

GLOBAL ECONOMIC GOVERNANCE INITIATIVE

The Making of a Development Economist: Rosenstein-Rodan and the Birth of Development Economics



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ABSTRACT

In the relatively small Emphyrean of the “pioneers” of postwar development economics, Paul N. Rosenstein-Rodan (1902-1985) occupies a prominent position: not only he is credited with having being the first to have fully articulated the “Big Push” and “balanced growth” theories, which soon became the development orthodoxy of the postwar years, but his 1943 article “Problems of Industrialisation of Eastern and South-Eastern Europe” is often mentioned as a sort of birth certificate of the discipline of development economics (Murphy, Shleifer and Vishny 1989; Pomfret 1992; Krugman 1993; 1994). Bhagwati, one of Rosenstein-Rodan’s former collaborators and a great admirer of his work, considered it “the most beautiful piece of creative writing on development” (Bhagwati 2000: 38). Moreover, Rosenstein-Rodan’s contribution is not limited to the age of “high development theory”, as Krugman once labelled the pioneering years of the discipline (Krugman 1993). Rosenstein-Rodan took his first steps as a highly theoretical exponent of utility theory in modernist Vienna, was a pioneer of post-war development economics, a prominent scholar and government consultant, and an eastern European émigré with strong cultural and sentimental ties to Poland, Austria, Italy, Great Britain, and the United States.

And yet, no analysis of his long scholarly career exists. This is in part because Rosenstein-Rodan’s work, after a number of very theoretical publications in the early phase of his scholarly career, increasingly focused on the preparation of so-called grey material, unpublished reports, and on coordinating research groups. He was thus a very influential scholar but not a very visible one. It is also the case, however, that, unlike for other development economists who have been recently studied and written about, no specific archival holdings appeared to have survived Rosenstein-Rodan.¹ Partners, spouses, close relatives and friends often have an important role in collecting and donating papers, but Rosenstein-Rodan’s wife,

¹ See, for example, W. Arthur Lewis by Robert Tignor (2005), Albert O. Hirschman by Jeremy Adelman (2013), Raul Prebisch by Edgar Dosman (2008), Lauchlin Currie by Roger J. Sandilands (1990), Hans Singer by John Shaw (2002), Wolfgang Stolper by Mary Morgan (2008).

Margaret (nee Williams), died a few months after him, and Rosenstein-Rodan's former colleagues at MIT and Boston University, Rodan's last academic home—including his close friend, the President of Boston University, John Silber—were convinced his papers had been dispersed or lost.²

As it turns out, Rosenstein-Rodan's papers are neatly preserved in the Howard Gotlieb Archival Research Center of Boston University, and the many organizations with which he collaborated during his life also hold papers written by him or related to him. It is thus possible to reconstruct in detail his intellectual biography. This paper, based on copious archival sources, offers a first reconstruction of the life and thought of Rosenstein-Rodan, and provides a first assessment of his formation and career, in particular as a development economist.³ In addition to documenting briefly the many lives of Rosenstein-Rodan, this paper offers elements to discuss two crucial junctures in the history of development economics as a discipline, namely, the birth of the discipline in the late 1940s, and its decline approximately a quarter century later.

Early Career: Vienna's Legacy and the European Crisis

Very little is known about the early life of Paul N. Rosenstein-Rodan, and even about the name there is a certain confusion (Paul Narziss Rosenstein, according to his Austrian 1933 passport, "known as Rosenstein-Rodan", according to his 1939 certificate of Naturalization as a British citizen)⁴. Born to a bourgeois Jewish family in Cracow on April 19, 1902, son of Anna and Maximilian, a judge, Paul studied economics at the Law School of the University of Vienna. Although the city's status had declined from imperial capital to the government seat of a small and exhausted republic, Vienna's intellectual life remained very stimulating, and it was considered, alongside Stockholm and Cambridge, UK, one of the three best places to study economics, perhaps more because of its private discussion circles—Ludwig von Mises's *Privatseminar* being by far the most important—than for the quality of the economics teaching at the university (Craver 1986a). Rosenstein-Rodan belonged to the relatively younger cohort of this milieu: his first publication, a long encyclopedia entry on marginal utility, appeared in 1927 (Rosenstein-Rodan 1927) and shortly after he became, with Oskar Morgenstern, the managing editor of the newly established journal *Zeitschrift für Nationalökonomie*, the journal of the Austrian National Economic Association. Following in the footsteps of his mentor Hans Mayer, Rosenstein-Rodan worked on the concept of time in economic analysis—an issue that would remain central to his work throughout the 1930s (Rosenstein-Rodan 1929).

Dismal professional prospects and a quickly deteriorating political climate made the Viennese environment increasingly unappealing for the son of a Jewish family. Anti-Semitism was becoming common currency in the political discourse, and although full-fledged anti-Semitic legislation would be issued only after the 1938 *Anschluss*, anti-Semitic sentiments were already rampant in the late 1920s. As Karl Popper remembered, "It became impossible for anybody of Jewish origin to become a University teacher".⁵ This was also true for Rosenstein-Rodan: "As things are now developing", Morgenstern confided to a colleague, "Rosenstein will have little future in Austria".⁶ By 1930, Rosenstein-Rodan was on the move and, thanks to a Rockefeller Foundation fellowship, he went to Italy.⁷ Luigi Einaudi—a prominent liberal economist and the Rockefeller correspondent in

2 Personal emails to me.

3 Archival sources are from the Howard Gotlieb Archival Research Center, Boston University, henceforth HGARC; Archivio Fondazione Luigi Einaudi, Turin, henceforth AFLE; Chatham House, London, henceforth CHA; World Bank Group Archives, Washington, DC, henceforth WBGA; Archivio Storico Banca d'Italia, Rome, henceforth ASBI; MIT Libraries, Cambridge, Mass., henceforth MITL.

4 Both available in HGARC.

5 The quote is from Karl Popper, *Unended Quest*, Revised edition, La Salle, 1976: 107 as reported by Craver 1986a: 23.

6 Oskar Morgenstern to John Van Sickle, Diary of John Van Sickle, entry of November 28, 1931, as reported in Craver 1986a: 22, n. 80.

7 The Rockefeller Foundation was also supporting the Vienna-based *Institut für Konjunkturforschung*, which had opened in 1927 and was headed by Hayek. On the Rockefeller Foundation's fellowships program in Europe and especially in Italy, see Craver 1986b; Gemelli 2005; and Faucci 1986.

Italy—became a dedicated mentor for the young mittel-European scholar. Introduced by Einaudi, Rosenstein-Rodan met economists in each and every cities he visited, and in Naples he became acquainted with the philosopher Benedetto Croce.⁸ These connections, first and foremost Einaudi, would be very important fifteen years later, when Rosenstein-Rodan, by then an economist at the World Bank, negotiated the first of eight Bank loans to Italy: in 1945, Einaudi would be appointed Governor of the Italian Central Bank, and in 1948 he was elected President of the Italian Republic.

Thanks to Einaudi's intermediation, Rosenstein-Rodan obtained a fellowship extension to be spent in London. Like his Italian sojourn, this was an important opportunity to broaden his network, and keep up to date with the most recent economics scholarship. In London, he frequented Friedrich Hayek and met, among others, Lionel Robbins, Nicholas Kaldor, John Hicks, and Piero Sraffa. In those years, Rosenstein-Rodan envisioned for himself a role as liaison between the Italian and the London scenes: in London, he was committed to circulating Italian economics literature. At the same time, he signaled articles by English-based scholars for Einaudi's journal *La Riforma Sociale*, while from his hotel, which was strategically located at walking distance from Charing Cross Road—the bookshop street *par excellence*—he hunted for rare economics books for Einaudi, Sraffa, and himself.⁹

From Vienna to London via Italy, Rosenstein-Rodan focused on two main research subjects. One was the history of economic thought, which stemmed from his broad readings in economic analysis and which became increasingly relevant in his teaching. A book manuscript based on his lectures was almost ready, but it never saw the light.¹⁰ Rosenstein-Rodan's second research project was on the concept of time in pure theory—a continuation of his research in Vienna. Prompted by an exchange between Simon Kuznets and Ralph W. Souter on the *Quarterly Journal of Economics* about the relation of business-cycle theory with economic theory, Rosenstein-Rodan composed a short manuscript on the concept of time in relation to economic equilibrium.¹¹ He also drafted articles about the determination of the “economic period” and further reflections on the time dimension in economic processes.¹² None of these manuscripts was ever published, but they formed the basis for articles that Rosenstein-Rodan later published in *La Riforma Sociale* and *Economica* (Rosenstein-Rodan 1933; 1934).

These London articles are important intermediate steps between Rosenstein-Rodan's early scholarly interests and his future work on development issues. Rooted in the Viennese tradition, both articles discuss matters of concern for the analysis of personal utility and the configuration of economic equilibrium. Yet, they address these issues by focusing on processes of adjustment and cumulative dynamics in people's economic behaviors, and prefigure important aspects of the analysis of economic coordination that would later appear so prominently in Rosenstein-Rodan's writings on development.

