition of borrowing that even the Stalinist period was unable to diminish. Of course, this era saw the brutal rejection of modern architecture. But in their response to the modern and to the linear city, the planners, to their advantage, still had recourse to what they had learned in the West. The General Plan of Moscow of 1935, drawn up at the peak of prewar Stalinist urbanism and established under the direct control of one of Stalin's closest lieutenants, Lazar' Kaganovich, Communist Party secretary for the Moscow region, bore echoes of the city-

⁵⁷ Stephen Kotkin, *Magnetic Mountain: Stalinism as a Civilization* (Berkeley: University of California Press, 1995).

⁵⁸ Cohen, "Introduction," *Sotsgorod*, 28–29; and Le Corbusier et al., *Les trois établissements humains* (Paris: Denoël, 1945).

⁵⁹ I defer here to the work of Elisabeth Essaïan, "Le plan général de reconstruction de Moscou de 1935 : La ville, l'architecture et le politique. Héritages culturels et pragmatisme économique" (Ph.D. diss., Université de Paris-VIII Vincennes Saint-Denis, 2006). See also Essaïan, "L'Amérique des architectes russes et soviétiques: Miroir et projections des ambitions urbaines, 1876–1953," *Espaces et sociétés* 107, 4 (2001): 37–64; Essaïan, "Il piano generale di ricostruzione di Mosca del 1935 e la trasformazione del centro storico," *Storia urbana* 26, 101 (2002): 51–75; and Essaïan, "Zaimstvovanie gorodskikh obrazov i gradostroitel'nogo opyta pri formirovanii i realizatsii Genplana Moskvyy 1935 goda," *Gorod i gorozhane v Rossii XX veka: Materialy rossiiskogo-frantsuzskogo seminara*, ed. A. D. Margolis (St. Petersburg: Kontfors, 2001), 32–42.

gardens and park-filled cities that pre-World War I urban planners had made use of since 1911. The General Plan of Moscow did not break with ancient Moscow but, on the contrary, prolonged, enlarged, and extended its radio-concentric arrangement, systematizing it through a structure of major axes, well-ordered squares, and standardized blocks. The principles of this organization were clearly defined, the most important being the affirmation of the symbolic center with the establishment of institutional, administrative, and cultural buildings: here, one is further from the linear city and closer to the centered city.⁶⁰

In July 1932, in a speech before the architects affiliated with the Moscow soviet, Kaganovich proposed not only that bourgeois technique must not be rejected but also that properly Soviet conceptions of comfort must be developed. He specified, moreover, that borrowing Americanist elements in no way prevented one from borrowing elements from Greek architecture. Although evocations of foreign experience and forms met with increasing criticism after 1930, foreign experience remained a resource for Soviet planners. Borrowings again made their mark, as in the case of parkways or the aligning of buildings in rows. Voyages, though increasingly controlled, were undertaken by the architects creating Stalinist culture. Curiosity shifted toward city services and technical installations capable of increasing comfort. In this way, the president of the Leningrad soviet returned from a mission in 1937 recommending the installation of codes and interphones on exterior doors, the digging of underground garages, and the development of decoration and lighting for shop windows and displays. He also proposed the resolution of some “trifles,” suggesting for example the use of itinerant sweepers, or another “detail seen in Paris”: the public urinals of the *Grands Boulevards* that prevented one from detecting any disagreeable odor.⁶¹ Hierarchy and the center prevailed (even if the Soviet Union was not the only country to have rejected the linear city).

Still pursuing Elisabeth Essaïan’s line of research, let us note a detail that takes on great importance within the framework of a reflection on circulation. In their stigmatization of the former Tverskaia Street (soon renamed Gor’kii Street), the central artery of Moscow leading into Red Square, the Bolshevik leaders opposed two types of circulation, the old commercial circulation and the cultural circulation of the future. “[T]he artery of commercial Moscow’s gluttony and debauchery,” they wrote, must be transformed into “an artery of proletarian culture and . . . of cultural and political liaison with the rest of the world.”⁶² Literature, the press, and the theater saw their esteemed venues installed in ad hoc buildings and institutions. At the level of

⁶⁰ Essaïan, “Il piano generale di ricostruzione di Mosca,” 56.

