

NUMBER 53

Notes on Entrepreneurship in Russia and the
"Russification" of Foreign Enterprise

Walther Kirchner

Conference on Entrepreneurship and Economic
Innovation in Russia/Soviet Union

Sponsored by

Kennan Institute for Advanced Russian Studies
American Association for the Advancement of Slavic Studies

November 16-18, 1978
Washington, D.C.

DRAFT PAPER - NOT FOR CITATION

=====

FOR CONFERENCE USE ONLY. NOT TO BE PUBLISHED; REPRODUCED OR
QUOTED WITHOUT PERMISSION.

=====

Notes on Entrepreneurship in Russia and the "Russification"
of Foreign Enterprise.

On February 2, 1924, Dr. Wilhelm Löw, who during more than a quarter of a century before the First World War had been the director of the Russian factory owned by the Friedrich Bayer A.G. in Leverkusen, made a report to the directors of Bayer about a trip to Moscow.¹ The purpose of the trip was to investigate the possibility of starting the Bayer factory anew. When he came to Moscow in January, he was pleasantly surprised by the appearance of the people he saw in the city. He reported that food was adequate, that the children looked healthy and that good order prevailed in the streets. Lenin had just died but the government seemed to be firmly established. Housing conditions, however, were terrible, and the general mood was depressed--even though hopes prevailed for rapid improvement, in line with what had happened during the past two years. Whether or not Dr. Löw had the reorganization under the NEP in mind, we do not know; in any case, he did not mention it, although it must have been the NEP with its new opportunities for foreigners, which was responsible for his trip.

As to conditions in industry, Löw remarked that at the negotiations which he carried on with Russian authorities, representatives of the workers were always present. Everybody was eager to see the wheels of industry turn again. But, alas, production in Löw's own field, the dyestuff industry, was down to perhaps 20 to 25% of 1913 and the firms, once in private German hands, now Russified, were run by the Soviet Anilin Trust, a government agency which set the production quotas for the different dyestuffs and regulated all imports. Everywhere, Löw reported, Bayer dyes were still in demand, but the supply, despite much smuggling which was carried on over the Polish-Russian frontier, was extremely limited; and instead of the former large and efficient factories there now existed many small traders who on their own dealt in dyes. In order to stretch the supply, they often sold their goods in diluted form. The Anilin Trust had not yet succeeded in producing some of the most needed dyes, such as Kongo or Benzopurin 4 B. Pharmaceutical articles were largely imported from countries such as Poland and Italy, or they found their way to Russia by devious routes--often via Austria.

An inspection of various factories on January 17 and 18 was not encouraging. At the Trokhgorny factory, a former brewery, chemical products were fabricated,

but the whole did not promise a good future. Some of the equipment was old; it had been removed from Bayer's former factory in Chamovniki. Others Löw found in the Dorogomilov factory, which the French had helped to start during the war. In the rather well equipped laboratory of Trokhgorny, Löw saw one of his former laboratory assistants. But without large investments and improvements, Dr. Löw judged that the factories could not become an asset for the Soviet Union. The former Stiller factory near Vladimir was working well, but the BASF (Badische Anilin und Sodafabrik, Ludwigshafen) plant at Butyrsky, which, to be sure, the BASF had never meant to be a large, completely independent unit for the manufacture of dyestuffs, hardly offered chances for the future. Equally disappointing to Dr. Löw was the state in which he found the Derbenevski factory of Hoechst, second of the three great German dyestuff manufacturers. Here, too, he saw little chance for the future, although it was just Hoechst which in the last few years before the war had outlined a great modernization program which would have made its branch a major asset for Russian industry.² Indeed, the moment was allowed to pass unused when, as has been recently said in another context, the resources inherited from a foreign investor could be absorbed and maintained "as productive enterprises while redirecting profits toward social investment."

Quite a number of laboratories existed where many chemists worked, often on pharmaceutical products; but none seemed satisfactory. As to Bayer's own factory at Chamovniki, Löw was not allowed to inspect it. Upon the outbreak of the war, the firm had been asked to help with the Russian war efforts. Delays resulted, in part owing to an understandable lack of cooperation by the remaining managers, and in May 1915, the factory was taken over by the government. Under French initiative, it was then used to produce powder and dynamite, just as, in a parallel move, the American Singer Company was forced to produce munitions instead of sewing machines. Bayer's assets were subsequently liquidated, and while the war was still on, production was discontinued. The government printing press was transferred from St. Petersburg to Chamovniki, the chemical installations were dispersed, the apparatuses were taken to other factories, and although of all the industrial plants which Löw had visited, that of Bayer, because of its general design, still seemed in the relatively best position for the resumption of production of chemical goods, nothing could be done for the moment. Erroneously, Dr. Löw apparently flattered himself with the possibility of seeing the factory eventually returned to the German owners for resumption of their once so important, and for Russia so valuable, manufacture.

The report of Dr. Löw is but one example for the "Russification" of foreign property which followed in the wake of the First World War. Obviously, by 1919, seizure and nationalization were not directed to any larger extent against the Germans than against other nationalities or, for that matter, against Russian owners.

And if so much destruction occurred, it was not intentional but the result of foreign and civil wars. Still, great assets needed for the communist economy were wasted. The Germans themselves, no matter what the outcome of the war would be, had great expectations for further expansion in the post-war period. A report by a Dr. Enders of September 1914, addressed to the directors of the Maschinenfabrik Augsburg-Nürnberg (M.A.N.), demonstrates the hopes which had been entertained. Enders envisioned, however, continued and increased Russian participation. He emphasized that for success in the Russian market, a foreign firm would have to be "Russian." M.A.N. had acquired a plant in Riga in 1912, but as was pointed out, this was not sufficient to manufacture profitably in Russia. While its stock could be owned by M.A.N., the factory had to be clearly a Russian corporation under Russian law, with Russian managers and with its seat in St. Petersburg.³ A similar view had been reached also by French and English, Belgian and American firms.

It would, however, be a mistake to consider the Sovietization of Russia as the only, or possibly even as the main road to the legal Russification of foreign industry. The process was vigorously under way before the revolution, the press and the Duma had demanded it in shrill, nationalistic tones, and practical steps had already been taken shortly after the outbreak of the First World War--at least with regard to German, Austrian and other property, which was seized and nationalized. This nationalization was carried out ruthlessly and, in this context, again much to the damage of the Russians themselves. Speaking of the fate of the famous trading firm of Wogau & Co in Moscow, which had helped start, finance, and manage industries in Russia, Professor Erik Amburger reports about the first Russian laws for the liquidation of German firms in February 1915 and the nationalistic storm which occurred in Moscow on May 28, 1915.⁴ It resembled, as he writes, the well-known Russian pogroms of the Jews. A "field of desolation" remained, which significantly involved not only the German owners but also nationals belonging to Russia's allies in the war and to neutrals, so that the British ambassador had to intervene. And of course, also the interests of many Russians themselves were affected.

The nationalistic frenzy of Russian mobs, encouraged by leaders like Moscow's governor, Prince Yussupov, is known from numerous other records as well. Among them are those of the long established musical firm of Zimmermann, who published, e.g., the works of Balakirev and who produced and sold instruments in St. Petersburg. The firm was almost forty years old; a branch had been established in Moscow in 1882. The store was vandalized. Pianos and other instruments were thrown out of the window unto the street, and without benefit to Russia, an end was put to another productive foreign-owned enterprise.

War and revolution thus meant an important step in the process of Russification, even if, for the time being, the effect was only negative. But neither war nor Sovietization can be considered a key to Russification. The process was a continuous one; it had gone on long before the extraordinary times of war and revolution. It engulfed all foreign firms. It was the natural outcome of the very fact that foreigners had penetrated the market of a country which, though industrially less developed, had all the possibilities for continuing on its own the process set in motion from the outside. And if the historian is impressed in this wartime and revolutionary experience with the waste, the squandering of assets which, seemingly, was by no means necessary, he may remember that this was not the first time that violence and waste accompanied Russification. In the course of the centuries, Russification had repeatedly taken a violent and destructive form, interrupting, retarding or accelerating a gradual process of evolution which was going on anyhow.