In the 1933 article for *La Riforma Sociale*, Rosenstein-Rodan turned the “special case” of the complementarity of utilities, usually treated as an aside in early marginalist analysis, into a central question. In particular, he highlighted the need to shift the focus from the utility of a good to the utility of its use in connection with other goods: “When considering . . . many goods, their best uses are not known in advance, as they depend one from the other: they cannot thus be considered as ‘given’, but they constitute the unknowns of the problem” (Rosenstein-Rodan 1933: 303). Hence, it followed that, because of the complementarity of the utilities, the economic plan of an actor goes necessarily through a number of modifications. But whereas in the 1933 article Rosenstein-Rodan claimed that “the economic subject reaches equilibrium time by time, through a historical

8 P. N. Rosenstein-Rodan to professeur [Einaudi], 2/II.1931, AFLE. P. N. Rosenstein-Rodan to Professore [Einaudi], 26/II.1931, AFLE. Among the economists visited by Rosenstein-Rodan are Gino Borgatta, Agostino Lanzillo, Ulisse Gobbi, Giorgio Mortara, Eraldo Fossati, Marco Fanno, Gustavo Del Vecchio, and Antonio De Viti De Marco, see P. N. Rosenstein-Rodan to professeur [Einaudi], 8/I.1931, AFLE.

9 Rosenstein to Chiarissimo Professore [Einaudi], 5/II.1932; 4/III.1932; 21/XII. 1933;], 6/I. 1934; 4/IV.1934, AFLE; P. N. Rosenstein to Rockefeller Foundation, Paris, 18th IX 1931, and Luigi Einaudi to Mr. John V. Van Sickle, September 30, 1931, AFLE. Another of Einaudi's correspondents for his collection of rare books was Piero Sraffa in Cambridge.

10 P. N. Rosenstein-Rodan to Caro Professore [Einaudi], 4/IV.1934; 6/VII.1936, AFLE.

11 P. N. Rosenstein to Professore [Einaudi], 21/XI.1930, AFLE. See Kuznets 1930 and Souter 1930.

12 P. N. Rosenstein to Chiarissimo Professore [Einaudi], 8/IV.1931, AFLE.

process” (Rosenstein-Rodan 1933: 283), one year later he contemplated not only the achievement of equilibrium through multiple adjustments, but the very possibility that the economic process might lead to a cumulative dynamic that moves away from equilibrium (Rosenstein-Rodan 1934).

The problem of change through time was for Rosenstein-Rodan at the core of economic analysis: whereas the theory of economic equilibrium had emphasized the analysis of the final magnitudes of economic quantities at the expense of the intermediate positions, Rosenstein-Rodan was interested in the process of change itself. Anticipating Gunnar Myrdal’s analysis of circular cumulative causation (Myrdal 1957), Rosenstein-Rodan wrote: “the changes of one element may, as a result of the non-simultaneous rhythm of adjustments, give rise to a continual chain of new changes, and a kind of perpetuum mobile of changes sets in . . . Either the same oscillations continue, or they increase and we have a case of increasing disequilibrium” (Rosenstein-Rodan 1934: 91). When the problem of development became the central question for the economic debate in the UK, Rosenstein-Rodan was particularly instrumental in importing these concepts into the new debate.

Meanwhile, Rosenstein-Rodan was progressing in his academic career, landing a tenured position at University College London. If the future of Europe was getting darker—Hitler became Germany’s Chancellor on January 30, 1933—Rosenstein-Rodan felt that his professional life was taking a positive turn: “I do not want to go back to Germany now [February 1933] . . . The last events made me feel disgusted by this whole world. Now I hope I will be able to live in a quieter environment—I trust I will have a contract here”.¹³

The European Collapse and the Problem of Economic Backwardness in Central and Eastern Europe

Soon after Hitler seized power in early 1933, Germany began a rearmament program, reintroduced military conscription in 1935, and in 1936 occupied the Rhineland. On March 12, 1938, the German *Wermacht* invaded Austria and proclaimed the annexation of Austria to Germany. One week later, on March 19, 1938, Hans Mayer, Rosenstein-Rodan’s university mentor and the president of the *Nationalökonomische Gesellschaft*, expelled all the Jewish members of the Association—“to his eternal shame”, as Lionel Robbins commented later.¹⁴ Rosenstein-Rodan was deeply affected by Austria’s Nazification and loss of independence. “You can well imagine”, he wrote to Einaudi, “the gloomy mood I have been in this last two months after the last events in Austria”.¹⁵

To many British observers, Germany’s growing hostility did not come as a surprise.¹⁶ While the Paris peace conference (1919) was still ongoing, several commentators had remarked that the conditions imposed on Germany, specifically the punitive repayment scheme, would be the roots of future conflict. John Maynard Keynes, a member of the British delegation to Paris, left the delegation in frustration and published a long pamphlet, *The Economic Consequences of the Peace*, in which he exposed the short-sightedness of the Allied attitude towards Germany: “If we aim deliberately at the impoverishment of Central Europe”, Keynes wrote, “vengeance . . . will not limp” (Keynes 1920: 268). Like him, others felt that an opportunity to build a solid peace had been lost. Out of this discontent was born, in 1920, the British (later Royal) Institute of International Affairs, also known as Chatham House, which quickly became a prominent think-tank in international relations.¹⁷ Most of all, Chatham House embarked on a major study to avoid repeating, after the end of World War II, the mistakes that had made Europe so unstable after World War I.

Central to this effort was Chatham House’s Reconstruction Committee, especially its Economic Group. In war years, it was not easy for Chatham House to find an economist prominent enough to chair it, and when, in

13 P. N. Rosenstein to Carissimo Professore [Einaudi], no date but early 1933, probably February 1933, AFLE.

14 Quoted in Craver 1986a: 30.

15 Rosenstein to Dear Professor Einaudi, 31st May, 1938, AFLE.

16 This and the next sections draw in part on Alacevich 2013; 2018.

17 For an analysis of Chatham House until World War II, see Bosco and Navari 1994.

September 1941, someone mentioned Paul Rosenstein-Rodan, then acting chair of the Economics Department at University College, London, nobody reacted with enthusiasm.¹⁸ Although “on paper he sounds first-class”, several objections were raised.¹⁹ Partly, Rosenstein-Rodan seemed to be “much too theoretical and academic to be of any use”.²⁰ Partly, the problem appeared to reside in his Polish origins. James Meade noted that if “foreignness” had been an objection against Hungarian Nicholas Kaldor, it presumably would have applied to Rosenstein-Rodan as well.²¹ That Rosenstein-Rodan had acquired UK citizenship in 1939 did not fully compensate for the fact that, in the words of the Assistant Director for Research at Chatham House, J. V. Wilson, he had been living in England for “only eleven years”.²² Yet, since any candidate might reveal “unsuspected defects after appointment”—as Wilson, somehow philosophically, added—Chatham House should hire Rosenstein-Rodan: “At least he is the bird in the hand”.²³ On October 6th, 1941, Chatham House announced the appointment of Paul Rosenstein-Rodan as Secretary of the Economic Group on a half-time basis.²⁴ In a matter of a few weeks Wilson sounded relieved and satisfied. “The work of the Economic Group”, he reported to the Secretary and Director-General of Chatham House, Ivison S. Macadam, “has been actively pursued since Dr. Rodan took up his duties . . . Dr. Rodan is a most able and energetic secretary of the Group”.²⁵

Rosenstein-Rodan set an ambitious agenda around four questions: the economic lessons of the 1930s, the blue-print of the Nazi European Empire, the post-war economic collaboration with the United States of America, and a study of the causes of agricultural poverty.²⁶ For the purposes of this paper, however, two questions are particularly relevant, namely the analysis of the Nazi empire, and the causes of (and remedies for) agricultural poverty.²⁷ In fact, they were logically connected.

In an internal memorandum, the Chatham House Economic Group drew the basic lines of what the economic reorganization of Europe would look like once the German conquest was completed. Germany, obviously, would host the industrial core, that is, strategic industries such as iron and steel, mechanical and chemical heavy industries, and the financial services. A second area, Eastern Europe, would have a complementary industrial role, that is, the production of cheap industrial goods for German mass consumption. Newly established labor-intensive productions would take advantage of the huge agrarian overpopulation present in the region. The counterpart of Eastern European industrialization, in Chatham House’s analysis, was the agrarianization of Western Europe, endowed with the best soils on the entire continent. This was, however, highly speculative: whereas in an imperial perspective the conversion of Western Europe to agriculture might make, in principle, economic sense, nobody actually believed it. German pro-Nazi industrialists, to make a conspicuous example, continued to acquire shares in French industries until the eve of World War II (Tooze 2006). A fourth economic area was formed by the underdeveloped countries of the Mediterranean basin, which produced agricultural sub-tropical goods.²⁸

Of the various European peripheries surrounding the German core, Central and Eastern Europe acquired a privileged position. Germans considered it a “natural” area of German expansionism, and a fundamental building block of a German continental empire. German’s notions of *Lebensraum* (“living space”) and *Grossraum*

18 See the correspondence in CHA.

19 Margaret Cleeve to Dr. A. G. B. Fisher, September 19th, 1941, CHA.

20 Margaret Cleeve, “Memorandum of talk with Professor Plant”, 11th September 1941, CHA.

21 J. V. Wilson to Miss Cleeve, 24 September 1941, CHA.

22 Ibid.

23 Ibid.

24 Committee on Reconstruction. Economic Group, October 6th, 1941, CHA.

25 J. V. Wilson to Mr. Macadam “Report on Dr. Rosenstein-Rodan”, January 6th, 1942, CHA.

26 Ibid.

27 The study of the economic lessons of the 1930s produced a book authored by young Australian economist Heinz W. Arndt (1944). This work, albeit influential, did not trigger any further research effort. The study of the postwar relations between UK and USA did not produce much. See also Arndt 1985.