⁶¹ Essaïan, “Zaimstvovanie gorodskikh obrazov,” 42.

⁶² A. Zaslavskii and A. Kozelkov, “Planirovka Moskvy,” *Stroitel’stvo Moskvy*, no. 10 (1932): 8, cited in Essaïan, “Il piano generale di ricostruzione di Mosca,” 57.

a one-of-a-kind capital city, Moscow paradigmatically illustrates how circulation is the cauldron of history. We are not concerned here with the routes that circulations follow but rather with one of the poles that they produce: cities. The spatial inscription of commercial circulation clears the way for all other circulation; it yields space to circulation as a site of material and human movement and as a site of encounter. In Moscow, a radical power attempted to drive out commerce to install ideology in its place. Today, commerce, which had never (to be quite honest) completely lost its rights in the era of Gor'kii Street, has again become the king of the new Tverskaia. In the same gesture, though in less heroic fashion, Soviet power destroyed numerous reference points of other, less commercial circulations that structured space—religion, for example. Although a lot of churches disappeared in the realization of the Moscow Plan, this plan did not produce all the destructive effects that its measures on paper might have portended.

It proved too difficult for Soviet power to renounce the ideal of the center and all its advantages that were promised by the urban—and no less techno-industrial—utopia, shared for one moment between East and West as a common modernity. Industrialist inspiration was not imported from the West in unmitigated form, without screening, selection, or retranslation by the Stalinist clan. The imperatives of this power dominated, and in developing the means of their domination, they discovered forms that were invariably centered.

Local logic thus presided over the reconstitution of entities in circulation, reformulating, and reassigning full meaning to them before sending them back toward their point of departure. This local logic was not an essence, however, as it was defined in this same movement by the very process of transformation that it provoked. This is exactly what Stalin declared when he envisioned making American *delovitost'* (efficiency) a major feature of Leninism: not allied or auxiliary but a true component. In *Foundations, or Problems of Leninism*, published in 1924, Stalin writes: "American efficiency is that indomitable force which neither knows nor recognizes obstacles; which continues at a task once started until it is finished, even if it is a minor task; and without which serious constructive work is impossible.... The combination [*soedinenie*] of Russian revolutionary sweep and American efficiency is the essence of Leninism in party and state work."⁶³

It is evident from the above discussion how American efficiency was reconfigured, becoming unrecognizable in spite of the proclamations, the promotions, the presence of engineers and workers, and even the intense materiality of machines and architectural forms. One can go even further and

⁶³ Joseph Stalin, *Problems of Leninism* (Moscow: Foreign Languages Publishing House, 1954), 111. See also his *Sochineniia* (Moscow: Gospolitizdat, 1947), 6: 188, quoted in Rogger, "Americanism," 385.

question whether industrial efficiency did not evolve entirely through representations, through images—those that the Soviet Union wanted to present of itself and those that it produced only through borrowing from the United States. This is what the next section explores.

Efficiency via the Image: From the Object-Actor to Hollywood-on-Moscow River

The image experienced a comparable succession of circulatory waves. In terms of image, it was a matter of fixed images (photography, posters, painting) as well as the animated image of cinema. Given the immensity of the dossier here, I again present but a few aspects of this example.

Within the continuous space of prescription and action that progressively became, with the assertion of Stalinist power, the USSR, practices of representation were interlaced with other governmental practices, and in particular with those that we have evoked relative to the economy and the city. To understand the terms, effects, and significance of this intersection, it is necessary to evoke the specific industrial logic of the USSR. The “real” efficiency of Soviet industry is still in question today. Controversy rages over what can actually be assessed given the systematic falsification of data that took place at all levels of the Soviet economy from the 1920s on, and above all during the Stalinist 1930s.⁶⁴ If there was industrial growth, was there overall economic growth in the 1930s? Likewise, if there was industrial growth, what was the value of what was actually produced? What was the genuine quality of the products? The question remains unanswered, even as regards military industry.⁶⁵ Concerning the enormous industrial mobilization effort in the second half of the 1930s, Mark Harrison, one of the participants in this debate who is very knowledgeable about military industry, has recognized that “the fact of knowing whether [mobilization] succeeded or whether it simply gave the appearance of success has not yet been the subject of adequate research.”⁶⁶ It is a matter here of linking this question of appearance with that of efficiency: what constitutes efficiency? Is efficiency radically opposed to appearance? Or could appearance have been a useful component of efficiency under the particular conditions of Stalinism in the prewar and, if one believes the historians of the Cold War, in the postwar and up until the