A violent end was put to the first large scale foreign participation in the Russian economic development when, toward the end of the Middle Ages, during the reign of Ivan III, the most fruitful connection between West and East, namely that between Novgorod and the North German towns combined in the Hanseatic League, was shattered. In the 1470s and 1490s, Ivan had attacked the town of Novgorod and destroyed the German factory there, the Petershof. Significantly, he had no means to replace what he had destroyed. Thus, to the extent to which he may have intended to "Russify" the Hanseatic trade, it was, at that point, a failure; for, the port of Ivangorod which he had built was poorly located and could only develop into a military, not a commercial outpost. Soon, foreigners had to be invited again to continue with their activities. Hanseats themselves came, as well as their Livonian brethren.

Accompanying circumstances were, however, different after the resumption of the interrupted economic relations with Russia. The development differed from customary developments as we witness them among the Western nations. Of course, unequal levels of economic development had existed at all times also between these. Constant transfers of know-how and experience, in addition to goods and capital, had taken place also between Italy, Germany, the Netherlands, England and others. The activities of each of these countries had at one time or another been affected and fructified by those of another country. Because of unequally distributed skills and interests, one or the other had gained practical advantages which sometimes led to relationships of dependence. Venetian glass and fayence makers, in addition to bankers, came to the Netherlands where they introduced their art; Mayence printers went to Strassburg, Basel, or Venice; Burgundian artisans brought their knowledge to England; Germans from Saxony taught Viennese and others the art of porcelain making. But the reception which those traveling within the Western world found in Western countries was different from that which they found in Russia. To the extent to which

they and their skills were assimilated or integrated, it occurred without a "Hollan-
dification" or "Anglification" or "Germanization." Russia, however, responded in a
different way, and the position of the foreigner, threatened by "Russification" or
ejection, had no parallel in the West.

A second wave of Western economic activity in Russia shows similar characteris-
tics. Around 1553, English sailors and traders arrived on the shores of the White
Sea, followed in the 1580s by Dutch and French. They added to the considerable for-
eign element of Germans (many of whom now from southern Germany rather than the Han-
seatic towns) and Italians already in Russia. Many of these visitors, unlike the
artisans and tradesmen moving within the Western world, had the character of adven-
turers rather than that of solid artisans and businessmen. Their skills were use-
ful, their initiative considerable, their credit was welcome, and their abilities
, turned out to be fruitful for Russia. But their own contacts with Russians were
sharply circumscribed and supervised; they could not do business as they pleased.
Most of it was with the tsar and his agents.

, Although in the seventeenth century, under the impact of Polish and Swedish
invasions a certain change seemed to prepare itself with regard to the role of the
foreigner, and although gradually his role seemed to come to resemble more that
which he played in the West, the pattern of "Russification" repeated itself. Once
Russia was politically and economically stabilized after the times of Trouble, the
Russians asserted themselves; especially English and Dutch entrepreneurs were ex-
posed to violent measures seeking to bring their businesses into Russian hands. Con-
fiscations occurred, privileges granted were revoked, occasionally lives were threat-
ened, and Russians, through endeavors of their own, gained ascendancy. There is a
tendency to overestimate the importance of the foreigners, and emphasis will be
laid in the following on the role of native entrepreneurship. For, the scope of the
activities of foreigners in relation to the total economic activities in Russia was
limited. They did secure an essential place in overseas trade and also in early
, mining and manufacturing ventures, in the glass and the paper industries, and in the
establishment of powder mills. But all this made up only a small part of the com-
merce and manufacture in Russia.

One of the reasons for the sudden seizures of foreign businesses and the violent
interruption of their activities was, aside from irregularities committed by the
foreigners themselves, that those who ruled Russia were suspicious of alien aspira-
tions, worried about the effect which foreign entrepreneurs might have on the polit-
ical structure of the state, and ever conscious of their possibly unnecessary econ-
omic preponderance. For, the Russians were themselves capable traders, indulging
with relish in commercial activities; and enterprises in foreign hands could obviously
be conducted successfully also by Russians. The government watched over it and, by

taking advantage of the institutions and organization of the country, sporadically ordered from above a certain Russification. Essentially, it refrained only from touching foreign trade.

One may wonder how the foreigners always gathered new courage, from 1478 on down to 1917, to start anew. Perhaps they never gave up the idea that they possessed unique skills (which they actually did, although they seldom kept a monopoly on them for any length of time), that Russia could not dispense with them, and that they were imbued with an entrepreneurial spirit which alone was conducive to innovations befitting the passage of time. Perhaps a balanced evaluation of Russian entrepreneurship in relation to Western entrepreneurship would disprove this assumption. Not only Western historians have accepted it as an axiom and have judged the Russian ways too much by their own standards; also Russians themselves have been inclined to go by Western standards. Soviet historians have not been very much concerned with the problem until rather recently,⁶ and more emphasis has been put on theory, on economic thought, than on economic and business practice.⁷

The conviction of the foreigners that they would always be needed may have been revived by the fact that during the last few decades of the seventeenth century, after the difficult times they had experienced in the middle of the century, they could move once more into a strong position. Westernization began in the times of statesmen like Matveev, Ordyn-Nashchokin and, subsequently, Vasili Vasilevich Golitsyn, and it made itself felt also in economic affairs. But again, the Western entrepreneur must be seen against the background of Russian entrepreneurship--not only of famous figures like the Stroganovs or Demidovs, but also against the mass of small entrepreneurs in industry and trade, engaged in weaving, brewing and distillation, rope making, the timber industry, etc., and, aside from trade, in agriculture. There, too, Russians demonstrated entrepreneurship. Grain was increasingly grown for the market, and crops for industrial purposes, such as hemp, tobacco, and later sugar beets played an ever growing role. As early as the eighteenth century, numerous peasants, including serfs, even if they continued to live on the land, moved more and more into the group of entrepreneurs, just as, at the other end of the social scale, many of the nobility did.

Among the foreigners who, during the later part of the seventeenth century, had gained new importance, the most outstanding was Vinius. But in a sense, he was also the last. Russians, be it as state employees or as private persons, assumed a steadily more conspicuous role. Indeed, after Vinius there is hardly a famous name among the foreigners, hardly one which historians customarily recall, until the onset of the industrial age, when the picture changes. Perhaps the best known among those of the eighteenth century after Peter's time would be Jan Tamesz. Others, such as Evert Isbrants, Paul Westhoff or the Englishman Gardner or, later, Gomm, who

hindrances remained for modern entrepreneurship because many Russians, among them posad members, could not dispose of a needed labor force as long as serfdom was maintained; but the whole economic environment changed. Not only St. Petersburg and Moscow stood out as centers of up-to-date activity; also other regions participated in the development. In many parts of the country, textile manufactures flourished, and in European as well as Asiatic Russia paper mills, glass, leather, silver, metal and arms factories were erected. Evidence of the importance which posad industries and their owners gained can be found in the fact that some of the posad members, such as A. Zatrapezhnyi and S. Yakovlev, rose to the rank of nobility.¹⁶

Under the circumstances, it is difficult to accept Marshall Goldman's statement that in pre-revolutionary Russia natives showed "an unwillingness to utilize proven technological improvements."¹⁷ Goldman had not the late eighteenth but the nineteenth century in mind; yet, as an overall judgment, such a generalization is doubtful for all periods. The Russian industrialist of the eighteenth century possessed in any case enough interest and ability to compete. The English visitor Samuel Bentham may have been right when, after inspecting the copper mines of Pogodashi and various mills in the Urals in the 1790s, he criticized the waste of manpower, of steam and of materials.¹⁸ But despite this lack of attention to good management, the Russians had succeeded in taking first place in as important a field as the iron industry and in surpassing Sweden, the most outstanding iron producer up to the 1780s or 90s. United States importers of iron, e.g., asserted that there was nothing that in quality could compare with Russian iron. We also have the testimony of Erik Laxman, a Finnish explorer and expert in Siberian conditions, who praised even earlier the, for the time, distinctive entrepreneurial spirit of the Russians. And perhaps technological innovations (not only those often referred to by Polzunov but also by others, often unknown), even if not widely accepted, likewise bear witness to an attitude which hardly confirms Goldman's judgment. If anything, what was lacking was, rather than technological expertise and venturesome spirit, organizational ability and skillful, parsimonious management.