28 Paul N. Rosenstein-Rodan, “Blueprint of the Nazi European Empire,” Economic Group Paper 25, December 5, 1941, CHA.

("greater area") were based on the idea of an expansion of German sovereignty eastbound. But non-German observers, too, agreed that the Eastern European region was crucial for the balance of powers at the European and global level. A British geographer, for example, was simply reporting a widely shared opinion when he underscored that whoever rules Eastern Europe would eventually rule Europe and the world (Mackinder 1919). A strong and "developed" Eastern Europe was thus, in British eyes, a necessary beacon against German expansionism, and a fundamental element for a pacified, non-totalitarian Europe.

Rosenstein-Rodan managed to attract to the Economic Group a broad network of exiled Central European scholars with a first-hand knowledge of continental Europe. He also developed an institutional collaboration with a number of exiled governments then based in London, and with economists at Nuffield College and the Institute of Statistics at Oxford. Michael Kalecki, Kurt Mandelbaum, E. F. Schumacher, and Thomas Balogh, all at Oxford during World War II, would also contribute to development economics in the postwar years. Thanks to this broad network, the Economic Group was able to establish a number of technical sub-sections, such as Engineering and Machine Industry, Mining and Heavy Industry, Paper and Timber, Textiles, Foodstuffs, and Transport and Communications, which provided the most complete and reliable collection of data on Eastern Europe available until then. Building on some of the main conclusions of the intense research effort of the Chatham House group, in 1943 Rosenstein-Rodan published an article on the problems of industrialization of Eastern and South-Eastern Europe that in fact set the terms for the development discourse to come.

Rosenstein-Rodan's 1943 article is widely known, so it will suffice here to highlight the major features that made it a classic. First of all, this article marked a strong discontinuity from orthodox analyses of the Eastern European economic crisis. In contrast with the standard *laissez-faire* approach, according to which Eastern Europe had no comparative advantage in any industrial production, Rosenstein-Rodan claimed that the only way to absorb the excess agrarian population that was keeping agricultural productivity close to zero was to move it to a newly established industrial sector. Moreover, because of the complementarities and the indivisibilities that would necessarily characterize the transition from an agrarian to an industrial economy, the establishment of the new industrial sector could not be left to the vagaries and uncertainties of private initiative, but should be carried out by a regional or State authority, and it should be comprehensive enough to generate an entirely new market for the new productions (Rosenstein-Rodan 1943; for an example of the standard *laissez-faire* approach to the Eastern European crisis, see Balogh 1933). As Joseph Love has shown, in the 1930s an autochthonous nationalist Eastern European tradition had developed in support of industrial policies in the region. Yet, that tradition remained mainly confined to a network of local scholars, except for its influence, twenty years later, on the structuralist debate in Latin America (Love 1996). In a very practical sense, Rosenstein-Rodan brought those theories to the heart of the Empire, for the Chatham House development plans for Eastern Europe implied the notion of British hegemony over the region.²⁹

Secondly, as we have seen, Rosenstein-Rodan's analysis put external economies at the center-stage. Rosenstein-Rodan focused especially on two cases of external economies. First, the new factories would train the workers on-the-job. And second, as mentioned, the individual factories would mutually stimulate demand through their needs for intermediate goods or through the demand for consumption goods by their workers. External economies, of course, had been discussed already half a century earlier by Alfred Marshall and Arthur C. Pigou. Yet, as Rosenstein-Rodan would later claim, they had remained a "platonic, unused part of economic theory" (Rosenstein-Rodan 1954: 31; see also Rosenstein-Rodan 1984). The foundations of development economics, on the contrary, gave a privileged position to external economies, complementarities and indivisibilities. Finally, the article laid the groundwork for subsequent work on how to plan investments that were both intensive and concentrated in time, in order to achieve the minimum scale and scope for the newly created industrial sector to sustain itself. This idea became commonly known, in the economic literature, as the concept of the "big push" (see, for example, Rosenstein-Rodan 1961a).

Whereas Rosenstein-Rodan's 1943 article was still entirely focused on Eastern and South-Eastern Europe, a

29 "Proposal for a Private members' Study Group", July 14th, 1939: 2, CHA.

follow-up 1944 article embraced a global perspective: backwardness as a global phenomenon, which interested at least “five vast international depressed areas” and approximately 80 to 90 percent of the world’s population: the Far East, especially India and China; the colonial empires, and especially Africa; the Caribbean area; the Middle East; and Eastern and South-Eastern Europe. The latter, added Rosenstein-Rodan, was “in many respects the most fruitful and interesting field of action, because the solution of the problem there can be envisaged within the life-time of one generation” (1944: 159). As the universality of the Eastern European case grew in clarity, Rosenstein-Rodan and his collaborators planned a publication that summarized their analysis of economic backwardness. As it happened, though fully collated, the book never reached the print stage. It is possible that after the war, it was considered quickly surpassed by events.

Rosenstein-Rodan’s shift from marginal utility theory to macroeconomic development was of major magnitude, and, as the discussion above shows, it was driven in large part by the research priorities of the Economic Group at Chatham House. The economic backwardness of Eastern and Central Europe became relevant because it was a crucial element of the more comprehensive social, political, and military weakness of that area in face of Nazi aggression. The economic backwardness of Central Europe, in other words, caught the attention of scholars and analysts when it was recognized as a root—or at least a crucial element—of the major political and military problem of the day: Nazi European imperialism (Mazower 2008).

In a few years, the development discourse became structured around a few theoretical controversies, such as the balanced versus unbalanced growth diatribe, or analyses of the dual sector model. Yet, it should be remembered that early formulations of core elements of the postwar development theory were initially highly contextual, as they had been elaborated with reference to a specific situation. Interestingly, Rosenstein-Rodan always minimized this context-specific dimension of his foundational contribution to development economics. In an interview, for example, he said that his 1943 article had been “misleadingly” entitled “Problems of Industrialization of Eastern and Southeastern Europe”, for in actuality “[t]hat was really a general development theory applied to a problem . . . Eastern Europe served as an example of the general thinking and not necessarily as the main purpose”.³⁰ In a private exchange with Joseph Love, who was conducting research on the influence of development thinking in 1930s Europe on 1950s Latin American thought (later published as Love 1996), Rosenstein-Rodan went even further: “We selected Eastern European countries only as an example for a model of the Third World . . . not because of any interest in Eastern Europe or Germany but only because representatives of the Eastern European governments in exile were in London, and one could use them”.³¹ By the time Rosenstein-Rodan was making these statements, the theoretical value of those early analyses had dramatically overcome their region-specific validity. While Eastern Europe, in the throes of the Cold War, was, for obvious reasons, no longer the target of UK development plans, the role of those ideas as development templates had increased manifold. Quite understandably, Rosenstein-Rodan made a point of underscoring how those early reflections transcended the borders of 1940s Eastern Europe, but his claim that the Chatham House study had no serious roots in the Nazi aggression to Eastern Europe was exaggerated. The archival evidence suggests a different and more complicated story.

Although the archival sources do not offer any hint on what prompted Rosenstein-Rodan to shift from utility theory to development issues, the context in which this shift took place provides a number of interesting elements. The Keynesian revolution has obviously a prominent place in this, not as much for its specific contents as because, in the words of Albert Hirschman, it broke “the ice of mono-economics”, that is, it showed that specific economic conditions required specific, tailored economic theories and policies (Hirschman 1981: 6). In this respect, Rosenstein-Rodan’s 1943 article was a perfect example of this new attitude. As Hirschman wrote: “underdeveloped countries as a group are set apart, through a number of specific economic characteristics common to them, from the advanced industrial countries . . . Traditional economic analysis, which has concentrated

30 Paul Rosenstein-Rodan, “Interview” by R. Oliver, August 14, 1961, The World Bank/IFC Archives, Oral History Program: 51.

31 Paul Rosenstein-Rodan to Joseph L. Love, May 13, 1981. I am grateful to Joseph Love for sharing this document and for permission to quote from it.

on the industrial countries, must therefore be recast in significant respects when dealing with underdeveloped countries" (Hirschman 1981: 3). In other words, both Rosenstein-Rodan and Hirschman understood Keynes's work as a masterful demonstration of how it was possible to use the Marshallian perspective in deeply innovative ways.³² In the 1950s, Hirschman built his strategy of economic development in explicit opposition to Rosenstein-Rodan's "balanced growth" approach, claiming that Rosenstein-Rodan's approach was so flawed that it did not even belong to the field of development economics (Hirschman 1958). It is thus somewhat paradoxical that Hirschman's analysis of the influence of the Keynesian revolution on the birth of development economics explains Rosenstein-Rodan's experience at least as well as Hirschman's.³³ And yet, the paradox is only the surface of a more interesting story, in which the early disciplinary history of development economics is inextricably linked to the personal trajectories of many émigré economists fleeing Nazi Europe.