⁶⁴ See the exchange between Steven Rosefielde, “Stalinism in Post-Communist Perspective: New Evidence on Killings, Forced Labour, and Economic Growth in the 1930s,” *Europe–Asia Studies* 48, 6 (1996): 959–87; and Mark Harrison, “Comment: Stalinism in Post-Communist Perspective,” *Europe–Asia Studies* 49, 3 (1997): 499–502.

⁶⁵ I would like to thank Andrea Graziosi for sharing his line of questioning on the subject with me.

⁶⁶ Mark Harrison, “Soviet Industry and the Red Army under Stalin: A Military-Industrial Complex?” *Cahiers du monde russe* 44, 2–3 (2003): 331.

end of the Soviet Union?⁶⁷ The question of “real” efficiency would therefore seem futile: the vast amount of falsification and, as we will see, of manipulation of the image does not lend itself to the work of the historian attempting to comb back through these elements to restore a hypothetical, “true” representation of efficiency. Above all, veritable tests have already been carried out: victory in war (in one war to be precise, that of 1941–45, in the course of which industry functioned according to new criteria rid of bureaucratic control and with the direct and immense aid of the United States) and defeat in the Cold War (and in other wars such as Afghanistan).

It is not only in the Soviet universe that the question of “real” efficiency would be in vain. Does the objective efficiency of techniques exist outside of their trial in economic and military wars or in whatever the theater of use may be? Frameworks of judgment in which this efficiency is evaluated always predominate, and these frameworks are both the object and seat of disputes that are perfectly human, social, political, and so on. No machine is ever alone with its mechanical, chemical, or electronic functioning. No space could be divided so that the technical object and its effect would be isolated; no space could impose itself in this way as the object of study of the social sciences—what counts not only for the historians arriving after the fact but also for the sociologists and the anthropologists who are able to have unfettered access to the live terrain (this does not mean that all make use of this ability). There is here a singular constraint. The work consists of identifying and of describing socio-technical configurations where the consideration of objects and of their effects is inseparably linked with that of the frameworks, for example, of intellectual or political validation. Soviet industry as developed by Stalinism poses a major problem here in that falsification, or the consciously manipulated assessment of efficiency, is consubstantial with Soviet industry. This is not to suggest that such manipulation existed or could exist *only* under Soviet socialism, but in contradistinction to a capitalist system, there was neither market nor competition that could pass judgment, via their own institutions, on Soviet products and thereby limit both bureaucracy and the extent of these dissimulations. Yet, more than anywhere else, image played a major role in the apparatus of efficiency that to date has been little studied by historians.

Now this question of the image is immense in its unique relationship to technique. For our purposes, it relates closely to the history of power in Russia, because the relationships with technique were of the highest degree of importance there. This question also touches on a major historiographic question, that of the eventual identification of national configurations of technique and of systems of efficiency. Under what conditions and at what

⁶⁷ Paul N. Edwards, *The Closed World: Computers and the Politics of Discourse in Cold War America* (Cambridge, MA: MIT Press, 1998).

