CHAPTER TWELVE

AMERICAN OCCUPATION, MARKET ORDER AND DEMOCRACY: RESTRUCTURING THE STEEL INDUSTRY IN JAPAN AND GERMANY AFTER WORLD WAR II[*]

GARY HERRIGEL

Appeared in: Jonathan Zeitlin and Gary Herrigel, eds, *Americanization and its Limits: Reworking Management and Technology in Europe and Japan after World War Two*, (Oxford University Press, 2000)

Introduction

Engagement with American practices and ideas in the post World War II period was different in Germany and Japan than it was in many of the other political economies considered in this volume because both were militarily-occupied countries. Thus, in addition to the diffusion (or in any case, incursion) of American industrial ideas, principles of organization and technologies by way of markets, scholarly and technical writings and elite circulation, American ideals were also imposed on Germany and Japan by military governors during the first decade after the war. By analyzing the process of restructuring in the steel industries in both occupied countries, this chapter will examine the complexity of the notion of "imposition" in the context of this military occupation. Its point will be that the American occupation dramatically changed both societies by forcing them to grapple with American ideas of social, industrial and political order. By this I do not mean that the Americans got exactly what they wanted in either case, much less that the two industries (or societies) were "Americanized". Rather, the interaction between occupiers and occupied transformed the way that both understood their own interests and what each understood to be industrial practice consistent with American ideals. In the steel industry, the result was the emergence of genuinely hybrid firms, industrial structures and market strategies which were all markedly different from their pre-Occupation ancestors and far more innovative and efficient than the American models that were used to guide their reconstruction.

In making this argument it is important to emphasize immediately that in my view the terrain upon which contestation occurred between American imposers and German and Japanese receivers/resistors *was not* in the first instance organizational or technological, though ultimately the effects of the encounter were felt in these areas. American military authorities did not insist that Japanese or German industrial actors adopt specifically American internal organizational procedures or implement American production techniques or technologies or industrial relations practices. Indeed, they left considerable latitude for local practice in these areas and allowed substantially different practices and forms of organization within the corporation and in industrial relations to emerge than either existed or were then developing in the United States. In any case, both the Germans and the Japanese had long been familiar with and even implemented a wide variety of American techniques before they ever confronted American military reformers.

Rather, the crucial area of engagement concerned the definition of the political, economic and social terrain upon which industrial institutions and technologies were to be constructed and deployed in each society. Indeed, it was the capacity of the occupying power to establish this as the terrain of conflict that indicates the enormity of the power it wielded over these two vanquished nations and it was certainly the source of its greatest influence. I will emphasize in particular two forms of Allied action on this terrain, one destructive, the other creative. First, the occupation forces systematically deconstructed the central institutions of market and political order in Germany and Japan: Among other things, cartels were outlawed, firms were broken up, leadership structures were attacked, and key associations were either redefined to play a different role or they were simply outlawed. This destructive impulse was defensive: In the political-economic imaginary of the occupying powers, the targeted industrial institutions had contributed directly to authoritarianism and the growth of military aggression in those countries.

Second, the presence and position of the Allies as military occupiers of defeated powers enabled them to structure debate about broad normative guidelines for social, industrial and political reorganization. American insistence on the ground rules for public deliberation about the reconstruction of each society brought principles of order into debate that diverged markedly from prewar indigenous ideas about the character and interrelationship of social, economic and political practices and institutions in Germany and Japan. American occupiers believed strongly, for example, that stable democratic societies contained plural, crosscutting organizations, multiple and countervailing instances of social and economic power, a strong middle class, trade unions, market competition and efficient, oligopolistically-structured industries. As it turned out, the US allowed the Germans and the Japanese to create these conditions in their societies in their own way—or in any case to make it seem as if they were. But the source of American power was that deliberating actors were not permitted to deny that a society with such features was desirable.[1]

The two sides of the Allied strategy of occupation in both countries are nicely expressed in a summary memorandum by the Supreme Command of the Allied Powers [SCAP] in Japan: "In the first two years of the Allied Occupation of Japan, SCAP's activities in economic matters [were] directed toward eradicating the old imperialistic, non-democratic economic pattern of life and replacing it with a new framework which would lead Japan into democracy and rightful membership among the community of nations"[2] In large part these two factors of US power successfully forced actors in Japan and Germany to engage the categories and logic of the US conception of social order and, as a consequence, get them to establish new rules for market competition and democratic order. Of course, what was actually achieved did not correspond in either case to what the occupying authorities imagined market order, democracy or their interdependence to be. German and Japanese actors created the mutual limitations between state and economy that the Allies desired, but in ways that were inescapably and insidiously informed by their own peculiar understandings of the categories and relations that the Americans imposed. Enforced, unavoidable confrontation with American ideas of political and market order, in other words, did not force the Germans and Japanese onto entirely virgin terrain. Rather, it forced them to reflect on their traditional practices in light of American ideals and allowed them to recompose elements from both into a strikingly new style of practice.

Plan of the Paper:

In my view, this kind of argument cannot be made by focusing narrowly on the ten year period following the end of World War II. A bit of historical table setting will be needed in order persuasively to convey the character of the conflicts that emerged as US occupiers set out to restructure the steel industries in the two occupied countries. Thus, section one will outline the prewar and wartime structures of the German and Japanese steel industries, highlighting the political boundaries of the industry in each society and the distinctive character both of property forms and of market organization in both industries. Section two will then turn to the lenses through which the occupying military governments interpreted these industries after the war and to the destructive and creative policies they promulgated to change them. The emphasis here will be on the categories of American economic and political understanding and on the way in which

American authorities understood market order to be related to democracy. Section three will look at the reception of these ideas and policies and their effects on the development of the industries in both countries during the initial period of growth in the first two decades after the war. In this section German and Japanese understandings of the relationship between market and political order will be contrasted with the Allied conceptions outlined in section two. The narrative of this section will be how German and Japanese attempts to appropriate American ideas and practices (and American efforts to impose the same) resulted in possibility creating effects which transformed the principles of market and political order of all the principals.

I. The Steel Industry in Germany and Japan in the Period Prior to Occupation

Though the two steel industries differed in size and technological sophistication in this period—the German industry was capable of far larger output than the Japanese industry and was a world leader in technology—there were many similarities between the two in terms of company forms and industry structure. Indeed, by the 1930s in both countries, the steel industry had developed a distinctive bifurcated structure. In each case a large, deeply integrated, diversified producer of relatively high-volume standardized steel goods accounted for nearly half of the total output in the industry, while a larger number of smaller more specialized companies, which were often part of much larger diversified combines, accounted for the rest of the industries' domestic output. Interestingly, these similarities in industry structure were achieved with dramatically different positions of the government in the industry. The Japanese industry will be described first, the German second.