Even in foreign trade, Russian entrepreneurship should not be underestimated. It centered on the East. For centuries, the Russians had been active in commercial relations there. They had developed knowledge and connections in that area. In the last decade of the eighteenth century, they crowned their efforts by founding the Russian-American Company, a venture following neither the model set by the trade patterns in relation with the West nor that customary for colonial undertakings such as the English and Dutch pursued. In addition to the East, the Russians also engaged in new ventures in the south, via the Black Sea, where for a long time they had maintained connections with Persians, Turks, Greeks, and others. The new undertakings, made possible by war and conquest, benefited on the one hand the

Russian producers in the southern central regions and the Ukraine, and involved on the other new trade partners, such as the Austrians and the French, in addition to reviving connections with old trade partners, such as the Italians and the Spanish. For a time, the Frenchman Anthoine de St. Joseph developed various ambitious schemes. Sound in conception, they fell, however, short in execution because of lack of solidity in his procedures.¹⁹

In the meantime, the enterprises of foreign traders on the traditional routes to the West /also increased, at least in absolute figures if not proportionately to the total Russian commerce. The reasons why the foreigners could hold their own are connected less with their abilities than with the express policy of the Russian government. This policy included negative as well as positive factors: Negative in so far as the government imposed prohibitions on the participation of foreigners in the internal Russian trade, restricted travel in the country, granted privileges to Russian but not to foreign artisans, listened to the demands of posad members for maintenance of their customary rights, issued guild regulations, etc. And positive in so far as it purposefully discouraged foreign ventures by its own subjects lest politically undesirable ideas be introduced in Russia from the West. It did not create an adequate merchant marine but, to the contrary, raised difficulties when its subjects wanted to travel abroad. Nor did it show any concern about their lack of competitiveness with foreigners, perhaps because, as has been argued, the educational level of the typical Russian businessman was insufficient, or about his lack of knowledge of foreign habits and of foreign languages, currencies, weights and measures. Thus, overseas trade flourished in foreign hands. Pashkov speaks of 68 million rubles of exports and imports at the time of the death of Catherine II as against 4 million in 1726.²⁰ Even if such figures and other calculations of more recent date are of little use because of the unreliability of the surviving statistics, their questionable compilation, the extent of smuggling, the continuous changes in what comprised the Russian empire because of the expansion of its frontiers, etc., there is no doubt that the increase was great.

If in the preceding paragraphs the accent has been put on Russia's native business spirit, on its zest for enterprise and, possibly, also innovation, it is not in order to attempt to propose here a revisionist thesis. It is to show that just in the eighteenth century, the century of Westernization, Russian enterprise made great strides and foreign enterprise could no longer boast of a leadership which it may have held earlier. But a very different situation emerged when the nineteenth century dawned and the so-called industrial revolution spread. Foreigners began once more to permeate the Russian economic scene and to move into the forefront. The tendency, if not the need, for a new Russian offensive, leading to new efforts in Russification, was the result. Only by adopting the foreign,

activities; but a "Russification" in the strict sense of the word did not occur until, under Soviet rule, the state monopoly of foreign trade was introduced.

Russians played, however, a different role once we turn to those foreign entrepreneurs and their firms who established themselves in the second phase, when it was not trade but industry that counted. The beginnings of this phase, which saw the establishment of large industrial enterprises by foreigners, can be dated from the middle 1840s. It was then that the introduction of the technical innovations which had been generated in the West could no longer be by-passed in the East. The Russian government was quickly aware of the fact that the role of foreigners in this area had to be regarded in a different light from that in the field of commerce, or even banking. This, indeed, explains the fact that it took a comparatively short time only, perhaps ~~at an average~~ ^{as a rule} less than a generation, until a foreign industrialist was either replaced or at least supplemented by a Russian. It would be impossible to explain the rapidity of the transition were we to forget the existence in Russia of a sound basis, on which industries could be built, and of the entrepreneurial spirit which had evinced itself in past centuries. Nor should we underestimate the infrastructure which had been laid with regard to people--workers, technicians, scientists--as well as to governmental institutions, towns, harbors and streets. In all layers of the population, among the serfs whose obligations were not so rigorous and restrictive as to check a thirst for entrepreneurial activity, or among the nobles whose status was not too lofty, or among the "Forgotten Class",²⁴ there were ~~sufficient~~ ^{many} men who were interested in creating modern industrial enterprises. "Les domaines des grands propriétaires ont été, dans la première moitié du XIXe siècle le nid d'une Bourgeoisie industrielle," writes Roger Portal; and later on he says: "La Bourgeoisie industrielle constitue une aristocratie de la Bourgeoisie marchande."²⁵

In so far as the modern Russian industrialists would have had to build their new ventures on knowledge of technology, substantial capital resources, and managerial training, they were, perhaps, in a position not much different from that in which those of France, Germany and other Western countries found themselves at one time or another vis à vis the early English industrialist. To different degrees, all over the continent, time lags existed from which at first the English, then others could benefit. In two respects, however, there was a considerable difference. First of all, the Russian industrialist found himself within a political and social system which delayed ~~the~~ ^{his} possibilities ~~for him~~ to adapt himself to the new production methods; and then, owing to tradition, upbringing and surroundings he did not possess that business attitude which is sometimes described as "capitalist ethos" and which contributed to the success of the men in the West. In both respects, changes occurred, however, rather rapidly, and as a result, "Russification" ~~came~~ ^{came} ~~about~~ ^{about} and the process which we witness in the preceding century was continued.

The pace at which Russians became heirs of the foreign entrepreneurs and the form in which this change took place were not uniform. A great variety of possibilities existed, contradicting customary generalizations. Some of this transition of foreign industry into

Western industrial and business methods, by reshaping foreign enterprises anew and gradually bringing them into the hands of Russians did it seem possible to escape a fate which in one century after another Russia had fought and avoided, and to prevent that at that crucial moment it would after all fall into colonial dependency.

Two phases can be distinguished in the new foreign penetration and the Russian reaction to it. In the first phase, the accent lies on commerce, in the second on industry. Russian reaction to the first was fundamentally different from that to the second. There was little attempt to replace the foreign merchant who, in the late eighteenth and early nineteenth centuries, came again in large numbers. Thus, the foreign merchant retained or regained his former importance and steadily added to it, enjoying a position such as he had not held since Hanseatic times. He was favored by being acquainted with the modern industrial scene; he was aware of new needs which Western countries had under the gradually evolving industrial conditions; and he was acquainted with the new products, especially machinery, which they had to offer. He also developed an intuitiveness and venturesomeness which were appropriate to the now quickly changing conditions of trade. And he instituted a banking system which provided him with the financial means for carrying on his ever more complicated trading ventures. Commercial banks attending to trade ~~for~~^{on} their own account as well as to financing that of others appeared, foremost Baring Brothers of London and Hope & Co of Amsterdam. Soon, however, also a Russian commercial bank was founded, to be sure by a foreigner, Ludwig Stieglitz, a court Jew from the principality of Waldeck in central Germany. But this firm became quickly and thoroughly Russified; Ludwig Stieglitz became the first president of the St. Petersburg Exchange. He was made a baron, he converted to the Orthodox faith, and around 1860, his son Alexander dissolved the firm and accepted a high government position.²¹

Unlike the Stieglitz, whose services most of the Western overseas trading firms used in Russia, the majority of the trading firms remained "foreign" in character, conduct and reputation even when the owners accepted Russian (or Finnish) citizenship. Among them, Dutch and French were now rarely found; most of them were English or German. Their firms were, unlike those in earlier times, no longer creations of adventurers but solid business enterprises, which worked successfully for decades or even a century. Often two, three or four generations conducted them--down to the time of the October revolution. The Russian government, always anxious to promote exports, showed little interest in interfering with them; it rather extended to them protection and security and neither promoted Russian endeavors in their field of activity nor did it seek to see them replaced or "Russified."