Rosenstein-Rodan also acknowledged Keynes's influence on postwar development thinking.³⁴ Yet, Rosenstein-Rodan was no Keynesian. As far as economic analysis is concerned, the connection between his studies on marginal utility theory and the subsequent development phase are particularly important. As mentioned above, while studying marginal utility theory, Rosenstein-Rodan had focused on dynamic processes subject to increasing disequilibria. In this respect, the analysis that he had developed at the micro level became useful to examine vicious circles—a fashionable concept in early development theory—at the macro level. Indeed, Rosenstein-Rodan was aware of this link. In his words, "the earlier micro-theory was relevant to development theorists very largely because the Austrian School (unlike the Lausanne School) paid major attention to the *path* towards equilibrium and not only to the conditions of stability which must be satisfied if a point is to be a point of equilibrium".³⁵

Finally, a third influence is discernible in Rosenstein-Rodan's discussion of the conditions for economic progress, namely, Allyn Young's analysis of increasing returns and the inherently unstable nature of economic progress: "New products are appearing, firms are assuming new tasks, and new industries are coming into being. In short, change in this external field [as opposed to the internal economies of a particular firm] is qualitative as well quantitative", and "movements away from equilibrium, departures from previous trends, are characteristics of it" (Young 1928: 528). Young defined his view of the market as "inclusive", in the sense that the market was not to be seen as external to industries, but as an aggregate of productive interconnected activities. Although, as Maiju Perälä (2006) has argued, Rosenstein-Rodan used Young's analysis only selectively, privileging in fact an analysis of the elements that undermine growth, and especially the supply-side constraints to development, which Young did not really discuss, points of contact with Young's analysis can be discerned in Rosenstein-Rodan's discussion of the interrelatedness of the supply and demand of different industries, of growth as a self-perpetuating process, of the time factor in economic processes, and of the relationship between market size and formation of a new industrial workforce.³⁶

The end of the war and its aftermath brought disruptive news to Rosenstein-Rodan, both at the personal and professional level. When the German army invaded Poland, Rosenstein-Rodan's parents and sister moved to Lwów (then a Polish city, now Lviv, Ukraine). During the first two years of war, Lwów was under Soviet occupation, but early on in Operation Barbarossa—the German invasion of Soviet Union, begun in June 1941—it fell under Nazi authority and the Rosensteins were segregated in the Lwów Jewish ghetto. All communications with London were severed. We know from later accounts that his parents and sister managed to escape from

32 I am indebted to Pier Francesco Asso for helping me clarify this point. See also his Introduction, co-authored with Marcello De Cecco, to the Italian translation of Hirschman's *National Power and the Structure of Foreign Trade* (Asso and De Cecco 1987).

33 According to Hirschman's biographer, Jeremy Adelman, the Keynesian revolution was "eye opening" for Hirschman, although Hirschman felt "a growing distrust of anything that smacked grand theory" (Adelman 2013: 122 and 124).

34 Paul Rosenstein-Rodan, "Interview" by R. Oliver, August 14, 1961, The World Bank/IFC Archives, Oral History Program.

35 Paul Rosenstein-Rodan to Dragoslav Avramovic, July 1, 1982, quoted in Avramovic 1984: 223, emphasis in the original.

36 Despite his crucial contributions to economic analysis, Allyn Young was long neglected in post-war years. A resurgence of interest took place in the 1990s, concomitantly with the publication of a biography (Blitch 1995) and a selection of his papers edited and with an introduction by Perry Mehrling and Roger Sandilands (Young 1999). For a discussion of the influence of Allyn Young on development economics, see Currie 1981; 1997.

Lwów and move to Warsaw, but tragedy befell: his parents were killed by a Polish bandit. Their daughter Erna, though severely injured, survived, and in 1944 moved to Czestochowa and later back to Cracow.³⁷ It is unclear where Paul found her again, nor do we know anything about their relationship or what contact, if any, they maintained and how.³⁸

Loss, fortunately, was not the only defining note in Rosenstein-Rodan's life between the end of the war and the immediate postwar years. In September 1946, Paul married Margaret Williams, who would remain his wife for life.³⁹

The Development Discourse in the Postwar Years: The World Bank and Southern Italy

After the end of World War II, the international landscape evolved quickly. The deteriorating relationship between the United States and the Soviet Union fully crystallized in the Cold War, which by 1947 was in full swing. The Soviet army never left Eastern Europe, and the analyses prepared by Chatham House to tackle the economic and social backwardness of that region did not have any practical outcome. The Rosenstein-Rodans left London for Washington, DC, where Paul joined the Research Department of the World Bank. But if Eastern Europe became inaccessible territory for the implementation of Chatham House's development plans, the development discourse remained nonetheless central in postwar *Western* Europe. The Cold War and the need to stabilize war-torn Western European countries made poverty and unemployment a central problem of the Western European political agenda, and a matter of concern for Europe's major ally, the United States.

The most vulnerable element in the Western camp seemed to be Italy: its economic recovery was slow and inconclusive, unemployment skyrocketed, and social and political tension, especially in the underdeveloped South, worsened by the day. Like for Eastern Europe, economic and social development was recognized as the principal way to stabilize the country. As an officer of the U.S. State Department put it, "a mixture of flattery, moral encouragement and considerable material aid" were necessary to "prevent Italy going communist".⁴⁰ Specifically, it was clear that the gap between the North and South of Italy had to be reduced, and a development plan for Italy's poorest regions, the Italian South or Mezzogiorno, was elaborated. A major partner in this effort was the World Bank.

Rosenstein-Rodan had a central role in the negotiations between Italy and the Bank, and many of the ideas he had developed at Chatham House fit the Italian situation well.⁴¹ The Italian Mezzogiorno was characterized by a poor and overpopulated agrarian economy characterized by large, extensively cultivated estates (*latifundia*). In contrast to the usual approach of relying on the Mezzogiorno's alleged international comparative advantage in the production of agricultural produce, Rosenstein-Rodan and his colleagues in the Italian government, the Bank of Italy (remember that Einaudi was its postwar Governor until 1948, when he became President of the Italian Republic, as well as the Minister of the Budget for part of that period), and Svimez, a prominent think-tank specialized on Italy's Southern economy, highlighted the need to implement a plan of industrialization. In

37 http://pl.wikipedia.org/wiki/Erna_Rosenstein, http://de.wikipedia.org/wiki/Erna_Rosenstein, http://en.wikipedia.org/wiki/Erna_Rosenstein, accessed on March 08, 2019.

38 We know that Erna remained in Poland. Although as a young artist in interwar Vienna and Paris she had been a Communist activist, she was soon disillusioned by the Polish Communist regime. Her surrealist art—very far from Socialist Realism—was deemed "formalist". She was increasingly ostracized and by the mid-1950s she was forbidden from exhibiting her art in public. In 1949, she married the writer and literary critic Artur Sandauer, and in 1950 they had a son, future human rights activist Adam Sandauer.

39 <http://www.freebmd.org.uk/cgi/information.pl?cite=WaKQ0BUi2Q9RKDOMzullDQ&scan=1>, which provides links to scans of "Marriages Registered in July, August and September" for the letters R and W respectively: 148 and 459. I am very grateful to Ann Backhouse for having found this information.

40 Walter (Red) Dowling to H. Freeman (Doc) Matthews, November 21, 1946, as quoted in Harper 1986: 109.

41 See, for example, the message by Mario Ferrari Aggradi to Antonio D'Aroma, Private Secretary to the President of the Italian Republic, Luigi Einaudi: "During my visit to Washington, [DC], I met several times with Professor Rosenstein Rodan, who has been very helpful in finalizing the [World Bank's] loan to Cassa per il Mezzogiorno [the regional development agency for Southern Italy]", Ferrari Aggradi to Antonio D'Aroma, Segretario Privato del Presidente della Repubblica Luigi Einaudi, 27 Ott. 1951, AFLE, my translation.

years characterized by a worldwide dollar shortage and currency inconvertibility, the Bank of Italy was particularly concerned that a domestic investment plan might trigger inflationary pressures due to a combination of raising consumption and reduced export. Rosenstein-Rodan agreed that the World Bank should grant a loan with the specific aim of withstanding the impact that the domestic investment plan would have on the balance of payments. The loan had a clear macroeconomic flavor and departed significantly from the loan policies that top officers at the Bank were trying to establish, which privileged loans for specific, directly productive projects. The first World Bank loan to Italy was disbursed on 1951, followed by seven other loans in fifteen years.

The opposing views between Rosenstein-Rodan and the Bank's top officers on whether the Bank should consider macroeconomic loans a standard practice or not, resulted in Rosenstein-Rodan's increasing marginalization, until he eventually left the bank for the MIT. Rosenstein-Rodan remained openly polemical towards the policy choices of his senior colleagues. In a later interview, he sarcastically dismissed the Bank's mania for financing specific projects instead of giving financial resources for larger programs. In his words, it was difficult to understand the "psychoanalytical problem why a bunch of intelligent people committed [to] what to an economist (not only to an economist, to any logical thinking people) must be rather an extraordinary shift in perspective in the wrong direction of giving so much emphasis to projects . . . The Bank thought it financed an electric power station, but in fact financed a brothel".⁴² The impatience was reciprocal. The Bank's vice-president, Robert Garner, commented the end of Rosenstein-Rodan's tenure at the Bank with these words:

I frankly never felt that the Bank was his dish of tea, and he's finally gone to Harvard [actually, to MIT]—to the academic world, where I think his talents lie. I came to the conclusion that the Bank was not the place for the development of broad economic policies or studies, that our job was applied economics, that the world is full of theoretical economists . . . and that for us to try to get into that field was unwise.⁴³

With his reference to Rosenstein-Rodan's passion for broad studies, Garner was probably referring not just to Rosenstein-Rodan's emancipated approach to loan policies, but also to his proposal to establish within the Bank a new department with no direct operational orientation, one devoted instead to research and teaching of development practitioners and officers from less developed countries. Rosenstein-Rodan's original idea was at the basis of the establishment, in 1955, of the Bank's Economic Development Institute (EDI), whose first director was the British economist Alec Cairncross. The EDI was considered by some as a precious oasis where the Bank's economists could pause from operations and focus on research, but it also remained a hybrid creature, split between its two souls—that of an academic research department, and that of a vocational school. By the time the EDI was established, however, Rosenstein-Rodan had left.