A. The Pre-1945 Japanese Steel Industry:

There are two distinct yet intertwined strands to the story of the development of the Japanese steel industry up until the end of World War II. The first is a story of relations between private industry and government in the coordination of industrial development and the second involves the development of particular forms of governance and industrial structure in the production of steel. The two strands can be introduced separately, but they then begin to intertwine in a series of cartelization laws beginning in the early 1930s and then converge almost completely in the wartime innovations in industrial governance known as Control Associations.

Government-Business Relations:

As was the case with an array of early industries in nineteenth-century Japan, the emergence and early development of the steel industry was strongly shaped by the intervention of the state. This early state involvement, as many have noted, was decidedly *not* because the Japanese government was committed to state-controlled development. Rather most agree that it was because private actors could not be enticed into carrying the initial startup risks in the industry.[3] Indeed, for nearly two decades at the end of the nineteenth century, the Japanese state tried to encourage private actors, in particular large diversified *Zaibatsu* holding companies, to enter the steel industry because it believed that indigenous Japanese steelmaking capacity was crucial for national development and security. Despite these efforts, the *Zaibatsu* were very reluctant to play along. They believed that the startup costs in steel would be far too high and the profitability and growth prospects for the industry too low to justify moving into the industry—even with state support.[4]

Frustrated by this lack of private interest and convinced of the value of indigenous production, in 1901 the Japanese state took the bull by the horns and founded the Yahata Steel Works. The new facilities were state of the art for the time (modeled very closely after German steelmaking technology and practice) and had an initial total production capacity of 90,000 tons of steel a year. In all, the investment totaled over 120 million Yen.[5] All of this was very impressive by the standards of the time—but in a way that vindicated the reticence of the *Zaibatsu* , for none of it worked very well. The operation of the blast furnaces and the coke ovens in the new venture suffered continual mechanical problems in the early stages and ultimately had to be shut down for two years to have their German designs adapted to the particular kinds of raw material inputs and skills available in Japan. Further, even when everything was up and running, the Yahata works suffered tremendous operating losses for the first nine years of its existence. When it finally did earn a profit in 1910, it was with state assistance.[6] Growth in the domestic market for steel, moreover, was slow, at least until the beginning of World War I, and competition from imports was very intense: As late as 1913, imported steel accounted for 64% of home consumption and 52% of pig iron consumption.[7]

Nonetheless, Yahata did succeed in gradually establishing a position for itself in the domestic market (after all, prior to its establishment, imports accounted for virtually all consumption of steel and pig iron). And this success was used by the government to lure other private domestic firms, many from *Zaibatsu* interests, to enter the industry. On the one hand, the Japanese government used attractive munitions, shipbuilding or railway contracts to entice *Zaibatsu* investments in steel production. This created a demand for pig iron that lead to further investment, particularly in Japan's colonial possessions in the initial stage of steelmaking. (see **Table 1**). And, once private firms had been lured into the industry, the government encouraged and protected them with numerous subsidies, tax incentives, tariffs and the like.[8]

Table 1: Overview of Initial Private (mainly *Zaibatsu*)Moves into Steel Production:

Name of Enterprise (and affiliation)	Date	Initial Capacity	Main Product area & market
Yahata (State Enterprise)	1901	Crude steel, 90,000t/year 2 blast furnaces (160t each) 4 open hearths (25 t each) 2 converters (10 tons each)	Pig Iron, Steel, Rolled Products
Sumitomo Chukojo (Sumitomo)	1902 (1912)	Crude Steel, 2.000 tons/yr	Cast iron (later: Cold Drawn Steel Tube for Imperial Navy)
Kobe Seikojo (Suzuki Shoten)	1905	open hearth (3.5t)	cast and forged steel
Kawasaki Zosen Hyogo (Kawasaki)	1906	2 open hearths (10 t/each)	cast and forged steel for railway equipment and later shipbuilding
Nihon Seikojo (Mitsui)	1911	2 open hearths (50t) 4 open hearths (25t) 2 open hearths (5 t)	Cast and forged steel and weapons for the navy
Nihon Kokan (NKK) (Asano)	1912	2 open hearths (20t)	Mannesmann seamless steel tube
Hokuton Wanishi (Mitsui)	1913	1 blast furnace (50t)	pig iron

Honeiko Baitan Konsu (Okura Gumi & Chinese National Iron Works)	1915	1 blast furnace (130t)	pig iron (side business from colonial mining operations)
Mitsubishi Seitetsu Kenjiho (Mitsubishi-Korea)	1918	1 blast furnace (150t)	pig iron (side business from colonial mining operations)

Source: Adapted from Hidemasa Morikawa, "The Zaibatsu in the Japanese Iron and Steel Industry", 142, Table 1 and accompanying text

On the other hand, Yahata itself also helped these novice, less-integrated and much smaller-scale private operations develop. It supplied the private steel units with domestic pig iron and, more significantly, spun off to the private firms specialized steelmaking and rolling technologies that Yahata was not willing itself to develop because they distracted from the large-scale steel production strategy the state firm was pursuing.[9] Itself a very significant market actor, for much of the first thirty years of its existence Yahata nonetheless behaved like an incubator for newer, smaller and above all private entrants into the industry.

With imported steel as the enemy and the technological development of the Japanese economy as their shared goal, public actors and private producers pursued a cooperative, yet nonetheless competitive and market based strategy of industry expansion. Bureaucrats, bankers, executives from the *Zaibatsu* holdings and managers from Yahata engaged in continuous discussions concerning the problems, opportunities, needs and possibilities of steel production in

Japan. One has to be careful to emphasize that this was not planning in any sense. Instead it was elite dialogue on how to structure market-based economic activity in the interest of the nation's development.[10]

Bifurcated Market of Steel Producers:

By the 1920s, these business-government relations had fostered the development of a bifurcated industrial structure in the Japanese steel industry, with a large, state-owned, integrated, high-volume producer on the one side and a number of smaller, more specialized, less integrated, private producers on the other. In order to understand the strategic and competitive dynamics that produced this bifurcated structure in the industry, the interaction of two sets of relations are important: Relations between the new *Zaibatsu* market entrants and Yahata and relations between *Zaibatsu* steel production and the rest of the *Zaibatsu* operations.