cost can one distinguish “national styles” such as those proposed by the American historian Thomas Hughes?⁶⁸ It is evidently not a question here of entering further into this dense problematic, but I would like to offer some points likely to stimulate discussion. First of all, it is important, in the logic of the image, that the technical object became a privileged object of art during the 1920s. The Soviets were among the principal agents of this promotion. Photography, cinema, and draftsmanship but also painting and even architecture were the initial sites. The embarrassment of riches reigned relative to the current aesthetic theories: Aleksandr Rodchenko wrote in 1921 that “all the new artistic approaches come from the engineer’s technique and art.” In 1931, the Constructivist architect Iakov Chernikov wrote the following declaration, out of which he would create a truly graphic discipline: “In other times, the machine was considered profoundly foreign to art, and mechanical forms were excluded from the province of beauty as such.”⁶⁹ Circulation was bound to play a role in this artistic apotheosis of the technical object. The filmmaker and film theorist Lev Kuleshov considered Americanism in 1920 in the same terms as a number of Western artists: Americanism signified a simplification that must be based on the representation of mechanical, not natural, processes. Nature was too complex: it was easier to show a bridge than an autumn landscape with a cabin in ruins, some clouds, and a pond. The material that would be the stuff of cinema as of art, according to Kuleshov, was technical. The model of this artistic material would be an industrial process that was filmed, moreover, with authentic workers instead of actors. In Soviet cinema of the 1920s, trains, tractors, factories, dams, airplanes, concrete, the telegraph, or, above all, the telephone became the true, material stars. These “object-actors” were one aspect of the aesthetic theorization that informed the international circulation of films. It was in thinking about objects in the films of Chaplin, and a scene from *Intolerance* in which a cigar occupied the full screen, that Kuleshov wrote in 1920, in *The Banner of Cinematography*, that objects “play ... exactly like a model” (in the sense of an actor): “Thanks to clever montage, a model or an object can have an equivalent value.”⁷⁰ In addition to montage, the close-up, with its intensification of the image, was the technique used to give technical objects all their aesthetic power.

⁶⁸ Thomas P. Hughes, *Networks of Power: Electrification in Western Society, 1880–1930* (Baltimore: Johns Hopkins University Press, 1983).

⁶⁹ Ball, *Imagining America*, 35.

⁷⁰ Lev Kuleshov, *Sobranie sochineniia*, 3 vols., 1: *Teoriia, kritika, pedagogika* (Moscow: Iskusstvo, 1987), 80. The translation is from Valérie Pozner, whom I would like to thank for having introduced me to this literature, in Kuleshov, *L'art du cinéma et autres écrits* (Lausanne: L'âge d'homme, 1994), 53 and notes. On this precise topic, see also the very stimulating, unpublished paper of François Albera, “L'Ob-jeu,” presented at the International Film Studies Conference, Udine, March 2001.

These images were doubly technical: to speak in Benjaminian terms, these were *technical* works in the era of their *mechanized* reproduction by means of the camera as photos or movies.⁷¹ On a third level, they were *mechanically* duplicated as films or published photographs. They were even elevated to a fourth technical level, that of *political technique*. In other words, they did not leave off at an artistic manifestation or an intensification of the effects of art through technique; they were conveyed in the sphere of politics. The year 1930 saw the appearance of an emblematic journal, *USSR in Construction*.⁷² This publication proceeded from the perfectly explicit desire formulated by none other than Maksim Gor'kii, to render more "visible" what was "good." Photographs took the lead. *USSR in Construction* was composed only of photographs. Its sole texts provided the editorial commentary or captions for these photographs. Constructivists participated in large numbers; El Lissitzki and Rodchenko were among the most famous editors, taking full charge of numerous issues. The journal came out in Russian and in four foreign languages: English, French, German, and Spanish. By the end of the 1930s, the Russian version had a print run of over 70,000 copies. The intended audience was the Soviet public, and increasingly the Soviet elite (for whom a deluxe edition was printed beginning in 1934), as well as foreigners who were sympathizers of the Soviet experience or partners in economic and industrial construction.

It was a matter of using the objectivity of the image to counter the lies of the enemies of the Soviet Union concerning the success of its construction: "Photography and cinema are fully able to graphically and concisely present the enormous scale of construction work being carried out by the proletariat in the land of the Soviets.... Photography should also be devoted to the service of construction not randomly, without system, but systematically and constantly." Photography was what the sun painted (*svetopis'*): "To rob our enemies inside and outside the Soviet Union of the ability to distort and discredit the display of words and numbers, we decided to turn to drawing with light [*svetopis'*], to the work of the sun—to photography. You do not accuse the sun of distortions; the sun illuminates what exists as it exists." The culture of photographic objectivity was universally shared, and this politics via image was founded on these values common to the modern era. The editors gratuitously sent their issues to a number of interlocutors involved in the international relations of the Soviet Union, expressly soliciting responses from these addressees. I quote here only one response, from a British adviser to the Soviet government: "I congratulate you on the first number of *USSR*

⁷¹ Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in his *Illuminations* (New York: Harcourt, Brace, and World, 1968).