At the Core of the Development Debate

It is difficult to gauge with any precision Rosenstein-Rodan's popularity in the early 1950s, but it is certain that the entire decade witnessed the publication of many articles that implicitly or explicitly made reference to his work. If ten years earlier, Chatham House had been a relatively unknown center, effectively disconnected from other places where research on economic development was being conducted, in the 1950s, the development discourse was acquiring a global dimension, characterized by an international and interconnected community. Rosenstein-Rodan's 1943 and, to a lesser extent, 1944 articles were by then standard references. When in 1952 Rosenstein-Rodan left the Bank, he was hired by the MIT's Center for International Studies (Cenis), destined to become one of the most prominent think-tanks on the development scene.⁴⁴

Established in 1951 as a continuation of "Project Troy", a US counterintelligence program to study ways to over-

42 Oral history interview, Paul Rosenstein-Rodan, August 14, 1961: 7-8, WBGA.

43 Oral history interview, Robert L. Garner, July 19, 1961: 98, WBGA.

44 On the history of economics studies and teaching at MIT, a fundamental reference is Weintraub 2014.

come the jamming of propagandistic American broadcasts to the Soviet Union, the Center soon broadened its activities to, in the words of its director, Max Millikan, “all forms of influencing foreign attitudes” (Blackmer 2002: 9). In the end, Cenis’ research program focused on “the idea of economic development, or industrial growth” in three major development “laboratories”, commonly called “the three I’s”: India, Indonesia, and Italy. Although each very different from the others, all three countries were young democracies committed to a program of economic development, and were considered critical battlegrounds of the global confrontation between the United States and the Soviet Union (Blackmer 2002). In 1953, Rosenstein-Rodan joined, not unexpectedly, as the director of the Italian project.

Rosenstein-Rodan’s previous experience in Italy facilitated a fruitful exchange of ideas between the Center and the Italian authorities. When in 1954 the Italian government prepared a ten-year national development plan, the so-called Vanoni Plan, economists from Cenis played an informal but relevant advisory role.⁴⁵ MIT economist Richard Eckaus offered a fundamental contribution on the study of Italy’s North-South economic divide (Eckaus 1959; 1960; 1961).⁴⁶ In 1957, Rosenstein-Rodan and the Oxford-based economist Ian M. D. Little published a groundbreaking study on peaceful uses of nuclear energy in Italy (Little and Rosenstein-Rodan 1957). Inscribed in the policy shift with which the Eisenhower Administration opened up atomic research for civilian uses and access to nuclear technology for countries that did not possess them, this study supported nuclear power as a strategic element for achieving the Vanoni Plan’s main goals of full employment and self-sustaining economic growth. In fact, the first World Bank loan for the construction of a nuclear power plant was granted to Italy in 1959.⁴⁷

Meanwhile, the Cenis group kept an eye not only on economic developments in Italy, but on social and political ones as well, and in particular on what margins existed, if any, for a split between the Italian Communist Party and the Socialist Party—in Rosenstein-Rodan’s words, a “vital factor for the judgement on the future of democratic institutions in Italy”.⁴⁸ Rosenstein-Rodan planned to publish a synthetic volume on development policies in Southern Italy, and he prepared a number of long reports on the Italian economy.⁴⁹ Like for other publishing projects before, however, the project was the victim of a very crowded agenda and did not achieve completion.

In the second half of the 1950s, Rosenstein-Rodan became the director of the Indian project, while Italy, after the end of the so-called “economic miracle” (1958-63) became increasingly less interesting as a development laboratory and was dropped. Partly, this was due to the success of the industrialization process in the Italian North, which made Italy join the club of advanced industrial countries (statistical records indicate that Italy turned from a mainly agricultural to a mainly industrial economy in 1958; see Istituto Centrale di Statistica 1968: 126). Partly, however, Italy’s waning as a protagonist of the global development scene was due to the failure of the development plan for the South. Despite the copious resources devoted to it, a self-sustained process of industrialization in the South failed to take place. As Rosenstein-Rodan recognized, “the dynamo may be there, but the transmission belt does not work” (Rosenstein-Rodan 1963: 6).

Thanks to the organizational skills of its director Max Millikan, the scholarly excellence of its members and generous funding from the CIA and the Ford, Rockefeller and Carnegie foundations, the Center for International Studies soon became one of the leading centers for the elaboration of what came to be known as modern-

45 The Vanoni Plan was named after Ezio Vanoni, the Minister of Finance and a former academic economist.

46 For the subsequent debate and continuing reference to Eckaus’s work, see, for example, Pescosolido 1996.

47 For some context, see Mason 1955 and Chernus 2002. On the World Bank’s loan for the construction of a nuclear power plant in Italy, see Curli 2000; Rigano 2002.

48 P. N. Rosenstein-Rodan, “Further Work on Italian Political Structure”, October 16, 1953, HGARC. On the interest of Cenis for sociological research in Italy, see P. N. Rosenstein-Rodan, “Priorities for Sociological Research in Italy, October 20, 1953, HGARC.

49 See Norman S. Buchanan to Friedrich Lutz, New York, October 1955, quoted in Baffi 1984: 34. See what appear to be either the notes for a conference or a very detailed table of contents for a prospective book: P.N. Rosenstein-Rodan, “Basic Problems of Economic Development in Italy”, December 4, 1956, HGARC. For Rosenstein-Rodan’s report on Italy, see, for example, P.N. Rosenstein-Rodan, “Remarks on Economic Effects of Agrarian Reform”, Center for International Studies, MIT, Economic Development, Italy, Economics/9, May 12, 1954, HGARC; P.N. Rosenstein-Rodan, “Programming in Theory and in Italian Practice”, Center for International Studies, MIT, December 4, 1955, HGARC.

ization theory.⁵⁰ As Rostow's famous model of the "stages of economic growth" exemplified, modernization theory implied the existence of a single trajectory from "tradition" to "modernity" for advanced and less developed countries alike (Rostow 1960). Adopting the Marxian view that "the country that is more developed industrially only shows, to the less developed, the image of its own future" (Marx 1977 [1867]: 91) but reversing Marx's anticapitalistic perspective, Rostow articulated a foreign policy agenda strongly based on development aid strategies.

As a prominent and long-term member of Cenis, Rosenstein-Rodan collaborated to the drafting of a long report that made the case for a massive program of foreign aid. This report circulated informally for years among policy makers and development scholars, and was eventually published in 1957 as *A Proposal: Key to an Effective Foreign Policy* (Millikan and Rostow 1957). Its publication was concomitant with the beginning of an increasingly close collaboration of Cenis with John F. Kennedy, who made foreign aid a qualifying aspect of his Senatorial and Presidential programs. When Kennedy entered the White House, Cenis arguably became the major source of development thinking for the US Administration. As historian Arthur Schlesinger Jr. wrote, *A Proposal* "gave our economic policy toward the third world a rational design and a coherent purpose".⁵¹ In an article from those years, Rosenstein-Rodan also implicitly argued against the usual criticism that foreign aid was a waste of resources because the monetary return of aid projects was often very small. The primary criterion for foreign aid, he claimed, was not to maximize the income created for every dollar of aid, but to maximize the catalytic effect of aid. Investments in infrastructures, for example, yielded only small increases in income, yet they created the landscape for subsequent, more remunerative, projects.⁵² Direct income creation from aid, therefore, might be disappointingly low, but Rosenstein-Rodan concluded that "far from being an argument for less aid, there are circumstances in which this might well be an argument for more" (Rosenstein-Rodan 1961b: 107, emphasis in the original).

At the same time, Rosenstein-Rodan was also the driving force behind more strictly economic analysis—most notably on the Indian Plan (Rosenstein-Rodan 1964a, 1964b, 1964c; 1964d; 1964e)—and, together with Richard Eckaus and Louis Lefebvre, the study of specific technical and engineering aspects of development. In particular, Rosenstein-Rodan planned to study the technological dimension of economies of scale, for example in which cases a continuous increase of scale was possible with the same type of machinery, and, on the contrary, in which cases a different machinery should be used with the shift from small to large scale. Also, Rosenstein-Rodan was interested in studying the impact of new machinery on the employment of skilled and unskilled labor.⁵³ What's more, these kinds of interests were particularly important to link the studies pursued at the Center with the work done by MIT engineers and scientists—though less with MIT economists, whose research interests, as Millikan once noted, gravitated "nearer the domestic than to international economic problems".⁵⁴ Rosenstein-Rodan seems to have been a perfect representative of the typical MIT "intimate interplay" between theory and practice.⁵⁵ This interplay has been increasingly acknowledged as a MIT trademark. In the words of Paul Krugman (an MIT PhD graduate), an MIT style is recognizable in the use of "small models applied to real problems, blending real-world observation and a little mathematics to cut through to the core of an issue".⁵⁶

Increasing visibility, however, went hand in hand with increasing criticisms. At the political level, right-wing pundits accused Millikan and Rostow of being Socialist sympathizers because of their support for foreign aid and collaboration with Indian planners. At the theoretical level, Rosenstein-Rodan's analysis of complemen-

50 On the role of Cenis for modernization theory, see Latham 2000; Gilman 2003. On Cenis and India, see Engerman 2003.

51 Quoted in Gilman 2003: 179.

52 For a famous critique of this approach, see Hirschman 1958.

53 P. N. Rosenstein-Rodan, "CENIS Research Priorities", December 3, 1962, MITL.

54 Max Millikan, "Report", February 18, 1964, quoted in Cherrier 2014, p. 31.

55 Max Millikan, "A Suggested Focus for a Research Program in the Social Sciences at MIT", April 1950, quoted in Blackmer 2002: 10.