Plainly, in their initial forays into steel production, the *Zaibatsu* were hedging their bets on the growth of the industry. They wanted to have some position in the industry if it finally did begin to grow, but they did not want to carry the burden of large investments on the scale of Yahata. Consequently, the *Zaibatsu* invested in areas of specialized production in which Yahata was not engaged, or in which import competition was weak. Also, as noted above, these investments were encouraged by special state contracts from downstream operations within the *Zaibatsu* themselves such as in shipbuilding and weapons production. On the whole, then, the scale of these private investments was considerably smaller, less integrated and far more specialized than Yahata. The *Zaibatsu* did not try to take over the steel market either from imports or from the government's firm. Rather, they entered steel production as niche players, gaining experience and know how technologically, while avoiding direct competition with larger competitors.[11]

Such apparent opportunism was actually in line with what the Japanese government wanted to achieve, for it contributed both to the expansion of indigenous steel production capacity and systematically enhanced the technological sophistication of private firms in areas that the state viewed as progressive. But the strategy was also very congenial to the broader combine-wide strategies of development that the *Zaibatsu* were pursuing during the first decades of the twentieth century. Knowledge of particular steelmaking technologies and markets was beneficial to other firms in related markets for machinery, shipbuilding, engineering and trade *elsewhere within the conglomerate*. Information circulated in and out of the steel arms of *Zaibatsu* in ways that encouraged learning and innovation in the complex of firms within the *Zaibatsu*'s scope of operations. The cooperative synergy between the steel and/or rolling operations of a *Zaibatsu* steel unit with the particular down-line operations of the conglomerate were the main thing, not vertical technical economies of integration or the lowering of unit costs in the steel unit itself.[12] Often *Zaibatsu* steel units were not integrated (backward or forward beyond rolling operations) and purchased pig iron or scrap (and even steel ingots) from third parties (in particular Yahata!).

As the industry grew, the bifurcation between the high-volume standardized producer Yahata and the specialized niche players became more entrenched. In a period of (albeit slow) growth like that in the first decades of the century, this was a very stable structure, beneficial to both parties in the industry. It was not a "dualist" or core-periphery structure in which the large core firm was the "most advanced" and the peripheral players less so. The players in the industry were all technologically sophisticated—indeed increasingly so as the new century wore on. They were of different sizes and differently integrated because they were pursuing alternative kinds of profit making strategies in the same industry.

Governance Problems:

The stories of business-government cooperation and industrial bifurcation merge when turbulence and market disorder start to affect action in the industry during the late 1920s and 1930s. The stable reproduction of the bifurcated market was challenged during this period due to the following factors: Large investments in new plant and capacity during World War I resulted in overcapacity after the war; the Japanese economy experienced a postwar recession and then later (along with the world economy) a very severe depression by the beginning of the 1930s; finally, during the 1930s militarist forces within the Japanese state began to attempt to accelerate the growth of domestic steel production in order to ensure domestic supplies for military industries.[13] The first two factors (overcapacity and recession/depression) made it extremely difficult for producers to find markets for the steel they were *able* to produce, while the third introduced a set of constraints on the range and quantity of steel products they were *allowed* to produce. These pressures gave rise to three different governance solutions: state-enforced private cartelization, merger and market-supplanting Control Associations.

Cartelization:

Overcapacity and recession/depression in the immediate post-World War I decade introduced disorder into markets because it encouraged market poaching. In the face of capacity well in excess of existing demand, firms that had previously left one another's specialized markets alone began not to. Seeking desperately to utilize expensive idle equipment, private specialty producers attempted to enter other specialists markets as well as the standardized markets dominated by Yahata and imports. Price cutting, special purchase and delivery conditions, and other pernicious competitive devices were the techniques deployed to achieve market entry. Unsurprisingly, with their deployment market order in the industry deteriorated: Prices became erratic, profits suffered and employment became unsteady. The classic response to this kind of situation is the formation of a cartel. Producers agree to cooperate with one another on price setting and the fixing of terms and conditions of sale in order to bring stability back to the market.

During the 1920s, the formation of cartels was a completely private matter of agreements between consenting firms on a wide array of elements within their competitive industrial environment. Such agreements were typically satisfactory for short periods to stabilize markets, but proved to be relatively fragile unless they were followed by sustained upturn in demand for product. The Achilles heel of these agreements was that they were never able to cover all producers in particular markets. Without a third party to enforce participation, short-term calculations of advantage tended to outweigh longer-term considerations of stability through cooperation. When the onset of depression at the end of the decade made this irritation in the nature of cartel organization into a serious crisis of market governance, the fragility of these private cartel agreements became a topic of intense debate among both private industrialists and government bureaucrats. Ultimately, debate gave rise to political intervention and, in 1931, the passage of the Major Industries Control Law which brought the authority of the state into the organization of cartels in the industry.[14]

The Major Industries Control Law was significant because it permitted the state to force compliance of non-member producers with the agreements struck by the majority of cartelized producers in a particular product market. This enabled producers in the steel industry to stabilize the specialization relations in the bifurcated structure by establishing cartels that defined the boundaries among product markets as well as the prices in the industry through production and so called "joint sales" agreements (i.e. selling quotas, the collection and allotment of orders, etc.). Such agreements eliminated damaging poaching, maintained the integrity of individual producers' specialty niches and allowed producers to concentrate on innovation rather than covering their costs. Such arrangements were attractive to the *Zaibatsu* because they facilitated productive interaction between their steel interests and the rest of their manufacturing business—something that poaching and competitive chaos in steel markets had made more difficult.[15]

Merger

State support of cartels was not enough to introduce stability into the volume sector of the industry. Yahata had been suffering throughout the twenties and early thirties from poaching by private firms who sought to unload their surplus production into the volume markets. In addition, several private firms, in particular private independents not part of *Zaibatsu*, had invested in volume capacity during the World War because it seemed at that time that Yahata would not be able to cover all of market demand. Ten years later these producers along with Yahata lived in an unstable merciless market of organized over-capacity, under-production and low profitability. Cartelization in this market was not enough: Merger was called for. But because Yahata was a state-owned firm, the creation of a merger had to be a political act.

In 1933-4 this is precisely what occurred: The Japan Steel Manufacturing Company Law was promulgated in 1933 and all of the volume producers in the industry, including Yahata, were consolidated into a single firm the following year.[16] Though the consolidation was encouraged and organized by the Japanese state and it involved a very large state enterprise, the consolidation actually took place through the *privatization* of the Yahata works and the incorporation of the operations of five private iron and steelmaking companies into the newly-privatized firm.[17] The new industry structure concentrated virtually all of Japan's pig iron production (97%) into the new consolidated firm. Importantly, the market positions of Japan Steel in both the raw steel and finished-product segments of the industry were significantly less: Japan steel accounted for 56% of steel ingot production and 52% of finished steel output. The rest of this, more specialized, output was supplied by the remaining non integrated players in the industry, above all by NKK, Kawasaki, Kobe, Sumitomo, and Asano. [18]

As these market-share statistics suggest, this round of industrial stabilization in the early thirties, driven by coordinated public and private action, successfully stabilized the bifurcated structure of specialists and volume producers. This was a coordinated, market-oriented steel industry. The final set of governance changes introduced during the early years of the new World War, however, were of a different character entirely.