⁷² The essential information in this paragraph comes from an article by Erika Wolf: "When Photographs Speak, to Whom Do They Talk? The Origins and Audience of *SSSR na stroike* (USSR in Construction)," *Left History* 6, 2 (2000): 53–82.

in Construction. One of its merits is its absolutely objective character. It goes without saying that I will do everything so that it is seen by the greatest number of people.”⁷³

This practice of the image is not to be understood only as good propaganda. It was something more profound: it was a matter of government. It was a mode of managing the public sphere through an approach that was larger than propaganda and, at the same time, a mode of managing the economy.⁷⁴ To begin with, we are dealing with government via the public sphere and on a global scale, in a direct fashion: it was because *USSR in Construction* went not through the communist parties or the Comintern but through government agencies that there was management of the public sphere. The same material was destined for all. Circularity was organized: the power of the reproduced image of technical objects, the principle of which was garnered from the West, returned to the West echoing the power of its communist friend-enemy; this resonance then returned toward the Soviet Union to prove, and to prove to itself there—on account of the attestations collected abroad—the power of industrial construction. The image contributed to the efficiency of industry, and indeed it was a question of its “real” efficiency: the Soviet leadership counted on the image creating an effect in the West, an effect that was used within the Soviet Union to form the Soviets’ judgment about what they were doing and building themselves (let us recall the Fordson tractor: what did it matter that it was handmade and that it regularly broke down when it was a “Fordson”!). As Erika Wolf has emphasized, all this furnished the Soviet elite of the 1930s with “an image of Soviet society and of the industrialization that supported its sentiment of mastery and leadership.”⁷⁵ There was no other system of efficiency—as long as war was not at hand to induce competition on the battlefield.

In this scenario, we are in the age not of technique but of quadruple technique. The Constructivist page maker used Constructivist photographs (reproduced by the thousands) of factories representing Constructivist (and other) architecture. Again, the political technique gained its force from the mechanical reproduction of technological images of technical objects and of production. Three stages were universal, while the fourth, that of political technique, was specifically Soviet. This fourth stage, however, relaunched circulation in an effort to seek out world opinion in anticipation of its external as well as internal effects. The historical force of the Soviet Union developed in part here, in the inventive use of these borrowings.

⁷³ These passages are cited in *ibid.*, 61 and 66.

⁷⁴ Gábor T. Rittersporn, Malte Rolf, and Jan C. Behrends, eds., *Sphären von Öffentlichkeit in Gesellschaften sowjetischen Typs: Zwischen partei-staatlicher Selbstinszenierung und kirchlichen Gegenwelten* (Bern: Peter Lang, 2003).

⁷⁵ Wolf, “When Photographs Speak,” 74.

It was toward Hollywood that the Soviet leadership turned to develop a popular cinema: while the country focused inward on the violent purges that were devouring its entrails, delegations were sent to Europe and to the United States to study cinema, with Hollywood as an obligatory stopover. I will only evoke here an anecdote about the favorite disciple of Eisenstein, Grigorii Aleksandrov, who spent a long time in Hollywood at the end of the 1920s studying the production of musicals and special effects, which he would then brilliantly introduce in the Soviet Union. His prewar career culminated in 1940 with the film *The Radiant Path*, which recounts the splendid odyssey of a textile factory worker played by Liubov' Orlova, the great star of the Stalinist era. After having fought saboteurs, she finally makes her way to Moscow, where she gives a speech at the All-Union Agricultural Exhibition under the protective shadow of an immense statue of Stalin in a long military coat. Along the way, we see startling images of this Stakhanovite personally taking on the supervision of 8 [textile] machines, then 16, then 32. All the processes of the image à la Ford, of machines aligned and repeated, are here.⁷⁶

The vast premise of the film was the great and joyful victory of socialism. Though the filmed image was in accordance with Hollywood and Detroit, the fiction of the second, third, or nth degree of Stakhanovite labor was lasting proof of the success of Soviet industry and society. The outcome of the construction and transmission of efficiency and the authority of this calculated effect were extremely durable in their time and in the United States; it might even be considered that they persist still in Putin's Russia.