56 Quoted in Cherrier 2014, p. 16. On the MIT peculiar style, with a special focus on the economics department, see Thomas 2014.

tarities and indivisibilities—expounded already in his 1943 article on the industrialization of Southern and South-Eastern Europe—and Rostow’s theory of the “Stages of Growth” were attacked by new approaches that discarded vicious circles as a false problem, and emphasized instead bottlenecks and disequilibria as more important mechanisms to explain investments behavior and economic growth in underdeveloped countries. The controversy between the balanced-growth and the unbalanced-growth approach, as those mutually opposed approaches soon came to be known—and its policy penchant, that is, central planning vs. project planning—animated development economics throughout the 1950s and later (Little 1982: 44).⁵⁷

The polemical heat noticeably spiked. With typical wit, Albert Hirschman depicted the supporters of balanced growth and program loans as bewildered Western travelers, dismayed by the poverty of the underdeveloped world and by the inextricability of vicious circles. “The temptation is strong then”, Hirschman concluded, “to leave all this backwardness alone and to dream of an entirely new type of economy where, in the words of the poet, ‘tout est ordre et beauté!’” (Hirschman 1958: 52). Hirschman insisted that development policies should focus on specific projects instead of programs, on directly productive activities instead of social overhead capital, and on spontaneous linkages between investment opportunities instead of comprehensive plans. Yet, this was perhaps an excessive criticism. When Rosenstein-Rodan favored programs over projects, he did so on the basis that a program “must be spelled out in projects, not only ‘ideas’, but it is far more than a mere agglomeration or a ‘shopping list’ of projects”.⁵⁸ Meaningful projects, according to Rosenstein-Rodan, were those with a “catalytic effect of mobilizing additional national effort”, and the program was thus nothing else than a way to envision the catalytic effect of single projects, how they could be expected to trigger additional investments, in which sectors, and so on.⁵⁹ The differences between the two camps, and between Rosenstein-Rodan and Hirschman’s positions, are unquestionable. Still, one cannot help noticing a certain family air between Rosenstein-Rodan’s “catalytic effects” and Hirschman’s “linkages”.⁶⁰ If there was one thing Hirschman and Rosenstein-Rodan agreed on, in any case, it was that there was a difference between developed and underdeveloped countries, and—as Rosenstein-Rodan put it in the class notes for his 1958 course on The Theory of Economic Growth—that “there exist certain economic and non-economic factors which cause the difference and necessitate the formulation of a separate theory for underdeveloped countries”.⁶¹

In time, Cenis expanded its focus also to Africa and Latin America, thanks especially to a number of grants from the Carnegie Corporation. Rosenstein-Rodan’s increasing interest in Latin American was probably also triggered by his contacts with the Kennedy Administration. When, as part of his diplomatic initiative towards Latin America, President Kennedy launched the Alliance for Progress to support development initiatives and the rising of the standards of living of poor people in the Western hemisphere—unoriginally, Kennedy called for a ten-year development plan—Rosenstein-Rodan was one of the “nine wise men” appointed with the task of reviewing the performance of participating countries and providing recommendations.⁶² Unlike other development economists who were notoriously cold about what looked a patronizing move on the part of the United States, Rosenstein-Rodan embraced the project enthusiastically.⁶³ As he said to an audience at Wellesley College on February 1963, “Economic development of underdeveloped countries is to our generation what full

57 For the principal expositions of the balanced-growth approach, see Rosenstein-Rodan 1943; Nurkse 1953; 1959; 1961; Scitovsky 1954. For the principal expositions of the unbalanced-growth approach, see Hirschman 1958; and Streeten 1959.

58 P. N. Rosenstein-Rodan, “Criteria for Allocation of Aid to Countries”, Preliminary Draft, 1956: 6, MITL.

59 P. N. Rosenstein-Rodan, “Criteria for Allocation of Aid to Countries”, Preliminary Draft, 1956: 3, MITL.

60 For a reassessment of those early debates, see Alacevich 2009 and 2011.

61 Paul Rosenstein-Rodan, “The Theory of Economic Growth”, notes for the class of September 25, 1958, HGARC.

62 Kennedy’s proposal was first formulated in a presidential address at the White House Reception for Latin American Diplomats, Members of Congress and their Wives, March 13, 1961, <https://www.jfklibrary.org/asset-viewer/archives/JFKPOF/034/JFKPOF-034-013>, accessed on March 9, 2019. On the Alliance for Progress, see Hickman (2013) and Taffet (2007).

63 Rosenstein-Rodan’s intellectual rival, Albert Hirschman, who had just published a very interesting book, *Latin American issues* (1961a), was also invited to participate as an expert in the Alliance for Progress but declined (Adelman 2013). Hirschman criticized the patronizing attitude of the Alliance for Progress, even if, as he recognized, it was aimed at improving the relationship with the Southern American continent. Latin Americans, Hirschman claimed, “are not interested in alliances either with us or the Russians. They want to chart an independent and somewhat unpredictable course between the two principal power blocs” (1961b: 181-182).

employment was to the generation of the 1930s: an ideal, a target . . . The Alliance for Progress is the most complete and the most articulate manifesto of that creed".⁶⁴ By the mid-1960s, however, Rosenstein-Rodan was deeply upset by seeing politics as usual taking control of the Alliance. At a meeting held at Harvard in 1962 with the participation of many experts of international affairs, such as William S. Barnes and Raymond Vernon (Harvard), Federico G. Gil (University of North Carolina), Joseph Grunwald (Yale) H. Field Haviland and Dankwart A. Rustow (Brookings Institution), Albert Hirschman (Columbia), Hans J. Morgenthau (University of Chicago), Paul Rosenstein-Rodan (MIT) and Carl B. Spaeth (Stanford), it was agreed that the Alliance had not delivered the hoped-for results.⁶⁵ The Committee of Nine, initially conceived as an independent body with strong influence over the allocation of development aid, was soon put under political control of the Organization of American States, and Rosenstein-Rodan resigned from his position.⁶⁶

The Decline of Development Economics

After fifteen years at the Center for International Studies at MIT (tenured in 1959, thanks to a grant from the Ford Foundation, and promoted to full professor in 1960), in 1968 Rosenstein-Rodan decided that the time had come to leave. Like for his shift to development issues in the early 1940s, archival documents do not provide any information on what prompted this decision. But again, something can be said of the broader context. First of all, there was a widespread feeling that the first phase of life of the Center was coming to a conclusion. As Donald Blackmer, the Center's Assistant Director, recognized in an early 1967 memo to his colleagues, "the feeling is that the Center has lost something of that special vitality and cohesiveness that have in the past done so much to distinguish it from other research organizations".⁶⁷ To be sure, this was also the effect of positive developments in the life of the Center: the teaching offerings had expanded, graduate education and fellowships had been established and were growing in numbers, faculty members were granted tenure, and the Center's relationship with the departments of Economics and Political Science was strengthened (Blackmer 2002: 138-144). Yet, this also served to dilute the sense of mission of the Center, as "other obligations and loyalties intervened".⁶⁸ Moreover, the intellectual balance between economists and other social scientists was slowly but irremediably changing. If in its early years, the Center had been monopolized by economists, by the early 1960s economists were in fact a minority (Blackmer 2002: 151).

The crisis that hit development economics in the late 1960s—due to a crisis in developing the theoretical foundations of the discipline, and to a growing disappointment in the meager results of many development efforts worldwide—played an important part in deflating the role of development economists at the Center. While it is undoubtedly positive that other social sciences increased their contribution to the Center's activities, Rosenstein-Rodan may have felt that his own contribution was becoming less relevant. The abrupt collapse of the India project, due to a diplomatic crisis between Cenis and the Indian government on CIA funding of Cenis' activities, may have also contributed to Rosenstein-Rodan's disenchantment. And in any case, in the late 1960s it was not only development economics that was beginning to show signs of decline: modernization theory was increasingly under question, both as a scientific project—it was clear that economic growth and democratic social transformation did not necessarily go together—and as a political platform for US intervention in underdeveloped countries. As Blackmer suggested, instead of a development decade the 1960s looked increasingly like a counterinsurgency decade. Finally, one wonders whether the protests that spread against the Vietnam War on many campuses of the Boston area may have also contributed to Rosenstein-Rodan's decision

64 P. N. Rosenstein-Rodan, "The Alliance for Progress", Speech given on February 13, 1963, reprinted in Symposium on Latin America, Wellesley College, Wellesley, Massachusetts, 1963, HGARC.

65 Professor Everett E. Hagen and Dean William S. Barnes, "Tentative outline for the Alliance for Progress meeting, Harvard Faculty Club", December 15, 1962, HGARC.

66 Paul N. Rosenstein-Rodan to Dr. Jose A. More, Secretary General, Organization of American States, April 26, 1966, HGARC.

67 Donald L. M. Blackmer to the Center Senior Staff, no date but early 1967 [as reported in Blackmer 2002: 204], MITL.

68 Donald L. M. Blackmer to the Center Senior Staff, no date but early 1967 [as reported in Blackmer 2002: 204], MITL.

to leave. Archival documents or other testimonies do not offer elements to clarify Rosenstein-Rodan's political leanings. At a first approximation, he was an old-style European liberal, and he must have had not much sympathy for the protests. If this played a part, then Austin, Texas—where Benjamin Higgins, a former colleague of Rosenstein-Rodan at Cenis had become the Chair of the Economics Department—was more appealing than liberal Cambridge, Mass.