Control Associations

With the coming of war, the militarists within the Japanese state began to become increasingly concerned that the nation's industrial capacity be able to be used in the service of the nation's military needs. In their view, the structures that were created during the thirties were unreliable and unwieldy in this regard, especially the cartels. The Major Industries Control Law had stabilized markets, but it also allowed for the continuous fragmentation of markets and proliferation of cartel organizations, all of which made it very difficult for resources to be consolidated and marshaled for state ends.[19] In September of 1941, the government introduced the Major Industries Association Ordinance, whose purpose was to create extra-firm "Control Associations" with the power and authority to direct production and the distribution of products in the industry toward the satisfaction of the state's military needs .[20] If the earlier Major Industries Control Law attempted to bring state authority to bear to help private interests govern themselves in a market context, this later law sought to have state interests completely trump the market interests of private firms.[21]

There was considerable debate at the time as to who would staff these associations, with the military preferring its own and private industry favoring their own managers.[22] Ultimately, it was decided that staffing would be by members of the industry itself, but in an interesting way: Appointees were taken from among top managers of the operating units of actual steel companies—rather than, for example, from the further removed but more broadly strategically-oriented holding companies of the *Zaibatsu*—and were made to resign their positions within their original firms. In effect, this arrangement aimed at ensuring that the decisions of the Control Councils would not be made with the profits of the steel companies (much less the broader technological synergies of parent *Zaibatsu* operations!) uppermost in their minds, but rather with the needs of the industry's immediate military customers. At the same time, since the designers would have intimate knowledge of the industry and its technology, they would be able to set production targets in ways that would be technologically and organizationally possible to achieve without bankrupting the companies.[23]

In the end, however, it seems that the dirigism of the Control Associations was not very successful. The Control Associations created a coterie of managers with an understanding of the steel industry that was markedly different from the stable bifurcated grouping of specialists and volume producers which had characterized the development of the industry to that point. Rather than volume production as a specialty among an array of specialties, these actors wanted to create an oligopolistic structure in the industry to increase the total volume output of all producers. We will see that these managers and this conception of the industry proved to be very significant in the reconstitution of Japanese steel after the war.[24]

B. The Pre-1945 German Steel Industry

The German steel industry was much older and larger than the Japanese industry.[25]

Nonetheless, by the middle of the 1930s it had developed a remarkably similar bifurcated industry structure. Just as in Japan, output in the industry was dominated by one large, integrated and widely-diversified producer, the Vereinigte Stahlwerke AG (hereafter, Vestag). Unlike the Japanese Yahata Steel, however, Vestag was a private concern formed out of companies which traditionally had no ownership participation of public bodies of any kind.[26] The outcome of a merger in 1926 among four of the largest firms in the coal and steel industry, this company accounted for over 50% of all steel and rolled products in Germany soon after it was first established (1927). It continued to be the dominant firm in the industry through the 1930s and into the war, though its output was nearly matched after 1937 by the newly-established Nazi state company, the Hermann Göring Werke (HGW, more on which below). Vestag produced a broad range of rolled or finished steel products, but it had only a relatively minimal set of downstream manufacturing subsidiaries (machinery, shipbuilding etc.), and these were largely holdover properties from the firms that had entered into the Vestag structure (that is, the firm made no effort actively to expand its downstream non-steel operations after its formation).[27]

As in Japan, most of the rest of the interwar output in the German industry was, until the late 1930s, produced by relatively smaller, more specialized operations of broadly-diversified conglomerate firms, known in Germany as *Konzerne*. These firms, (the majors were Hoesch, Krupp, Klöckner, Mannesmann [after 1932], and the Gutehoffnungshütte), were sprawling combines with far-flung operations throughout the steel-finishing and engineering industries. As in Japan, the output of these firms' steel units tended to be more specialized than the steel operations of the dominant Vestag. Where Vestag concentrated on more standardized fare and larger volumes across finished-steel markets, the steel operations of the *Konzerne* produced specialty and customized finished products. Often, the technical capacity to provide these products was aided by close exchanges of information and expertise with downstream units in the *Konzerne*.

These large conglomerates resembled their Japanese counterpart *Zaibatsu* in that they encouraged intra-*Konzern* exchanges in the interest of furthering the knowledge and innovative capacity of the internal exchanging parties—all to the benefit of the *Konzern* as a whole.[28] Unlike the *Zaibatsu* in Japan, however, the *Konzerne* were not ancient organizations in the country nor did they dominate the German industrial economy: The diversified *Konzern* form only emerged in the first decades of the twentieth century in the steel industry and it stabilized as a form of corporate organization only in the interwar period.[29] Moreover, the *Konzerne* were largely regional entities and had a narrower palette of companies in a more restricted range of sectors than the *Zaibatsu*. Most German *Konzerne* had operations in steel, coalmining, engineering (especially heavy engineering) and shipbuilding. Most also had their own trading companies and several had traditionally significant weapons and military-related operations (e.g.: Krupp). Though the so-called *Montankonzerne* tended to have close relationships with major German banks, such as the Deutsche or Dresdner banks, these broadly-diversified industrial entities did not have the kind of intimate family-esque relations with a *Konzern* -controlled bank as was the case with their *Zaibatsu* counterparts.[30] Finally, in the steel segment itself, unlike the *Zaibatsu* steel producers, for the most part the steel producers within German *Konzerne* were integrated producers—that is, they produced their own pig iron, raw steel and rolled products.

On the level of the governance of market relations, the Germans also had many similarities with the Japanese: Cartels were the mechanism of choice both to maintain market stability and to uphold the integrity of boundaries between specialties. Stable bifurcation in the industry's structure, then, was maintained by a mixture of merger and cartelization in ways that intricately intertwined markets and coordination. Though remarkably similar to the Japanese, the Germans arrived at this governance equilibrium in a very different manner. The key difference was that in Japan, bifurcation in the industry structure was a point of departure in the development of the industry, whereas in Germany it was the outcome of many years of turbulence caused by a mid-life crisis in a relatively competitive nineteenth-century industry.

For most of the early decades of the twentieth century, German steel industry markets were extremely volatile, despite the fact that these years were marked on the whole by growth.

The problem was that most of the major firms in the industry had emerged during the nineteenth century as suppliers of railroad expansion and the large scale construction attendant to rapid industrialization. And where in Japan only Yahata Steel was fully integrated, *all* of the major German producers had integrated production facilities, often ranging from coal reserves into finished bar and rail. As demand for rails and structural shapes began to level off toward the end of the century , all the players in the industry simultaneously attempted to diversify into newer and more specialized finished-good markets, giving rise to tremendous and very turbulent competition. Cartels were created continuously, but, though legally binding, were for the most part ineffective: Either new entrants continually entered the market or competition outside the cartel created new finished-goods markets that then attenuated the commitments of customers in existing ones. Merger on a grand scale to consolidate industrial capacity into a small number of oligopolistic producers (the so-called "US Steel Strategy") was also discussed, but was never seriously attempted due to the obstinacy of the primarily family-owned and operated steel corporations in the industry.