Considering Circulation

Thus there was circulation under Stalinism, and it was for the worst. It is true that circulation always occurred within a framework. It is also true that it fell back on a nationalism that soon came to reject, particularly at the end of the 1940s and with the launching of the infamous campaign against cosmopolitanism, even the useful borrowings practiced by Stalinism during its most intense prewar development.

Circulation was consubstantial with Stalinist power in some of its strongest manifestations. A major part of the effectiveness characteristic of this power (and not only of technology and industry) resided in the effects of these circulations. The word must be employed in the plural. Circulations are highly varied, and the present contribution has neglected some of the major ones that are interwoven with those under consideration here; together these form the landscape of Stalinism. This article has discussed the circulation of technical objects, machines, techniques, and forms of organization at

⁷⁶ Bernard Eisenschitz, ed., *Gels et dégels: Une autre histoire du cinéma soviétique, 1926–1968* (Paris: Centre Pompidou; Milan: Mazzotta, 2002), 37 and 122; and Annabelle Creissel and Kristian Feigelson, "Ford, fordisme et stalinisme (1935)," *Théorème*, no. 8 (2005): 73–82.

all levels (in industrial as in urban domains); the circulation of hierarchical principles, of aesthetic practices (from photography to architecture by way of cinema); and, for all these circulations, those who convey them and their politics. Certain circulations are relative to innovations that are among the most characteristic of the 20th century. Their “local” association—situated and dated, attributable to people, including to Stalin and his group—contributed heavily to the composition of the landscape of the USSR of the 1930s in all its singularity: this was the case in particular of the rise of dispatching at the height of the Terror, or even the association of industrial efficiency with the quadruple technology of the image (a political technique of the mechanical image—reproduced in numbers—of the technical object).

Nevertheless, one can see what little interest there would be in considering separately these threads of circulation, or even simply in aligning and accumulating them one next to the other for the sole pleasure of considering their diversity. It is important (a) to identify and to follow what and who circulate; (b) to note the inevitable transformations of these entities in the course of circulation; (c) to consider these circulations in the relationships they have with each other; (d) to understand eventual dynamics that emerge in common, such as, in this case, centralization; (e) to observe the eventual returns to the site of origin of the borrowing, in single or multiple loops; and (f) to identify the original configurations to which these circulations contribute. It is necessary to enter, to dare to enter, into the complexity of these singularities that are composed, composite, hybrid, local, and formed by the intersection of these circulations (with the contribution of many other phenomena, of course).

A number of studies on Americanization are not really studies of circulation because they do not consider the complexity of the processes that are engaged locally by the placement of an entity into circulation (or, moreover, the capacity of this entity to emit and to be borrowed at the point of departure and to call and to receive at the point of arrival). Local combination produces specific admixtures each time that neither “Americanism” nor any “Americanization” could completely explain. Causality is always in play in studies of circulation. One of the big problems of studies on Americanization is that the external reference is easier to identify, to grasp, and to analyze, whereas it is much more difficult to identify the transformative work of the specific and of the local (which are defined moreover by this very work and not by an essence of some kind). Too many studies of circulation that are nevertheless good historical works go round and round in circles, content to deal with the reference—the extrinsic reference (under the rubric, for example, of “introduction of ... into ...”). In other words, they concern themselves with what is displaced—and therefore with what is easily recognized since it is merely a question of actions in space. They are little concerned, in