One year later, in 1969, Walt Rostow also moved to the University of Texas. But if Rostow remained there for the rest of his life, Rosenstein-Rodan's stay seems more like a short and uneventful parenthesis. In 1972, Rosenstein-Rodan was back in Massachusetts, although on the other side of the Charles River, as the founder and first director of the Center for Latin American Development Studies at Boston University (CLADS; now Institute for Economic Development, IED).⁶⁹ Rosenstein-Rodan's plans for the Center were bold, and it is worth reporting parts of his statement to the Trustees of Boston University:

The Institutes of Latin American Studies [of other US universities] have mostly unstructured programs of languages, Latin American literature and history, international relations and political science and surprisingly little economics. By trying to do too much they don't do enough, at least in social and economic fields . . . We have at MIT, Harvard, Tufts, and Brandeis several people interested in and knowledgeable about Latin America, but every one of these institutes operates below the minimal threshold of efficiency and cannot create a climate of Latin American social and economic research. This was the first reason for the creation of a Center for Latin American Development Studies at Boston University. Having a structured program and a working nucleus of its own staff, it can catalyze and valorize the considerable intellectual resources existing but not fully used in this area . . .

Latin American studies is not envisaged by us as a simple area study. It is a part of studies in comparative development . . . Even those social scientists who are not primarily interested in Latin America have to study it for methodological reasons. When one compares India, Brazil, Nigeria, etc., everything is different: the resource endowment, people's cultural and economic values, the structure of society, the capacity to produce, etc. What is cause and what is effect is almost anybody's guess. In Latin America we have 20 similar but not identical models which differ from each other in not all but only a few respects. It is, as it were, a history- and geography-made laboratory experiment of various countries in which the majority of conditions are similar and only one or two variables differ. What is cause and what is effect can be more easily studied in that area and is of interest in the study of the whole Third World.⁷⁰

In this new capacity, Rosenstein-Rodan continued work that he had initiated while at Cenis. In particular, when the India project had ended, Rosenstein-Rodan, Eckaus and Millikan started a collaboration on research and training with the office of development planning in Chile, ODEPLAN, established during the presidency of Eduardo Frei (1964-1970). Apparently, Rosenstein-Rodan also collaborated on this project during his early years in Austin, before the victory of Salvador Allende at the 1970 presidential elections (Blackmer 2002: 149). The presidency of Frei, a Christian Democrat who had been elected with a sweeping 55.7% of votes and could count on an unprecedented congressional majority (42.3% vs 13.3 of the Radicals, 12.4 of the Socialists, 10.3 of the Communists, 7.3 of the Liberals and 5.2 of the Conservatives) was characterized by a number of reformist policies aiming both at fostering economic growth and income redistribution (his administration, besides establishing ODEPLAN, implemented a much needed agrarian reform). This was a major change after the liberal-conservative policies of the previous president, Jorge Alessandri, who favored protectionist and monopolistic industrial sectors and traditionalist, rent-seeking agrarian elites (Angell 1991). The goal of ODEPLAN, as Eckaus

69 <http://www.bu.edu/econ/centers/ied/>

70 P. N: Rosenstein-Rodan, "Draft of speech to B.U. Trustees", December 1, 1972, HGARC.

and Rosenstein-Rodan wrote in the introduction to a book that collected the main results of this project, was to understand current problems of the Chilean economy, and to produce general methodologies useful for future research. In line with the MIT-Cenis approach, the program could be characterized as “policy-oriented economic research” (Eckaus and Rosenstein-Rodan 1973: v). The same applies to a number of other projects that were the offspring of the Center’s activities, such as Daniel M. Schydlofsky and Juan J. Wicht’s cinematographically titled analysis of Peru’s dismal economic record in the 1970s: *Anatomía de un Fracaso Económico* (*Anatomy of an Economic Catastrophe*, 1979), for which Rosenstein-Rodan wrote a Preface that equally criticized both domestic and IMF policies in the country.

As the director of the Center for Latin American Development Studies at Boston University, Rosenstein-Rodan’s publishing record, already rather discontinuous in the past, came virtually to an end. The number of reports on specific Latin American countries and issues, however, grew rapidly. This was mostly behind-the-doors work, to which Rosenstein-Rodan added the occasional public lecture. It was on one of these occasions that a mixture of ill-conceived and unfortunate words, bad timing, and clumsy follow-ups put Rosenstein-Rodan’s reputation as a public intellectual at risk.

On September 11, 1973, Salvador Allende’s elected government of Chile was overthrown in a coup orchestrated by the general Augusto Pinochet. Allende defended the Presidential palace with helmet and gun, and killed himself before being captured by the military. Leftist political parties were banned, the constitution suspended, and a ferocious repression of political opponents, union officers, and random citizens swept the country, with thousands of individuals tortured and summary executed and tens of thousands of political dissidents (or people simply suspected of being political dissidents) held prisoner in the basements of National Stadium in Santiago.

In a surprising historical U-turn, if one thinks of the Rosenstein-Rodan family’s vicissitudes with the murderous activities of the Nazis, Paul Rosenstein-Rodan’s comments on Pinochet’s coup sounded much more supportive of the military junta than of Salvador Allende’s administration. “Salvador Allende”, Rosenstein-Rodan said in a talk at Boston University, “died not because he was a socialist, but because he was an incompetent” (Rosenstein-Rodan 1974a: 7). Apparently without understanding the inappropriateness of this provocative remark, Rosenstein-Rodan continued with an aseptic analysis of Allende’s economic program, accusing him of having redistributed income massively, and therefore increased demand, without correspondently increasing production. As a consequence, according to Rosenstein-Rodan, inflation, vertical loss of foreign exchange, and social tensions prepared the ground for the overthrow of Allende: “The people almost wished for a military coup”, concluded (1974a: 13). This reading of events was not significantly different from that of Pinochet’s inner circle. For example, in February 1974 the first minister of Economy, Development and Reconstruction in Pinochet’s junta, Fernando Léniz, claimed in front of the Subcommittee of the Inter-American Committee of the Alliance for Progress that “the serious events which occurred during the last three years led to such a crisis of the political, economic, and social systems, that the Armed Forces had to intervene so as to reestablish the fundamental values that had always been the backbone of our life as an organized society” (Léniz 1974: 203).

Rosenstein-Rodan read the coup as a turbulent but necessary transition to a more moderate and sensible political climate: “Despite the excesses of the generals . . . I still suspect that their concept of the ideal leader is not Mussolini or Franco but De Gaulle” (1974a: 13). And indeed, in his reply to Léniz, Rosenstein-Rodan agreed that Chile needed both economic and moral reconstruction, to reestablish social harmony, “and with it the ‘Chile Lindo’ which we all loved and love still” (Rosenstein-Rodan 1974b: 221). Not unexpectedly, Rosenstein-Rodan’s words caused great indignation, and a considerable number of letters to national newspapers.⁷¹ The protests intensified in October 1974, when Rosenstein-Rodan organized at CLADS a conference on “The inter-American system and the economic situations of Latin American nations”, with participants such as Jan Tinbergen, Raúl Prebisch, and former president of Colombia Carlos Lleras Restrepo. The presence of Eduardo Frei, president of Chile before Allende and a supporter of Pinochet’s coup (though later his party would shift to a position of inef-

71 See the many transcripts of letters reacting to Rosenstein-Rodan’s claims in HGARC.

fectual and moderate parliamentary opposition) and of Robert S. McNamara, the US Secretary of Defense in the crucial years of the escalation in Vietnam and in the 1970s the president of the World Bank, electrified the situation. Student protests interrupted the first day of the conference proceedings, which were subsequently closed to the public, a number of speakers postponed or cancelled their arrival, and the CLADS offices were assaulted, with staff members “barricading the doors with file cabinets and tables”⁷². Apparently, Rosenstein-Rodan declared to *The Daily Free Press*, the student operated newspaper serving the Boston University community, that he had visited Chile three times in the weeks immediately following the coup, with two follow-up trips in March and August 1974, that he supported the coup as it attempted to reconstruct the Chilean economy and estimated this state of affairs to be necessary for a couple of years⁷³. Another students’ daily was abrasive: “Paul N. Rosenstein-Rodan is not a fascist. He is a liberal. But he advises the fascist Latin American governments . . . He may talk with an accent and a tone and a warmth that would remind you of your East-European grandfather. But he loses his warmth when you look at his research, his advice, and the people he advises”⁷⁴.

Even discounting Rosenstein-Rodan’s provocations and pro-junta remarks as a flair for performance that hid his more generous beliefs—this is Robert Solow’s thesis—he was very clear on dismissing both the atrocities of the coup and the political and economic sabotage of the Allende government by the United States and multilateral organizations such as the World Bank as unimportant.⁷⁵ It should be remembered that the role of CIA in supporting the Chilean truckers’ strike, which dealt a terrible blow to the country’s economy and democratic institutions, was unveiled by US press already in September 1974⁷⁶. Archival evidence, however, shows that Rosenstein-Rodan also acted on behalf of people incarcerated by the Pinochet’s regime, obtaining at least in one case their release.⁷⁷

Later, Rosenstein-Rodan recognized that what he imagined would be a violent but temporary reaction against Allende’s government, was in fact a much more serious affair, both at the national and international level. He also recognized the emergence of human rights as a global discourse, in particular following the many instances in which the newly elected President of the United States, Jimmy Carter—starting with his inaugural address on January 20, 1977 and then in a series of public addresses—emphasized the centrality of human rights in the international agenda of the new administration.⁷⁸ In early 1978, Rosenstein-Rodan claimed: “Let us welcome the re-emergence of moral values and the postulate of human rights in world politics”.⁷⁹ More specifically, as far as international aid was concerned, he was adamant: “No economic or military aid is to be given wherever torture is applied . . . We need not (and should not) break off normal economic relations (trade and investment) with the Soviet bloc, with the Philippines, Chile, Uruguay, Mississippi, Missouri, or South Boston.