Finally, in the general economic turmoil and recession of the early post-World War I decade, a solution that split the difference emerged. Volume production was consolidated into a new firm, the Vestag, through a grand merger of production capacity. The rest of the more specialized steel and rolling capacity was then ceded to newly-created *Konzerne* which were able to link their steelmaking operations with extensive recently-acquired downstream manufacturing interests. These moves together both reduced the number of producers in the industry and clarified product-market boundaries among producers. And this transformed the cartel into a durable and effective mechanism for the stabilization of market order in the industry.[31] Indeed, the correspondence between industrial structure and corporate strategy was so harmonious that unlike their Japanese counterparts, German producers never appealed to the state to intervene in the maintenance of commitment or participation in cartels.

This picture of a strong family resemblance between the bifurcated industrial structures in the German and Japanese steel industries must be slightly diluted, however, by two additional aspects of the German case: German producers had a very different relationship to the state than their Japanese counterparts; and, largely because of that difference, two additional groups of producers existed in the later interwar German industry —both of which grew enormously after 1937 in association with Nazi regime efforts to encourage steel production for war.

German steel producers had a highly ambivalent relationship to the various governments that existed in Germany prior to the end of World War II.[32] On the one hand, large-scale German industrialists, in the steel industry as well as in other sectors, were very firm and articulate advocates of the self-government of industry and of society and correspondingly, of the limitation of state power. They consistently advocated private control over the market (though not market freedom), and limited (though not necessarily democratic) government. Unlike the Japanese case where the government was reconstituted in the mid-nineteenth century in a way that allowed it to be viewed as an agent of the interests of the nation, in Germany the Imperial government after unification and then later the Weimar and Nazi regimes never succeeded in erasing the feeling among non-aristocratic social classes that the government was the affair of a particular social estate. Throughout the pre-1945 period, as a result, large-scale industrialists found their own social and ultimately national legitimacy as a social estate (*Stand*) in the existence of strict limits on the state's capacity to act in the economy in general and in the affairs of private firms and industrial sectors in particular. Modern industry in a powerful nation, German industrialists believed, should organize itself.

That said, German industrialists, particularly in heavy industry, were not beyond engaging in commerce with the state if it proved profitable—as it did with the massive growth of the German military, particularly its navy, before World War I. Nor did they object to the state taking over responsibility for collective-good services that proved to be too cumbersome to maintain cooperatively and privately, such as technical training and other forms of public infrastructure. As long as the State did not insinuate its own designs on the operations of private firms, large corporate private industry appreciated the role that a limited state could play in a market economy. If in Japan industry and government cooperated in the development of a private economy in the interest of the nation, in Germany large industry and government coexisted with mutual respect and dependence, yet without a superordinate purpose or interest to bring them together in sustained cooperation.

Evidence of the salience of this distinction can be seen in the way in which the structure of the steel industry shifted in the late 1930s when the Nazi regime began to attempt to change the rules of the game and become more directive in the affairs of private steel production. The established private enterprises in the industry balked at Nazi efforts to channel their steel output away from their market strategies and toward the satisfaction of state needs. Even the formation of their own Control Associations (*Wirtschaftsgruppen*) in the context of the development of the first Nazi Four-Year plan in the mid-1930s, staffed very often by trusted former trade association officials, did not attenuate large firms' mistrust of the state or temper their resistance to its projects.[33] The German steel producers were willing to incorporate the state's demand for steel into their output (as they had traditionally done in the past), but they were not willing to turn completely away from their private commercial operations or strategies in the process.[34]

This resistance on the part of the industry gave rise to two developments that changed the composition and structure of the industry. On the one hand, a number of private firms emerged which were willing to exploit the resistance of the major producers to the state and cater exclusively to the steel needs of the Nazi government. These new firms cobbled together smaller, non-integrated pig iron, steel and rolling mills that were broadly dispersed throughout Germany (and after the war began, throughout the expanded Reich) and organized their output completely around the specialized demands of the military or military-related sectors. The largest and most significant firm of this type was the Friedrich Flick AG, which operated as a somewhat loose *Konzern*-like structure, but largely within the steel branch. That is, instead of seeking synergy between sectors (e.g. steel and engineering), Flick encouraged synergy among specialized and non-integrated steel operations.[35]

The other development was the creation by the Nazi regime of its own massive firm, the Hermann Göring Werke. Established in 1936, this wholly-owned state firm soon became the second largest producer of steel in the Third Reich[36]. The HGW was a sprawling agglomeration of cobbled together old firms and new greenfield sites. It was established to disrupt the private power of the *Montankonzerne* in the procurement of raw materials for steel production and in the delivery of steel for the military (and also to enhance the bureaucratic power of Herman Göring and his henchmen within the Nazi state apparatus).[37] By garnering a privileged position in the administered distribution system (the *Wirtschaftsgruppen*), the mere presence of the state firm could force the recalcitrant private companies to shift their attentions toward Nazi economic ends. As an actual producer of steel, however, though it had high levels of mostly standardized output primarily for military-related ends, HGW was far less efficient along a whole array of measures than the major privates were, in particular the Vestag. (**See Table 2**).

Table 2: Comparative Data on Vestag and Herman Göring Werke in 1942/43

Index	Vestag	HGW (1943)
ratio of coal to pig-iron production	4.7:1	10.5:1
ratio of coke to pig iron production	0.5:1	2:1
crude steel production/employee(in tons)	25.5	10.1
percentage foreign workers in total work force	32	58
sales/employee (Reichs Marks)	11,558	6,333
State Credits Received (Millions of RM in 1945)	0.18	3.2
Depreciation (RM/ton of pig iron)	9	22

Source : Mollin, Montankonzerne und .Drittes Reich, 256, Table 28.

From a comparative point of view, the significance of the HGW and of the newer specialized steel *Konzerne*, such as Flick and Otto Wolff, was to make the German steel sector slightly more fragmented than the Japanese industry on the eve of war, though the general bifurcation between specialists and standard volume producers was maintained. That said, it is remarkable how generically similar the industries were: Both the Japanese and German industries had large centralized steel companies which produced in high volumes, though in the German case there were two such firms, together accounting for market shares comparable to that controlled by Japan Steel alone (at least in steel and finished goods markets). Likewise, both industries had significant portions of market share accounted for by steel-producing subsidiaries of much more broadly-diversified industrial combines. These firms, in both countries, were much stronger in specialized and lower-volume markets than was the case with the large dominant firms.