contrast, with what is afoot locally following the call and the receipt, or with what returns to the point of departure. What is most important is the culture medium that produces specific social forms where the identity and the rationale of the borrowed or imposed element are most often lost. The sought-after references to the foreign and faraway intersect here with those references that are sought in the past and in tradition. The exogenous reference (in a spatial dimension) does not enter into contradiction with the endogenous reference (in a temporal dimension): the two types conjugate, and there is no reason for astonishment in finding forms of conservative modernism or of traditional modernism.⁷⁷ Stalinist power made substantial use of these combinations, which are sometimes difficult to decipher. What remains of this ferment is a new chemistry, to which belongs, in its turn, *the given discourse on circulation*—a discourse that has, in its own way, an effect on reality. This effect, therefore, is not at all treated as an opposition between “intentions” and “results” nor, as is common in remarks made in France about history, as an opposition between practices and discourses. Discourses, which are practices, play their own role in a complex ensemble of multiple practices, the portrait of which must be established.⁷⁸

This study of some circulations from the period of Stalinism in the 1930s, and of their effects on the comprehension of this era, exposes some original traits of international studies of circulation. One of these traits has to do with the era. The Bolshevik Revolution inaugurated an “area of circulation,” a global zone that was essentially bipolar: in 1917, the United States intervened in the European war as the first socialist revolution jolted old Russia.⁷⁹ An area of circulation stretched between Detroit (although Ford was central, it was a question more widely of North America) and Moscow, between the site of the deployment of an industrial regime where mass production was linked to mass consumption and the site of a political regime that introduced itself as the center of the only world revolution possible. This zone was that of the modern. On one side were Taylorism and Fordism, and on the other, pronounced communism, both sharing forms of rationality (realized in the relationship between organization and knowledge) but pursuing radically different projects.

To reconsider the whole question from the point of view of the constitution of this huge Fordian and Stalinist zone “*croisée*,” and of its rapid

⁷⁷ One thinks, of course, of all the works that followed the publication of Jeffrey Herf's *Reactionary Modernism: Technology, Culture, and Politics in Weimar and the Third Reich* (Cambridge: Cambridge University Press, 1984).

⁷⁸ Here see the suggestions of Zeitlin, introduction to *Americanization and Its Limits*; for an attempt, see Cohen, “Fayol.” Relevant here is also the perspective of social sciences situated in multiple locations: George Marcus, “Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography,” *Annual Review of Anthropology* 24 (1995): 95–117.

⁷⁹ Raj, *Relocating Modern Science*, 226.

accession to a global scale, is undoubtedly a question beyond the scope of this article. Furthermore, if two poles, Detroit and Moscow, dominate this zone whose complexity reflects the 20th century, other “poles of reference” (and Germany, in particular, with regard to forms of economic organization) also emerge or persist, maintaining the ancient routes crossing Europe. Incidentally, Europe did not lose its centrality or its situation as a place of intersection within this area, a fact that is especially remarkable in some domains like aesthetics (Cubism, abstract art, serial music), architecture (the international style), or psychology (psychoanalysis). The persistent centrality of Europe is, without a doubt, a historical characteristic of this zone—and one that served its time. The fact remains that the circulatory approach has as its vocation the reformulation of all questions of local history.⁸⁰ The USSR became receiver and sender: it is thus fitting to consider the USSR in the history of Fordism as well as that of global communism.

“Poles of reference” are thus local, regional, national, continental, or in any case situated and identified by names that are often those of cities. However, some of these poles are more than that. They are not only reserves of resources—humans (engineers, architects), techniques (machines, patents, know-how, and objects to copy), organizations (hierarchical forms, modalities of circulation of knowledge and prescriptions), and aesthetics (new alloys of techniques, of themes, of forms, and of materials)—to be mobilized. Moscow was more than a “pole.” The Soviet capital established itself as a “hub of standardization.” It became the extremely prescriptive producer of political, hierarchical, and ideological norms; and to command and arrange this circulation, the capital had a very complex, organized apparatus that was of great quality and in large part secret: the Communist International.⁸¹ Neither Ford nor any other capitalist organization disposed of the equivalent, except in the case of subsidiary companies or, as we would say today, transplants.