Among the leading firms we find Rowand Carr & Co, Mitchell Cayley, Hill & Wishaw, Thomson Bonar & Co, John Venning and Clarke Morgan & Co from Britain; van Brienon, Amburger & Co, Wilhelm Brandt & Co,²² Meyer & Brückner, and Clementz Berg

from Germany; and, interestingly, in addition to these and many others there were also two American firms of importance, those of John D. Lewis and of William Ropes. Statistics giving the export and import figures of all the major firms have been preserved, published as they were over a period of more than half a century in the annual editions of the Gosudarstvennaia vneshniaia torgovlia.²³ The names of the firms did not always remain the same over the years; mergers occurred; some disappeared, owners belonging to a younger generation embraced additional activities; but a "Russification" in the strict sense of the word did not occur until, under Soviet rule, the state monopoly of foreign trade was introduced.

Russians played, however, a different role once we turn to those foreign entrepreneurs and their firms who established themselves in the second phase, when it was not trade but industry that counted. The beginnings of this phase, which saw the establishment of large industrial enterprises by foreigners, can be dated from the middle 1840s. It was then that the introduction of the technical innovations which had been generated in the West could no longer be by-passed in the East. The Russian government was quickly aware of the fact that the role of foreigners in this area had to be regarded in a different light from that in the field of commerce, or even banking. This, indeed, explains the fact that it took a comparatively short time only, perhaps as a rule less than a generation, until a foreign industrialist was either replaced or at least supplemented by a Russian. It would be impossible to explain the rapidity of the transition were we to forget the existence in Russia of a sound basis on which industries could be built, and of the entrepreneurial spirit which had evinced itself in past centuries. Nor should we underestimate the infrastructure which had been laid with regard to people--workers, technicians, scientists--as well as to governmental institutions, towns, harbors and streets. In all layers of the population, among the serfs whose obligations were not so rigorous and restrictive as to check a thirst for entrepreneurial activity, or among the nobles whose status was not too lofty, or among the "Forgotten Class,"²⁴ there were many who were interested in creating modern industrial enterprises. "Les domaines des grands propriétaires ont été, dans la première moitié du XIXe siècle le nid d'une Bourgeoisie industrielle," writes Roger Portal; and later on he says: "La Bourgeoisie industrielle constitué une aristocratie de la Bourgeoisie marchande."²⁵

In so far as the modern Russian industrialists would have had to build their new ventures on knowledge of technology, substantial capital resources, and managerial training, they were, perhaps, in a position not much different from that in which those of France, Germany and other Western countries found themselves at one time or another vis à vis the early English industrialist. To different degrees, all over the continent, time lags existed from which at first the English, then

others could benefit. In two respects, however, there was a considerable difference. First of all, the Russian industrialist found himself within a political and social system which delayed his possibilities to adapt himself to the new production methods; and then, owing to tradition, upbringing and surroundings he did not possess that business attitude which is sometimes described as "capitalist ethos" and which contributed to the success of the men in the West. In both respects, however, changes occurred rather rapidly, and as a result, "Russification" came about and the process which we witness in the preceding century was continued.

The pace at which Russians became heirs of the foreign entrepreneurs and the form in which this change took place were not uniform. A great variety of possibilities existed, contradicting customary generalizations. Some of this transition of foreign industry into Russian hands will be commented upon here.

The first major Russian undertaking of foreigners was, in a sense, from the beginning a Russian undertaking. It was initiated by the Russian government and concerned the construction of the railroad between St. Petersburg and Moscow. But it depended almost entirely upon foreigners as far as its execution was concerned. In the 1830s, the Russian government sent emissaries abroad to study the various railroad systems and, at the suggestion of the officers sent out, decided on hiring an American firm for the construction, using an American locomotive (designed by Moncure Robinson), and purchasing much of the other needed materials abroad. The task was completed in the early 1850s and high profits went to the Americans. But Americans as well as English, Germans, Belgians and others quickly found out that with surprising speed the railroad market which they had expected to offer a long term outlet was provided--to be sure, with the help of foreign capital--with Russian products. Locomotives, passenger and freight cars, rails, wheels, boilers, etc. were soon manufactured in adequate quantities and of satisfactory quality by Russian firms. After 1900, only a very small share of the market was left.

Professor Paul R. Gregory has argued that "prior to the spurt of the 1880s overall industrial growth was relatively unimpressive,"²⁶ and it is difficult to argue the point as long as terms like overall and relatively are not defined. Statistics may well leave some such impression, but research in industrial archives conveys a somewhat different impression. And Professor Arcadius Cahan has suggested that free enterprise would have achieved more. Perhaps so, even if others, including John McKay, may not necessarily share that view and, moreover, within the framework of the Russian scene, possibly undesirable side effects must be taken into account. Actually, when we examine the record of Russia's industries, we find that besides many state enterprises a remarkable development of private Russian industry occurred. As it was helped by the state through preferential treatment in receiving government orders and through railway construction, subsidies, protective tariffs, money policies, foreign borrowing, and ~~attracting~~

rupt), main representatives of the United States once the contract for the Alexandrovsk works with Winans had run out, had to accept more and more Russian contributions to their products. The Swiss, with Sulzer in Winterthur and others in Oerlikon experienced a parallel development. Here, a short survey of some German contributions and their merging into Russian industrial life will serve to illustrate the issue.

By way of introduction, a few general points can be made. First, that the importance of the foreign contribution cannot be demonstrated by quantification but depends upon qualification. Statistics tell less than thoughtful analysis. Next, if we speak of Germany's part, investment of capital is less significant than that of talent. Third, at the outset of industrialization, Germany, a late-comer, contributed little to Russia; but starting late, it developed up-to-date scientific and technological ideas and production methods which played the major role in areas most promising for all later industrial growth: in the fields of electricity, chemistry and, as part of the machine industry, the Diesel engine. Fourth, Germany was the least nationalistic of Russia's foreign contacts. At no time did it prevent the export of new techniques, as the English had done who up to 1843 imposed the direst punishments on those who would communicate English inventions in the textile industry to the Russians; nor did it imitate the French who coordinated national aspirations, in the French case ideas of revanche, with their business aims. German industrialists were inclined to subordinate national to business interests. Lastly, in part for this reason, but in part also because of closer acquaintance with their neighbor, because of a long tradition, and because of inclinations toward everything foreign, the Germans adjusted more readily to the Russian scene, learned the language, applied their skills and ultimately became more easily Russianized.

Among the German firms connected with Russia, a multiplicity of experiences can be noted. The story will be told here not in order to contribute to the business histories of such firms but to show, in the light of the development of Russian entrepreneurship, initiative and state interest so far presented, the attraction which Russia exercised on the various firms and the great variety of responses by them when faced with the decision to what extent they had to become part of the Russian industrial world.

It may be useful to start with the Krupp firm because Krupp is an example of a foreign firm which, once deliberations, decade after decade, had come to naught, desisted altogether from taking up manufacturing in Russia and thus becoming part of the Russian industrial scene. Next, we shall deal with Siemens, which exemplifies the very opposite case. Without any compulsion from the outside and under no pressure, Siemens entered the Russian industrial world and contributed to, and

shared in, its growth. Lastly, the path of various firms will be referred to which hold intermediate positions. Reluctantly, under pressure of Russian policies, they started businesses and industries in Russia and, as Russian state and private industry advanced, found themselves forced to surrender more and more of their "foreign" individuality. Generally, within less than a generation, their becoming an integral part of the Russian scene was accomplished.