The major disturbance in the analogy between the two industries in the end has to do with the different relationship between steel producers and the state in Germany than in Japan. In Germany, there was greater industrial fragmentation as the economy mobilized for war because the private firms were unwilling to allow their sovereignty to be compromised for state interests. There was no analog in Japan to the upstart catfish-type war production firms such as Flick which came into being to exploit opportunities for war contracts created by the reluctance of the private sector. In Japan, private firms were more able to reconcile their interests with those of the state (and vice-versa) and hence there was no opening for opportunistic profiteering. [38]

II. Occupation and the Imposition of New American Rules of Political-Economic Order, 1945-57

With the defeat of Germany and Japan in World War II by the Allied powers, the steel industries in both defeated countries came under very critical scrutiny. Top executives with close ties to the former enemy regimes were arrested and assets in the industry appropriated by the occupying powers. The personalities in the industry and their culpability in the aims and crimes of the defeated regimes, however, were not the main factor that drove the Allies to seek reform .[39] Rather it was the very structure of the industry itself that became a target: The Allies attacked both the bifurcated structure of the steel producer market and the character of the companies that constituted it as crucial obstacles to democratic order in Japanese and German society.

The attack on the steel industry was consistent with the way in which the Allies dealt with industrial forms that resembled those of the steel industry in all other sectors. The dominant self-understanding of the American and Allied occupying powers in Germany and Japan is easy to detect in the contemporary writings and memoirs of participants in the occupation. One especially concise formulation is given by Eleanor Hadley in her 1970 book which draws extensively on her experiences as an antitrust specialist in Japan during the occupation. I present this lengthy quotation because it underscores the linkage that the victorious powers made between economic organization and political democracy and their sense of legitimacy in intervening in the restructuring of the fundamental rules of economic behavior that structured practice in both societies[40]:

World War II differed radically from previous wars in the terms imposed by the victors on the defeated. Previously exactions had been limited to territorial changes, restrictions on the military establishment, and reparations. World War II, representing for the first time "total" warfare, extended to the peace conditions "total" peace, with demands for change in the political and economic structure of the defeated powers. In both Germany and Japan the victors attempted to revamp the social structure, to establish democracy. In the words of one descriptive title, the Germans and the Japanese were "forced to be free"….Allied leaders saw the expansionist foreign policy of Germany and Japan as the product of their undemocratic governments, and believed that the future security interests of their own countries required nothing less than the social reconstruction of these two nations. By themselves, proscription of army-navy-airforce, along with territorial adjustments were insufficient. Nothing less than basic social reconstruction was needed if democracy, which would be peaceable, were to take root….

> The programs for democratization in Germany and Japan were essentially similar. In both instances they called for a new constitution, new leadership, and change in the structure of the economy. Economic change was demanded for political reasons. The Allies believed that a democratic constitution would be meaningless unless the key pressure groups of the nation supported its ideology. In both Germany and Japan concentrated business was seen as one of the most powerful pressure groups, and because German and Japanese concentrated business was not considered to support democracy but rather oligarchy, it became a target of occupation reform.

Why did the US occupiers consider the structures of the "concentrated" businesses in Germany and Japan to be "oligarchic" as opposed to democratic? It won't do to code this orientation as a simple free-market, anti-monopoly position, although advocates of smaller business and "free" markets were important minority voices in both occupation governments.[41] On the contrary, the most influential elements of the occupation governments were quite sympathetic to big business and were not at all opposed to some limits on market competition. They were, in the words of Theodore Cohen, "New Dealers" who believed deeply in the progressive and democratic potential of large scale, mass production industry.[42] But their vision of large scale industry was one in which the power of large market actors was checked, as they believed it to be in the United States, by other strong and organized actors, both in their own markets and in the society at large: Rather than monopoly, they supported oligopoly; rather than cartelization and cooperation among producers, they favored vertical integration, competitive (oligopolistic) price setting and the stimulation of stable consumer demand; instead of paternalism and employer discretion in wage setting and labor markets, they favored trade unionism and collective bargaining; instead of multi-sectoral private conglomerate empires, they preferred to have corporate actors confine their growth to the vertically-related processes of individual industries.[43]

In each instance, the American ideal was to create the economic and social conditions for the emergence of plural sources of power which would have to compete with and respect one another. It was precisely the absence of such conditions, as the Hadley quote above indicates, that the Allies believed made possible the authoritarianism and demagoguery of the two enemy regimes. In the context of industry, this pluralist understanding of a democratic economy was connected to an emerging American conception of industrial mass production and its social and political preconditions. The most significant connection had to do with the possibilities for market restructuring and the achievement of scale economies that would be made possible by the elimination of monopolies and cartels. Inefficient large producers protecting costly specialist production processes and cartels of specialized small producers no longer would be able to survive in an environment that insisted on competition and frowned upon collaboration.[44]

American reformers believed that the creation of this kind of alternative environment in the economy of the occupied societies would have significant positive employment and income effects and, ultimately, social and political ones as well. Traditional middle classes, key villains in the American understanding of the rise of fascism, would decay without the collusive mechanisms they had used to protect their social and economic position.[45] The emergence of efficient, large-scale oligopolistically-structured industries would replace the old middle classes with a less differentiated industrial and service middle class. Without cartels and multi-sectoral vertical monopolies to enhance their social, economic and political positions, "feudal" industrialists would be forced to concentrate their energies and resources on the achievement of efficiency and compete for profits in markets and influence in politics with other firms and associations.[46]

Destructive and Creative Policies

In order to achieve these goals in the occupied political economies, the Allies developed a strategy that involved both destructive and creative elements. The most notable destructive strategy involved the direct intervention into the property rights structure of industrial holdings in order to "deconcentrate" industries deemed by the Allies to have "unhealthy" or "undemocratic" monopoly structures. The same logic was also applied to cartels: Allied powers immediately advocated the elimination of all cartels in the both economies.[47] The creative element of occupation strategy came with efforts to create rules for practice in the economy that would prevent the re-emergence of the structures that the Allied governments destroyed and which would encourage instead the development of strong, countervailing organizations in markets and in society. In both occupied countries, this resulted in a very aggressive emphasis on antitrust legislation as well as a positive disposition toward the emergence of an organized labor movement.[48] Both kinds of shifts, American reformers believed, would foster the democratization of the occupied economies. Significantly, though the American occupiers viewed the formation of trade unions and employers organizations favorably and understood their competition and cooperation to be constitutive of stable democratic order, they disapproved of direct joint governance by these groups: Bargaining over wages among independent organizations was acceptable and democratic; parity occupation? of single organizations to determine and set wages and prices was not. The US wanted plural sources of social, economic and political power.[49]

In both occupied countries, the steel industry became a primary target of both the destructive and creative aspects of Allied occupation reform. The huge market positions of Japan Steel and Vestag and HGW were considered by the occupiers to be excessive: They were concentrations of economic power that circumvented efficiency-inducing competition and gave producers the potential to hold society hostage to their interests. Likewise, the companies that were part of diversified combines (*Konzerne* and *Zaibatsu*) were attacked as unreasonable concentrations of power: Cooperation was viewed as collusion that undermined developments toward greater efficiency and larger scale within individual market segments. Both types of firms, and the bifurcated market structures that they created in the steel industry, became the targets for dismantling by military authorities in both Germany and Japan. Naturally there was resistance in both societies to these reforms. The remainder of this section will detail the reforms that were both pursued and implemented in both countries. The subsequent section will address the reality of resistance and the transformation of indigenous and American ideals it ultimately produced.