From the Soviet perspective, for the period in question, the American pole served intensively and in highly varied fashion as a support for the Soviet

⁸⁰ See the concept of “circulatory territories” in Alain Tarrus, “Territoires circulatoires européens des migrants et sédentarisation urbaines,” in *Migrants: Les nouvelles mobilités en Europe*, ed. Mirjana Morokvasic and Hedwig Rudolph (Paris: L’Harmattan, 1996), 93–117, and other articles by the same author.

⁸¹ Branko Lazitch, “La formation de la section des liaisons internationales du Komintern (OMS), 1921–1923,” *Communisme*, no. 4 (1983): 65–80; Mikhail Narinski and Jürgen Rojahn, eds., *Centre and Periphery: The History of the Comintern in the Light of New Documents* (Amsterdam: International Institute of Social History, 1996); José Gotovitch and Mikhail Narinski, eds., *Komintern: L’histoire et les hommes. Dictionnaire biographique de l’Internationale Communiste en France, en Belgique, au Luxembourg, en Suisse et à Moscou (1919–1943)* (Paris: Éditions de l’Atelier, 2001); and A. O. Chubar’ian, ed., *Istoriia Kommunisticheskogo Internatsionala, 1919–1943: Dokumental’nye ocherki* (Moscow: Nauka, 2002). For the diplomatic aspect, see Dullin, *Des hommes d’influence*.

pole. The example of tractors demonstrates that the same could be true in the reverse direction, but one could also study the Western fate of the “Five-Year Plan” formula, reviving all the preliminary forms of *planisme*. What circulates has, in a way, a tendency to form a loop, to rebound. The model is India, the British Empire, and Great Britain, all in co-construction through the cartography circulating from one continent to the other.⁸² The last essay by Wolfgang Schivelbusch on the three New Deals of the 1930s is very suggestive in this regard: the logics put into practice by Roosevelt, Hitler, and Mussolini were very different from one another, but their contemporaneity resulted from the circulation of certain phenomena specific to the beginning of the 20th century, a culture of leadership, for example, founded on more or less material techniques of “mesmerizing” the “masses.”⁸³

We have already become accustomed to the term “hybridization” relative to what happens locally in the phenomena of circulation. Yet this term does not easily recognize the composite character of what is formed and which is irreducible to the sum of the elements of its composition; this term neither allows for the recognition at each instant of each of these elements, be they intrinsic or extrinsic. In this way, the system of industrial efficiency that was created in the Soviet Union was an invention in its own peculiarity, based on a particular technical mastery, and oriented toward the most visible, useful part of technical ensembles (and this to the detriment of the interdependences that were characteristic of the techniques of Taylorian and Fordian modernity).⁸⁴ This efficiency was also oriented toward a systematically and constitutively falsified accounting and toward the construction of a quadruple technical image. Taylorism and Fordism were unrecognizable: Taylorism was “arrhythmic,” and Soviet Fordism was the enemy of productivity research (even the technical objects reputed to be “resistant” were transformed in circulation, like all entities, whatever their nature). It is even debatable whether there was ever the least bit of Taylorism or Fordism in the USSR. What was created did not conserve the properties of the borrowings or inheritances: that is what the present study confirms from previous research on technical circulations. The architectural aspect of official construction must affirm on its own that it is Greek and not Corbusian: its exhibition as such provides the proof. The affirmation of the Fordian character of production was, on the contrary, an affair of the press and of the image in the USSR, yet Fordism did not typically prove itself through discourse. An intensely Stalinist locality, the USSR is

⁸² Here see the works of Kapil Raj.

⁸³ Wolfgang Schivelbusch, *Three New Deals: Reflections on Roosevelt's America, Mussolini's Italy, and Hitler's Germany, 1933–1939* (New York: Metropolitan Books, 2006). See also Yves Cohen, “The Cult of Number One in an Age of Leaders,” *Kritika* 8, 3 (2007): 597–634.

⁸⁴ Thomas P. Hughes, *American Genesis: A Century of Invention and Technological Enthusiasm* (New York: Viking, 1989).

best understood as being composed of circulations and situated within the zones of circulation that encompass it—two centuries of industrial capitalism and of socialist hope notwithstanding.

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