72 Petra Langer, Rich Teich and Richard Wolf, “Protest disrupts CLADS conference”, *The Daily Free Press*, October 17, 1974: 2.

73 Gary Fusfield and John Rasmus, “Hot to help the Junta without really trying”, *The Daily Free Press*, September 24, 1974: 4.

74 Doug Farquhar, “The man from CLADS keeps his tale fresh”, *The News*, October 17, 1974.

75 Robert Solow’s comments on a “stage Rosie” and an “invisible Rosie” were offered at the Memorial Service for Paul Rosenstein-Rodan, May 10, 1985, Boston University, Marsh Chapel, HGARC. Kapur, Lewis and Webb reported that many observers complained that the World Bank “buckled too easily to out-of-channels pressures from its country owners, especially the largest” (1997: 20). A notable example is the Bank’s refusal to make any loans to Chile during the presidency of Salvador Allende. Mahbub ul Haq, since 1972 Director for Policy Planning at the World Bank, wrote in a confidential memo to Robert McNamara, then President of the Bank: “we mumbled about exchange rates, fiscal balance and price distortions, without ever trying to establish a link between our theology and Allende’s concerns,” Mahbub ul Haq, “The Bank’s Mistakes in Chile,” April 26, 1976: 2, as quoted in Kapur, Lewis and Webb 1997: 301. Bank lending to Chile started over after Pinochet’s coup. In a later interview, McNamara claimed that the Bank did not offer loans to Allende’s Chile on purely economic grounds, that is, because of the deteriorating creditworthiness of Chile under Allende: “It happened that we were not lending at the same time that the U.S. was putting pressure on the Bank not to lend, but there was not a causal connection between the two,” Robert S. McNamara, Oral history interview, May 10, 1991: 18, WBGA

76 See, for example, “The C.I.A. in Chile”, *The New York Times*, September 16, 1974: 34; Seymour M. Hersh, “C.I.A. Is Linked to Strikes in Chile That Beset Allende”, *The New York Times*, September 20, 1974: 1.

77 See, for example, the letter by Enrique Kirberg to Paul Rosenstein-Rodan, November 1975, HGARC.

78 See Moyn 2010.

79 “Human Rights” (Talk on the television, “Aquí”), February 1978, HGARC.

But *AID* is a different matter. To give aid to governments who practice torture is to be their accomplices".⁸⁰ A few years later, he would claim: "In vast parts of the world, human rights are violated . . . To tolerate their abuse, is to participate in collective guilt".⁸¹ The contrast with the nonchalance with which he commented Pinochet's coup is impressive and welcome, though one cannot help thinking that these claims should not be offered only intermittently. And indeed, he continued to maintain that there was a difference between a brief interruption in the democratic process due to a temporary emergency, and longer dictatorships.

From a political perspective, Rosenstein-Rodan noted that Latin American dictatorships had erased an entire generation. After World War II, Rosenstein-Rodan recalled, some Italian students from Bologna published a monthly magazine called *La Terza Generazione* (*The Third Generation*), in which they claimed they had no fathers, only grandfathers, as the middle generation had been imprisoned and killed by the Fascist dictatorship. Rosenstein-Rodan argued that the same had happened in Latin America: "In many parts of Latin America the military dictatorships banning political activity not for one or two emergency years but for a decade or more have created a similar vacuum".⁸² Pinochet, it turned out, was not an emergency reaction to Allende's political economy, but something completely different and terrible, both for *desaparecidos*, their families, and for the country as a whole.

The Chile affair was not only a difficult period in Rosenstein-Rodan's personal career, but an alarm bell for the whole development field. By the mid-1970s, development economics had been in deep crisis for about a decade, and Pinochet's coup was a deafening denunciation of its failure. Not only had postwar growth not managed to close the gap between rich and poor countries, but it was evident that growth had often been accompanied by increasing inequality. Moreover, as Albert Hirschman wrote, there was "another, often unacknowledged, reason for the disenchantment: it looks increasingly as though the effort to achieve growth, whether or not successful, brings with it calamitous side effects on the political realm, from the loss of democratic liberties at the hand of authoritarian, repressive regimes to the wholesale violation of elementary human rights" (Hirschman 1979: 98-99). Rosenstein-Rodan may have minimized the importance of the events in Chile, but they nonetheless deeply undermined the discipline that he had contributed to fund and shape.

The crisis of development economics was in the facts of development aid policies. In the late 1970s and early 1980s, the flow of aid resources from developed to underdeveloped countries was visibly weaker than before. The vision that many development economists had entertained of a global welfare system that would transfer resources from richer to poorer countries, had remained just an illusion. Gunnar Myrdal, for example, had insisted on the anachronistic nationalist dimension of the traditional welfare state. As he lyrically put it, "Not merely to save the world, but primarily to save our souls, there should . . . be dreamers, planners, and fighters, in the midst of our nations, who would take upon themselves the important social function in democracy of raising our sights" (Myrdal 1956: 322). He concluded: "This is only possible if they enlarge the scope of their interests to encompass the world scene" (Myrdal 1956: 324), and if the concept of the welfare state is broadened into the concept of a "welfare world" (Myrdal 1956: 324)⁸³. Like Myrdal, Rosenstein-Rodan also paralleled development aid at the international level to welfare transfers at the national level:

Civilizations begins with taxation. If we are an international community we must do what we have done at home. When the higher income classes paid a progressive income tax they did not expect the lower income classes to be grateful. It was a civic duty. In the moral crisis of today we see in many developed countries a movement of an international Poudajism: an income tax strike. The richest country in the world, the United States, which pioneered in the field of aid, is the worst offender. When her income per head was

80 Ibid. Emphasis in the original.

81 Paul Rosenstein-Rodan, "P. N. Rosenstein-Rodan on Politics", Symposium "The 1980s: Where Are We Going?", February 25, 1982, HGARC.

82 Ibid.

83 For a recent commentary on Myrdal's position, see Moyn 2018.

merely 40 per cent of what it is today she gave 2 per cent of GNP to the Marshall Plan. Today, when her income is 2 ½ times higher she gives for economic aid less than 0.25 per cent—as much as is spent on Kleenex.⁸⁴

Perhaps the different interests of the United States in the aftermath of World War II and in the years of détente were a real enough excuse for this dismal state of affairs in foreign bilateral aid. Rosenstein-Rodan, a long-time champion of foreign aid policy since his involvement with Chatham House, the World Bank and, in the US, the Cenis at MIT and CLADS at Boston University, was obviously dismayed by the US attitude.

In addition to development failures and the unanticipated calamitous political side-effects of the development effort, other reasons have been advanced to make sense of the collapse of development economics in the 1970s. Among these is the lack of analytical clarity on the part of development economists. Paul Krugman has been a prominent exponent of this view. In his words, “high development theory was virtually buried, essentially because the founders of development economics failed to make their points with sufficient analytical clarity to communicate their essence to other economists” (Krugman 1993: 16). Others have criticized Krugman’s claim. Joseph Stiglitz, for example, argued that development economics never actually disappeared from the larger economics landscape, and that development economists were in fact able to formalize their theories, when needed (Stiglitz 1993). But perhaps this is not even the main question. Irrespective of its validity, Krugman’s thesis seems to miss a larger point about the transformation of development economics from the 1970s onward, namely, the discipline’s shift from grand theories to applied economics.

Starting in the 1970s, the increasing theoretical homogeneity of the economics discipline, due to the marginalization of institutional analyses and the hegemony of neo-classical theory and mathematical modeling, was accompanied by an increasing application of a shared orthodox theoretical core to a number of different applied fields (Morgan and Rutherford 1998). In this process of “unification and fragmentation”, in the words of Backhouse and Cherrier (2014: 12; see also Backhouse and Cherrier 2017), development economics lost its theoretical singularity to be reabsorbed within the neoclassical tradition. Yet, at the same time it survived and thrived as an applied field.

Conclusion

Rosenstein-Rodan offered important theoretical contributions to early development economics. His 1943 article, as mentioned, is still considered a standard reference. It is difficult, however, to come up with any subsequent, similarly path-breaking, publications by him that can justify the undisputedly pre-eminent position that he holds in the development field. This is because of the peculiar role that Rosenstein-Rodan carved for himself throughout his career. Much of his influence stemmed from his being at the center of research networks: from that pivotal position, he oriented research and policies. This trait was clearly noticed by his colleagues. MIT’s David Blackmer, for example, commented that “[Rosenstein-Rodan’s] considerable influence was usually exerted through conversation and personal contact, not the written word” (Blackmer 2002: 85). So, in a sense, if Rosenstein-Rodan’s theoretical contribution is very important but limited to a specific period of his activity, his role in transforming development economics into a solid applied field characterized his entire career. In this respect, Rosenstein-Rodan’s experience is a perfect example not of the crisis of development economics, but of its endurance.⁸⁵

84 P. N. Rosenstein-Rodan, “Speech by Professor P. N. Rosenstein-Rodan at the ECLA Meeting”, Port-au-Spain, 12th May 1975, HGARC.

85 Paul N. Rosenstein-Rodan died of a heart attack on Sunday, April 28, 1985, at Beth Israel Hospital in Boston, see <http://www.nytimes.com/1985/04/30/us/paul-rostenstein-rodan-dies-noted-adviser-on-economics.html>.

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