A. Allied Policies for the Deconcentration, Decartelization and Democratization of German Steel

The American occupiers believed that the extreme integration and cartelization that had traditionally characterized the structure of the German steel industry both blocked the diffusion of efficient technologies and industrial practices in this industry and created dangerous monopoly power in the economy. Outsiders viewed the relatively large numbers of small and flexible rolling mills attached to individual companies as a sign of steel mill monopoly power and its inefficiency, rather than as an explicit strategy on the part of producers to expand their range of products. The Allies agreed that the industry needed to be deconstructed and rearranged in a way that would allow more "modern" and "healthy"—i.e., larger scale and less horizontally diversified—forms of industrial production to take root.[50]

To this end, all of the assets of the iron and steel industry were seized by the military governments in 1946 and early 1947.[51] All six of the major Ruhr steel producers (Vestag, Krupp, Hoesch, Klöckner, GHH and Mannesmann), which alone during the 1930s (before the formation of HGW) had controlled over 78 per cent of German crude steel production, were completely broken up, as were the sprawling HGW and Flick operations (though in these cases there was the additional factor of capacity and units lost in liberated non-German territories). Bargaining between the Allies, the German government and the iron and steel industry throughout the end of the 1940s resulted in a constant game of strategic recombination in the industry. Properties and plants were torn apart and repositioned both on paper and in fact.[52] Ultimately, twenty-three new companies were created, thirteen from the old Vestag alone.[53] (Table 3)

Table 3: The 23 "New" German Steel Enterprises Created After World War II*

New Enterprise	Old Parent
Deutsche Edelstahlwerke AG, Krefeld	Vestag
Rheinisch-Westfälische Eisen- und Stahlwerke AG, Mülheim/Ruhr	Vestag
Bergbau- und Industriewerte GmbH, Düsseldorf	Vestag
Hüttenwerke Phönix AG, Duisburg	Vestag
Dortmund-Hörder Hüttenunion AG, Dortmund	Vestag
Gußtahlwerk Bochumer Verein AG, Bochum	Vestag
August Thyssen-Hütte AG, Duisberg-Hamborn	Vestag
Hüttenwerke Siegerland AG, Siegen	Vestag
Gußtahlwerk Witten AG, Witten	Vestag
Rheinische Röhrenwerke AG, Mülheim	Vestag
Niederrheinische Hütte AG, Duisburg	Vestag
Stahlwerke Südwestfalen AG, Geisweid	Vestag
Ruhrstahl AG, Hattingen	Vestag
Mannesmann AG, Düsseldorf	Mannesmanröhren-Werke
Hansche Werke AG, Duisburg-Großenbaum	Mannesmanröhren-Werke
Stahl- und Walzwerke Rasselstein/Andernach AG,	Otto Wolf

Neuweid	
Stahlwerke Bochum, AG, Bochum	Otto Wolf
Nordwestdeutscher Hütten- und Bergwerksverien	Klöckner
Hoesch-Werke AG, Dortmund(Hoesch)	Hoesch
Hüttenwerk Rheinhausen AG, Rheinhausen(Krupp)	Krupp
Eisenwerk-Gesellschaft Maximilianshütte AG, Sulzbach-Rosenberg-Hütte (Friedrich Flick KG)	Friedrich Flick KG
Luitpoldhütte AG, Amberg	Reichswerke AG für Erzbergbau und Eisenhütten
Hüttenwerk Oberhausen AG, Oberhausen	Gutehoffnungshütte Aktienverein für Bergbau und Hüttenbetrieb

***Ilseder Hütte, the twenty-fourth enterprise, was left unchanged by the rearrangements.**

Source: Stahltreuhändervereinigung, Die Neuordnung der Eisen und Stahlindustrie im Gebiet der Bundesrepublik Deutschland, (Munich: C. H. Beck'sche Verlagsbuchhandlung, 1954)

The new structure of the industry was organized around steel works: each new company was dominated by one works. But, significantly, the degree of diversification in the finished rolling-mill product palettes in each of the newly created steel firms was disrupted. Though the Deconcentration Authority for the Steel industry (*Stahltreuhändervereinigung*) attempted to retain as much integration between existing steel and rolling mills as "was technically necessary", much capacity was deemed inessential and allocated to other steel production units.

In this way, parts of the industry's rolling-mill capacity was spread across the industry, rather than within firms. This kind of distribution of plant linkages was often extremely awkward: In some cases rolling mills were realigned with steel works that could not supply them with the proper kind of steel and separated from ones that previously had.[54] But this kind of allocation of capacity was desirable from the point of view of the reformers both because it was difficult otherwise to achieve the goal of creating more companies to enlarge the arena of competition and because it raised the costs of diversification and created an incentive for firms to grow by increasing the scale of rolling mills they possessed. A political conception of the proper relationship between market order and democratic order, in other words, trumped narrower concerns of technical and economic efficiency.[55]

This intentional reallocation of finishing capacity among steel works was most dramatic in the Vestag successor companies, but a narrowing of rolling mill capacity occurred within the steelmaking operations of the old *Konzerne* as well. Often this was less the result of explicit deconcentration efforts than it was the outcome of war damage or dismantling losses in rolling-mill plant which the deconcentration authorities did not attempt to redress. But, whatever the cause, the key outcome of the deconcentration for all firms' steel operations was the need to seriously rethink their strategy in rolled production. In particular, the old prewar strategy of the *Konzerne* steel units which emphasized product proliferation, specialty production and broad horizontal synergy and diversification was now not only seriously undermined, that is, physically and technologically, but it became only one of a number of alternative strategies available to producers as they set about reconstructing themselves.