At a surprisingly early date, indeed in 1820, shortly after the very start of his firm and earlier than almost any industrialist in the West, Friedrich Krupp turned his eyes toward Russia. Fighting hard for the survival of his new enterprise, he already then proposed to erect a steel factory in Russia. Unknown as he was, nothing came of it. But eighteen years later, in 1838, still at the beginning of the industrial age, after Friedrich Krupp's death, his son Alfred entered again into negotiations with Russians about the founding of a large rolling mill.²⁹ This time, negotiations made better progress; yet, it was not until three years later that Russia, on its part, took the initiative and proposed to Alfred Krupp that he build a steel mill in Russia. Alfred was not merely interested; as one would hardly expect, he even contemplated giving up his German plant altogether and to move the entire firm to Russia. He was thoroughly disappointed with Prussia, which showed much less understanding for his work than Russia, and he was ready to make an investigatory trip there.³⁰ As late as October, 1841, he deliberated, but he came to no decision. Thus the matter remained dormant until 1855, when once more the Russians proposed that he help them with the founding of a large steel mill. This offer was followed, eight years later, by yet another. By then, Krupp was, however, less interested. Industrial production had become more complicated, much experience was needed now, hundreds of workers had to be trained in working together, and many parts of the production process were so dependent upon the availability of auxiliary industries, research laboratories, schools, varied raw material sources, and so interwoven with political conditions and local arrangements that, unless all these preconditions existed, success seemed doubtful. At that, the Russians had on their own made good progress. In Obuchov they had, in particular, created an important and thriving steel mill. It was, however, just in connection with Obuchov that, in 1868, they made still another offer to Krupp, suggesting that he take over the mill there. It was a tempting offer inasmuch as not only Obuchov itself was a serious competitor but also other foreign competition (Maxim, Armstrong, Colt, later also Schneider-Creuzot) existed. Negotiations about Obuchov or, in any case, about the founding of a Krupp cast steel gun factory extended, therefore, well into the next year. But ultimately Alfred Krupp felt that a Russian branch would deprive the German house of many capable men; that legal, religious and other guarantees for freedom of movement and protection of his people

would be difficult to secure; and most important, that a mere entrepreneurial expansionist drive (Unternehmungswut) should not induce a conscientious industrialist to engage in new ventures.³² At least as much as other considerations (including also possible needs for additional funds and resentments against Russian officials who on visits to the Krupp works had been trying to get hold of production secrets) it was this decision to avoid the Gründer spirit of the 1870s³³ which led, in 1878, and subsequently in 1881, to two more refusals by Alfred Krupp to establish himself in Russia.

After Alfred's death, Count Witte thought, in 1898, that he could revive the issue and suggested to Alfred's son that Krupp build a canon factory in Russia.³⁴ But then and later, the political situation, dominated by France's policy of military encirclement of Germany, rendered further official cooperation in the field of armament industries impossible. This did not mean, though, that Krupp did not continue to find in Russia a market for some of his products and that he did not look for other connections there. Thus, he did make agreements with the Riga machine factory of Felser & Co which, however, was shortly thereafter acquired by the Maschinenfabrik Augsburg-Nürnberg (M.A.N.) in an effort to stop Krupp's competition.

The story of Krupp's always revived negotiations with Russia regarding a Krupp branch in Russia presents not only a negative aspect but also a positive one. It shows that Russia's own entrepreneurs and the Russian government, as it becomes evident when one considers the capabilities of, e.g., the Putilov or the Obuchov works, were able to get along also without the foreigner, that they could dictate the terms for foreign participation in the process of industrialization, and that they could, if need be, meet the foreign competition.

A case which illustrates a very opposite situation, both on the German and on the Russian side, is that of Siemens. Hardly had Werner Siemens established himself in Germany in 1848 than he dispatched, in 1853, his young brother Karl to St. Petersburg to found and head a branch and production center there. The start paralleled that of Harrison, Winans & Eastwick inasmuch as Siemens received the first large Russian contract for establishing a main telegraph line, just as a decade earlier the Americans had received a contract for the main railroad line. Both firms produced parts of their needed materials in Russia. But while the Americans ran a plant owned by the Russian government, Siemens produced in a factory of his own; and while the Americans gave up their interest after accomplishing the task, Siemens continued to manufacture in Russia and to build the country's most important electrical firm.³⁵

Siemens' relationship with Russia went through various stages. They were determined on the one hand in Germany by the interests and innovations in the electrical field which gave this country a unique position not only in Russia but in the

entire world; and on the other in Russia by the powerful forces which asserted themselves there in society, government, and industry. These, notwithstanding the fact that the Russians failed to build up a competitive electro-industry, left a deep imprint on the conduct of the Siemens factory.

At first, the Siemens branch developed as if it were an independent Russian firm, largely because its foreign connection was secured by close family ties. When Karl, however, left for England to help his brother Wilhelm (Sir William) there, who headed the English branch which also enjoyed great independence, control by the Berlin headquarters was tightened. This trend was reversed when, in the 1880s, Karl returned. But after the retirement of Werner and Karl's becoming, around 1890, his successor as head of the entire Siemens complex, again the forces of consolidation under Berlin's guidance made themselves felt. Berlin leadership was further strengthened after the firm had, in 1898, become a corporation (Aktiengesellschaft) --even though Karl, who had moved to Berlin, retained his affection for Russia (he possessed an estate near St.Petersburg, where he loved to spend vacations) and even though his daughters, who held shares in the Russian Siemens firm, had married Russians.

Yet, the tendency toward control from abroad was bound to fail. More and more of the products and parts had to be manufactured in Russia and, under pressure of the Russian government, even export markets had to be sought for them, in direct competition with the mother house. More native Russians were required to be added to the staff.³⁶ Moreover, ever higher Russian customs impositions, stricter regulations, and preferences given to Russian-owned firms forced all foreign firms to become "more Russian."

Simultaneously, developments within the Russian branches of foreign undertakings furthered this trend. Family connections weakened; sentimental ties with the homeland of many who were sent to Russia gradually waned; some of the German managers or employees accepted Russian, or Finnish, citizenship and sometimes the Orthodox faith. Loyalties became Russian, encouraged by the tsarist government through the conferring of high Russian decorations and orders, such as that of St. Anna or Stanislas. Ownership passed through marriage and inheritance into Russian families; stock in corporations, if available, was increasingly bought up by Russians. Profits often did not return to the mother house but remained in Russia, reinvested in the firm or put into high interest paying government bonds.³⁷ Eventually, owners abroad again and again came to wonder whether or not they should try to keep a branch in Russia or to give it up. Siemens himself wondered.³⁸

If there were firms like Krupp which had decided against starting production at all in Russia,³⁹ and if there were others which, like Siemens, had readily begun production abroad⁴⁰ and still others which, like the firm of the instrument maker and publisher Zimmermann, started out in Russia and only subsequently founded firms

abroad: then there was still a majority of firms which, interested in the Russian market but unable, in view of Russian policies, to supply it from abroad, established production centers in Russia, but did so only reluctantly and hesitatingly. Few seem to have realized how strong the pull toward "Russianizing" these factories would be. To varying degrees, they instituted control measures which would bind the branch to the mother house.

Among the great German chemical works, all of which had been founded in the 1860s, BASF and Hoechst started manufacturing in Russia in the 1870s, Bayer in 1883. At that time, the Russians already possessed excellent chemists and important factories. Soda, gun powder, phosphates, glycerine, cosmetics and other chemicals constituted their main output. Dyestuffs became the chief product of the German firms. At first, the Russian branches of these attended to the mixing of imported ingredients; they then began to manufacture some of the basic products while still importing many of the components as well as the machinery needed to manufacture them. Gradually they included more and more dyes in their Russian production program so that, despite the hold the German industry had on world markets, the Russian share in the production process steadily climbed. Of course, even under such conditions, the German dye¹stuff works could, in view of the rapid growth of the whole industry, constantly increase their exports to Russia and maintain the direction of the branches in administrative, financial, and technical matters. Yet, even these were increasingly influenced by the Russians. As early as 1886, the Deutsche Ökonomist had written: "Today no longer Herr von Hanseemann [Director of the powerful German bank, the Diskonto Gesellschaft] dictates conditions but the [Russian] minister of Finance, Bunge."⁴¹ Not only carefully directed state policy but also the general Russian atmosphere made itself felt. It percolated into many areas of the activities of foreign industries, affecting not only their organization and production programs but also the persons working for them. Carl Duisberg, who once stated that, national interests notwithstanding, business interests demanded manufacturing in Russia, complained about the infiltration of the russischen Schlendrian; Krupp had once complained about the corrupting influence of St. Petersburg life--especially on the top personnel. Still, unless the foreigner wanted to risk losing the market, he had steadily to increase his engagement. He had to invest ever higher amounts of capital; accept that, as the tsarist government happily pointed out, Russian capital followed and flowed into foreign industries⁴²; enlarge the range of the products made in Russia; be satisfied, occasional cartel agreements notwithstanding, with profits lower than in other markets; and buy up unsuccessful smaller firms lest they fall into the hands of other German, foreign, or of Russian firms and become nuclei of a competitive dyestuff industry. By 1914, the branches of the

German dyestuff works were still fully in German hands and under German control; yet, the impact of Russia was subtly and steadily there and influenced the performance of the factories and the men responsible for it.

Such impact was, of course, possible only because Russia was not lacking in capable entrepreneurs of her own; because she skillfully pursued a far-sighted, circumspect foreign economic policy and understood how to channel the efforts of the foreigners, who prided themselves of their superior abilities, into directions which she, and not the foreigners, determined; because able, adaptable workers were available; and because she possessed excellent scientific minds. Little wonder that native industries challenging the foreigners grew rapidly and that only the most advanced and sophisticated industries could maintain themselves. And even these were steadily and rapidly acquiring a Russian character.

All this becomes particularly evident if one considers the development of the machine industry. Having got its start during the early phases of the industrial revolution in England, it had spread from there to France, Belgium, Germany, Switzerland and the U.S.A., and had come already comparatively early to Russia. As a result, the market conditions for a latecomer such as Germany were rather different as far as exports to Russia were concerned. The record of her locomotive factories is especially instructive. Excellent factories had grown up in Germany: Borsig, Maffei, Krauss, Henschel and others, and like their English, American, French and other competitors they started out with large exports to Russia and still larger expectations. These were soon shared also by those who made other railway supplies, such as passenger cars, rails, boilers, etc. But as early as the 1870s, they found out that their business passed into the hands of Russian firms such as the Struve factory, the Votkinsky Kazennyi Zavod, the Sormovo, the Nevsky works, Malzov, Putilov, and others. These not only made good engines; they were also inventive, added new features to the design, adapted them to the special Russian conditions, and even gave their engines a different, distinctly "Russian" look. None of the German firms attempted to build up in Russia a major production unit; at best, they concentrated on the export of specialized engines, perhaps for use in the mines, or of parts, and occasionally they took advantage of sudden temporary opportunities as were offered in the time of the Russian-Turkish war or briefly early in the Witte period.

It may be surmised that the experience with automobiles might have turned out to be similar, but the First World War prevented a normal development. The first Russian automobile was brought out in 1896 by Yakovlev, who used the Benz "Velo" as his model. Soon, capable Russian engineers became available, foremost among them Boris Loutzky, who had worked for the Maschinenfabrik Nürnberg and for Daimler. He constructed cars and subsequently entered into an agreement with the St. Petersburg firm of Lessner for making cars and parts and establishing repair shops. The Lessner

firm had long been active in promoting links between foreign and Russian industries.

An especially useful example for the situation faced by machine factories is furnished by the M.A.N. Having started out in the 1860s and 1870s with substantial deliveries of installations, machines, and machine parts to Russia, both Augsburg and Nürnberg (which later combined) soon found it difficult to export to Russia. But convinced, probably erroneously, that manufacturing in Russia was bound to be unprofitable because efficient manufacturing processes could not be introduced there and because the Russian worker was thought to have, besides other shortcomings, difficulty in adjusting to German orderliness and punctuality, and to have little concept of the value of time,⁴³ both desisted from transferring part of their manufacturing activities abroad. As a result, their Russian business did not develop as anticipated and only the invention and finally successful construction of a Diesel engine, accomplished by Augsburg in 1898 after infinite trouble, gave them new chances. These seemed to be the brighter as the Diesel engine answered specific Russian needs. For the Russians, especially the Ludwig Nobel firm, were at the time developing the Caucasus oil fields from which the Mazut could be derived, a very cheap fuel gained from crude oil after one distillation. Diesel's patent was sold to Nobel in 1898,⁴⁴ but the expectation was that despite this, a great export market for M.A.N. Diesel engines would materialize.

This did happen, and many large Diesel installations, most useful for Russia's industrialization, such as that sold to Kiev for its electricity works, were subsequently sold. But what was not expected was that Russia took the lead in the Diesel field, outdoing the manufacturers not only in the United States, England, and France where also the Diesel patent had been sold, but also those of Germany herself. Russia proved that she had the means, the minds (scientists like von Döpp, Koshevnikov, Korevo, Hagelin), and the skilled workers who knew how to build this intricate and not yet perfected engine. And in firms like Nobel, Kolomna, or Sormovo, also the managerial ability was not lacking. With the help of foreign trained engineers, they proved themselves inventive and enterprising enough to stay in advance of Western developments. During the first decade of the twentieth century, M.A.N. found not only its market for its standard production in machinery difficult to maintain but also its hopes for sales of Diesel engines gravely reduced. Nothing was left but to reconsider the earlier decision, which had been against the transfer of some of its production facilities to Russia; and after years of hesitation, M.A.N. did purchase a factory in 1912. This was the Felser & Co in Riga. The short time until the outbreak of war did not allow a test whether or not the acquisition was useful. As a matter of fact, the Russian government continued to give preference, especially when military needs were involved, to Russian-owned firms; and a report of September 25, 1914, looking toward a possible post-war situation, stated emphatically⁴⁵ that

if M.A.N. was to run a branch in Russia, it had to be clearly Russian. The Felser shares held by the German M.A.N. would have to be converted into shares of a Russian M.A.N. operating under Russian law.

Perhaps even this would not have been a satisfactory solution. For, in the historical literature, one point has been almost entirely passed over which became of ever greater importance with regard to foreign enterprises. It concerns the dichotomy which developed between the interests of the main offices and their Russian branches.

Thus, the BASF and the Hoechst directors, as well as others, began to complain that the managers of the Russian branches "represented the Russian side." Depending partly upon their royalties from sales, they were suspected of favoring a high turn-over rather than profitability. They were pleading for the right to purchase raw and intermediate products as well as needed machinery not only from the mother house but freely on the international market, wherever they could be had at most favorable prices.⁴⁶ They wanted to manufacture as much as possible in Russia whereas the home offices wanted to export as much as possible from Germany.

Similar complaints came from the Bayer management; and the above mentioned ~~Endes~~ report indicates for M.A.N. a corresponding situation. At Siemens, the directors of the Russian branch pointed out that the Berlin models were often improved in St.Petersburg and that standardizing constructions, prescribed by Berlin in connection with its desire to take increased responsibility for directing also the Russian works in the 1890s, did not serve the Russian business.⁴⁷ Instead, the branch offices wanted greater adaptation to the wishes of the Russian customer, even if he was asking for "impractical features." They furthermore insisted on employing more Russian technicians, although these were said to be very conceited (von sich selbst eingenommen), and on appointing top Russian supervisors.⁴⁸ They desired collaboration with Russian inventors--men like Professors Artemiev, Popov, etc. And they insisted on remodelling a number of their sales organizations into separate Russian companies.

The trend toward greater participation by Russians was not limited to technical and managerial matters. It extended also to questions of ownership. Russians became co-owners. An industrialist, Stamirowski, secured for himself in 1911 a share of 25% in Siemens' electrical works in Lodz. C.L. Wachter, Wogau & Co, C.D.Thornton and other St.Petersburg firms held stock in the Gesellschaft für elektrische Beleuchtung, St.Petersburg, which had been established by Siemens. Private Russian capitalists acquired, when a chance offered itself, stock in foreign companies. A Russian, Rothstein of the St.Petersburger Internationale Handelsbank (Banque internationale de commerce), became the leading representative of a syndicate created by Siemens, the AEG (Allgemeine Elektrizitätsgesellschaft, Berlin) and the Union (Riga-

St.Petersburg), a firm established by Ludwig Loewe, Berlin, and later taken over by the AEG. Rothschild (Paris) and two Swiss firms also participated in this syndicate represented by Rothstein. This Russian banker exercised a powerful influence on many a foreign firm, forming a link between Russian government and foreign management. His premature death in 1904 was a considerable blow to the foreigners.

The relationship which gradually emerged between a Russian branch and a foreign mother house in the course of such developments is clearly shown in a 29 page long report which the director of the largest Siemens undertaking in Russia, Hermann Görz, sent on November 17, 1899, to Berlin.⁴⁹ Görz had with some misgivings accepted the post in Russia, and Siemens was not always satisfied with him. The monetary reward of a position in Russia seems to have been his main inducement, but it may be doubted that the one and a quarter million marks which he did save in the course of almost two decades was more than he might have gained had he retained his executive position in Germany with the AEG. He returned to Germany in 1906 and continued to direct from there the Russian branch. His 1899 report, as he himself confesses, was not impartial; but though conditions changed again during the following years, it is indicative of a trend toward internal Russification of foreign production centers in Russia.

Görz starts by characterizing the attitude of the Russian government and public toward the foreign electro-industry. He writes that in view of the rapid progress which electro-techniques make, the Russians assume that every enterprise in the branch must be extremely successful. From this follows, he argues, that, as a recommendation of the Minister of the Interior shows, they want municipalities to take electric installations under their own management if these promise a profit. Or they impose the most burdensome conditions when granting concessions for installations. Unfortunately, they are supported by foreigners themselves who violently compete for concessions which they then try to sell again.

An example is furnished by a "standard contract" for street illumination worked out in 1897 even with the help of representatives of a German firm in St.Petersburg. Forced to accept such a contract, the Siemens firm anticipates for the years 1899/1900 a deficit of Rbls. 64,700 out of an income of Rbls. 566,100. The city of St.Petersburg wants approximately 20% out of this sum, while under parallel circumstances the city of Paris requires--aside from some minor fees--5%, Vienna 3%, and Berlin 10%. Impositions similar to those made by St.Petersburg are made by Kiev or Taganrog. In St.Petersburg, the output of one hectowatt electricity costs the firm 116 2/3% more than in Berlin. The cost for fuel, materials, wages, and repairs in St.Petersburg of Rbls. 1.25, and of 1.- in Moscow compares with 0.8 in cities like Stockholm or Breslau, 0.6 in Copenhagen, and 0.3 in Hamburg. Speculations by foreigners, their battles to gain a foothold in Russia, or even old agreements entered into by

them years ago under different circumstances lead to ever increased demands on those who seek to secure concessions in Russian towns.

Görz comments further on irregularities which are common when foreign firms submit bids. Often the Russian government or municipality uses bids by foreigners to favor Russian firms, soliciting from these offers lower than those by the foreigners and then using them to force these to reduce their prices. But the foreigners--and especially the Belgians--only contribute to such conditions. Thus, when in 1898 the building of certain warehouse installations was submitted for bids, the offers of twelve firms, among which two Russian firms, varied by up to 80% (they ranged from 199,000 rbls. to 358,000, with Siemens quoting 300,000 and promising to use its own Russian-made products).

With a look at all the disadvantages besetting the Russian firm of Siemens, Görz then explains how many of the new firms abroad, seeing the rapid progress made by Russia and desirous of conquering that market, make initial offers with prices far below costs. This makes all Russian production suffer.⁵⁰ Other factories abroad make low offers in order to get rid of their overproduction. No wonder that in 1896/97 Siemens (St.Petersburg), with a capital of 3½ million rbls. and a turn-over of 2.7 million, had a profit of 12 1/4%, in 1897/98 with 4 and 3.1 million rbls. respectively a profit of 8 3/8%, and in 1898/99 with the same capital and 4½ million rbls. sales a profit of only 5%.

Görz sees further difficulties with regard to the profits a Russian branch can make in the fact that Russian engineers, who have visited foreign factories or who have studied abroad, return home with reports about sales and prices there. This guides the Russian government when placing orders; yet, it overlooks that such prices are possible only when large markets unimpeded by customs barriers exist, but not for Russia. At that, it demands guarantees for the faultless functioning of machinery it buys far beyond what others ask. This is shown by regulations such as the Russian Ministry of the Navy issued with regard to dynamo engines.

The report addresses itself then to the expenses of production in the Russian electro-industry and compares them with those for imports. They are so great that foreign firms are reluctant to assign more than 17½% of their capital investments to their Russian branch. This is understandable when one considers that (and this is not what most historical investigations assume) tariffs for raw and intermediate materials are often so high that it is more advantageous to import the finished product. They amount, e.g., for

Siemens dynamo engine S 50,	if the parts are imported,	to Rbls.	514.44
	if the finished engine is imported	to only	386.40
"	"	T 275: parts:	2420.09; finished product:
"	transformer:	"	179.88; " 128.10 "
"	cable CKA 3100:	"	1633.22; " 1266.- "
"	" 25a:	"	649.42; " 570.- " .

Actually, owing to further impositions, Russian made products are sometimes disadvantaged by another 10%.

At that, freight costs for Russian products are higher than for things coming from abroad. Görz mentions the freight of dynamoses from

St. Petersburg to Warsaw	of 38.79 rbls.	as against	Berlin-Warsaw	of 27.60
"	Omsk	92.60	"	" Omsk 111.80
"	Baku	77.63	"	Paris-Baku 124.71
"	Odessa	58.39	"	Hamburg-Odessa 53.48.

For copper, freight per pud and per km costs:

From Germany to Russia	1/55	of a	kopek
France	"	1/50	"
Austria	"	1/50	"
Within Russia herself	1/41	"	.

Investments and labor costs are likewise adduced as reasons for the predicament of manufacturers in Russia. While an investment of 400 rbls. for installations of a factory per each of its 6800 workers suffices in Nürnberg for the Schuckert electro-firm, and of 370 rbls. for each of the 7000 workers of Siemens in Berlin, Siemens in St. Petersburg with its 1050 workers needs 600 to 630 rbls. per head. A Russian worker received in October 1899 at an average 10 rbls. a week, while the Siemens worker in Berlin, with far higher productivity, gets no more than the equivalent of 11.80 rbls. Interest charges, anyhow higher in Russia than in the West, are the more burdensome as, unlike in Germany, a large stock in materials must be maintained because the supply with raw and intermediate materials is often slow and prices for them are higher.

Lastly, Görz speaks of the technical personnel. The need (and the expenses) for it is the greater as firms specializing in accessories exist abroad while the St. Petersburg branch has to manufacture them itself. It therefore needs more engineers and other technical experts. If it gets these from abroad, they often lack the necessary linguistic knowledge and costly translators must be employed. If they are Russians, they are often more interested in the theoretical than the practical aspects of the work; and, through loss of contact with Western industries once they have finished their studies abroad, they are often no longer as up-to-date as they should be. Yet, for foreigners as well as Russians, the salaries are more than 100% higher than in the West, amounting in rubles to what abroad they get in marks or francs. Under such circumstances, extra capital reserves would be needed in Russia, but the articles of incorporation of the Russian branch do not allow enough for depreciation at year's end.

No nationalistic Russian could have made a more persuasive argument for the need to better protect and support manufacturing plants in Russia than this head of a foreign-owned firm. The conclusions at which he arrives cannot have been pleasing to the mother house. Since his report deals essentially with difficulties which

internal business arrangements brought about and not even with the many external, societal and general economic issues which also entered, Görz's report shows the dichotomy between the interests of the mother house and the branch. At the end, Görz takes altogether the side of Russia. He argues that also "in ernsten Zeiten" (did Görz possibly include in this war times--possibly even war between Russia and Germany?) must rely on a healthy electro-industry. It is therefore necessary for Russia to raise as quickly as possible its tariffs; that it reduce the freight rates, that it give preference to Russian production when placing orders, that it "adjust" demands of Russian factories in technical and financial matters to conditions which further their survival possibilities and their capabilities, and that it promote the training of native technicians fit for not only theoretical but mainly for practical work.

Every single one of these points ran counter to the interests of the mother house abroad. Yet, not only do we find them mentioned in internal correspondence but in various instances also supported in petitions directed to the Russian government, petitions diametrically opposed to those which main administrations addressed to their own governments. They pushed in the direction of Russification.

The picture which thus impresses itself upon the historian is that owing to the vitality of the Russian entrepreneur through the centuries and the determined policies of the Russian government and with its help, the role of the foreigner was more limited than the attention given to it in the existing literature seems to indicate. The foreigner was himself constantly pulled in the direction of "Russianization" and this pull reflects on the so often discussed, emphasized or denied problem of backwardness. Where Russia did not develop into a modern nation on her own but relied on foreigners, she could still at all times call the tune. She could absorb and "Russianize" foreign enterprise and could channel it into directions which were profitable to the nation.

Walther Kirchner, Princeton.

Footnotes

1. MS. Bayer Archiv, Leverkusen, "Personalien Löw."
2. MS. Farbenfabriken Hoechst, Hoechst b/Frankfurt, Werksarchiv, "Vorstandsberichte"; ibid., "Filiale Moskau," 2/000.
3. MS. M.A.N. Archiv, Reisebericht Enders, Sept.25. 1914, 132/2; 1/III.
4. "Das Haus Wogau & Co," Russland und Deutschland, ed. by Uwe Litzkowski (Kieler Historische Studien, XXII), Stuttgart, 1974, p.188.
5. Erik Amburger, Die Familie Marselis (Giessener Abhandlungen zur Agrar- und Wirtschaftsforschung des europäischen Ostens, IV), 1957, passim.
6. Cf. P.I.Liashchenko, Istoriia narodnogo khoziaistva SSSR, 2 vols., Moscow, 1952, II, passim.
7. A.I.Pashkov, transl. ed. by John M. Letiche, A History of Russian Economic Thought: Ninth through Eighteenth Centuries, University of California, 1964, passim.
8. Jacob M. Price, The Tobacco Adventure to Russia ... 1676-1722 (Transactions of the American Philosophical Society, N.S. LI), Philadelphia, 1961, passim.
9. Walther Kirchner, Commercial Relations between Russia and Europe, 1400 to 1800 (Indiana University Publications, Russian ... Series, XXXIII), Bloomington, 1966, p.160.
10. Amburger, Familie Marselis, p.203.
11. Walther Kirchner, "Ukrainian Tobacco for France," Jahrbücher für Geschichte Osteuropas, X (1962); same, Commercial Relations, pp. 176-191.
12. Catherine the Great and the Russian Nobility, Cambridge, 1967, p.132, passim.
13. Fritz Redlich, "European Aristocracy and Economic Development," Steeped in Two Cultures, New York, 1971, same, The German Military Enterpriser (Vierteljahrsschrift f.Sozial- und Wirtschaftsgeschichte, Beiheft 47), Wiesbaden, 1947.
14. Die Struktur der russischen Posadgemeinden und der Katalog der Beschwerden und Forderungen der Kaufmannschaft (1762-1767) (Forschungen zur osteuropäischen Geschichte, XXII), Wiesbaden, 1975.
15. History of Russian Economic Thought, p.401.
16. Knabe, p.223.
17. "The Relocation and Growth of the Pre-Revolutionary Russian Ferrous Industry," Explorations in Entrepreneurial History, IX (1956), 19.
18. Kirchner, Commercial Relations, p.222.
19. Cf. also Hans Halm, Habsburgischer Osthandel im 18.Jahrhundert (Veröffentlichungen des Osteuropa-Instituts München, VII), München, 1954, p.181, passim; same, Johann Philipp Balthasar Weber: Die Russen (Innsbrucker Beiträge zur Kulturwissenschaft, IX), Innsbruck, 1960, p.93 n., 164.
20. P.401. See S.M. Troitskii, Finansovaiia politika russkogo abzolutizma v XVIII veke, Moscow, 1966, p.185, passim.

21. Maydell, Boao Frhr.von, "Die Stieglitz aus Arolsen...", Deutsches Familienbuch, V (1956). Cf. Walther Kirchner, Studies in Russian-American Commerce, 1820-1860 (Studien zur Geschichte Osteuropas, XIX), Leiden, 1975, pp.186 ff.
22. A collection of Brandt papers from the early nineteenth century dealing with Archangel trade has survived and is now in the archives of the University of Illinois at Urbana.
23. About their reliability, see Kirchner, Studies, pp. 56 ff.
24. Valentine Bill, The Forgotten Class, New York, 1959.
25. in: Revue d'histoire moderne et contemporaine, VIII (1961), pp.43, 59.
26. "Russian Industrialization and Economic Growth," Jahrbücher für Geschichte Osteuropas, XXV (1977), p.205.
27. Cf. Alfred J.Rieber, "The Moscow Entrepreneurial Group...", Jahrbücher für Geschichte Osteuropas, XXV (1977); cf. William L. Blackwell, "Old Believers," Slavic Review, XXIV (1965), who, in addition, mentions the Malyshev, the Nosov Brothers, Guchkov, etc.
28. Rieber, pp. 188 ff., 198.
29. MS., Historisches Archiv der Friedrich Krupp G.m.b.H., Essen, Familienarchiv Hügel, VII f 1562, V 5020 "Krupp in Russland".
30. MS., ibid., VII f 638, V 1175, March 9, 1841.
31. MS., ibid., IV, 93, CR 150.
32. Ibid., "Alfred Krupp, Briefe und Niederschriften," IX, 245.
33. An outstanding example of the irresponsible Gründer spirit is furnished by Strousberg, whose final downfall was speeded up by his Russian railway ventures
34. MS., HA Krupp, FAH, III, C 210.
35. Walther Kirchner, "The Industrialization of Russia and the Siemens Firm, 1853-1890," Jahrbücher für Geschichte Osteuropas, XXII (1974).
36. The workers had generally been Russians, but not the employees. In 1904, the list of the employees at, e.g., the Hoechst dyeworks in Russia still shows mainly German names. Germans had difficulties, though, because many did not get residence permits beyond two years.
37. Decades earlier, Winans had left millions of his profits in government bonds.
38. MS., Siemens Archives, München (SAA), Li 141.1, Carl Siemens ~~and~~^{to} Wilhelm S., Gostilitzy, 12/24 Nov.1896; 4 Lk 159, Aktennotiz (Wilhelm v.S.?), 1904.
39. Among them, e.g., another munitions maker, the Ludwig Loewe A.G. in Berlin. It seems that Isidor Loewe was among the few who may have feared ruinous social upheavals, but such foresight is difficult to demonstrate.
40. Among them Brockhaus of Leipzig, who had first brought out a Russian encyclopedia which was not merely a translation from the German, and then, under Brockhaus and Efron, had begun the now famous set, whose first volume appeared in 1890.