In addition to this specialization of core steel production units (blast furnaces, steel mills, rolling mills), deconcentration also aimed at severing all but the most essential non-steel ties within the old *Konzerne* enterprises.[56] The logic here was the same as within steel more narrowly defined. The broad cross-sectoral diversification of the *Montankonzerne* was viewed both as inefficient and monopolistic. Such enterprise structures were undesirable from an Allied point of view in two ways: They allowed steel operations to run inefficiently by providing them with guaranteed markets, while at the same time effectively subsidizing the downstream operations which perpetuated inefficiency and market fragmentation there as well. The Allies did not view the *Konzerne* as dynamic entities pursuing strategies of continuous innovation and product proliferation; they understood them instead to be archaic and pernicious economic forms that constituted obstacles to efficiency, democracy and progress[57]. The effect of breaking up cross-sectoral linkages, however, was nonetheless to undermine the dynamic economies of technological variety that had sustained the *Konzerne* in the prewar period.

All of Vestag's machinery and manufacturing interests were collected together in the Rheinische Stahlwerke AG, its coal holdings into three independent companies and its trading businesses into the Handelsunion AG.[58] The same vertical deconstruction occurred in most of the *Konzerne*. Mannesmann, Klöckner and Hoesch, for example were stripped of crucial steel plants, all but their most-needed coal mines and most of their downstream engineering interests.[59] The GHH had its networks of coal mines and steel mills expropriated but retained its extensive holdings in manufacturing, primarily in heavy engineering and shipbuilding. Its sizable former steel operations in Oberhausen were constituted as a fully independent steel company, the Hüttenwerk Oberhausen AG (HOAG).[60] Krupp was forced to sign a commitment to separate legally all of the family's steelmaking facilities (concentrated primarily in the work at Rheinhausen) and attendant coal mines from the rest of its business, collect them into a holding company, and sell them off. The major non-steel lines of Krupp's business included some trading companies and a wide variety of specialized heavy engineering workshops located around Essen and in the Ruhr Valley more generally.[61]

Deconcentration thus significantly reorganized and decentralized both the production of steel and rolled products and the broad cross-sectorally diversified companies that produced them. The bifurcated industry structure of giant mass producers surrounded by smaller specialist producers was eliminated. Individual producers were smaller, less integrated (especially with forward non-steel sectors), and less diversified producers of rolled steel products. These developments totally destroyed the coherence of both the industry and the companies in it as they had existed prior to the war.

The strategic intent behind all of these deconcentration efforts (i.e., to create the economic conditions for the formation of oligopolies and integrated mass producers and the social conditions for pluralist democratic order) was reinforced through the simultaneous implementation of very strict decartelization measures in the industry. An outright ban on all cartelization in the German economy was announced by all three Allied governments in the west in 1947.[62] The ban was enforced by the Allied occupying governments until 1955 and continued to be enforced by the Germans thereafter until it was replaced by a new law governing competition in 1957. This ban on cartels was complemented on a European level in the coal and steel industry where the European Coal and Steel Community Treaty and Organization (ECSC) made the rejection of all forms of cartel a condition of membership.[63]

The intention of this rule-change regarding cartels was to alter the environment in which producers in the steel industry competed. In the prewar industry structure, concentration, specialty production, horizontal diversification and cartelization were integrally related. Volume production of standard products was concentrated in the large Vestag and HGW combines, while production of-lower volume and more specialized products was taken by the smaller, horizontally diversified *Konzerne*. The large volume producers strove for scale economies, while the *Konzerne* looked for horizontal synergy's and economies of scope across their many manufacturing businesses. The curiosity of this structure is that it gave the smaller *Konzern*-based specialist producers an interest in the formation of cartels to stabilize competition. With a wide variety of smaller-sized rolling units, oriented toward specialization, yet with high fixed costs despite their small size, the threat of ruinous price and terms-based competition during downturns in the business cycle was very real to these producers. By forming cartels, they could stabilize the structure of specialization.[64]

The Allied and ECSC reform measures undermined the integral logic of this industry structure. In effect, the reforms discouraged strategies of specialization and customization in finished products (by taking away the governance mechanisms and business forms that made them stable and profitable) and created the possibility for the radically-fragmented pieces of the industry to be recombined, both within firms and across the industry as a whole, in ways that would facilitate larger-scale, more "efficient", production. Through specialized investment in select finished-product markets, greater capacity in each product-market segment could be spread across a more limited number of firms than had been possible in the past. Bifurcation would be replaced by oligopoly; monopoly and specialization by mass production. In any case, the absence of *Konzerne* strategies of scope and synergy across sectors and the stabilization mechanism of the cartel, the possibility of making profits in a broad variety of rolled products with only a modest scale commitment in each was significantly reduced.

Finally, the occupying powers were extremely active on the labor side in the industry. The prewar German steel industry was notably hostile to trade unionism. This was not only true of the industry during the Third Reich but had actually characterized the industry's outlook from its very inception. While, by 1913, Germany had the largest social democratic movement and one of the world's largest trade union movements, there was no union representation in the steel industry at that time.[65] The High Commissioner for Germany within the occupying government created an Office of Labor Affairs which attempted, systematically, to encourage the rejuvenation of the German labor movement after its period of enforced dormancy within the Third Reich.[66] According to a US Policy Directive for the High Commissioner issued in November 1949, cited by Michael Fichter, the goal of the United States in the labor and industrial relations field was "to encourage the development of free, democratic trade unions and the negotiation of agreements and cooperative settlement of problems between them and employer associations."[67] The Office of Labor affairs sponsored hundreds of trips by trade unionists to the United States to learn about "the American Way of Life". It also sponsored a Training Within Industry (TWI) Program which established educational committees on the shop floor level designed to undermine what were viewed as the "authoritarian or paternalistic" shopfloor relations in German firms and impart more democratic "American" habits. Production units in the steel industry figured very prominently in these programs. Unions began to assert themselves very aggressively in the industry almost immediately after the occupation began.[68]

B. Deconcentration, *Zaibatsu* Dissolution and Allied Efforts to Create a Democratic Economy in Japan

The Allied occupying force in Japan, Strategic Command of the Allied Powers (SCAP), attacked the bifurcated structure of the Japanese steel industry and the diversified multi-sectoral *Zaibatsu* holding companies with at least as much alacrity as they had the analogous structures in Germany. The procedure, timing of the reforms, and official position of the authorities differed significantly in Japan, however. In particular, unlike Germany, there was not actually a Military Government in Japan. Because there was always a clear divide between the government and the military in Japan, and because the government did not collapse as it had in Germany (and perhaps because there were not enough people knowledgeable about the place and capable of speaking the language), the occupation forces dissolved only the military and its institutions, but decided to run all of its reforms through the existing civilian government structure, even as that structure was to be changed. All reforms in politics—including a new constitution and the reconstitution of parties, changing the suffrage laws etc.—as well as policies of deconcentration and promulgation of new rules regarding market behavior were formally legislated by the Japanese government and carried out by the bureaucracy—though always at the bidding of the SCAP.[69] Nonetheless, Allied antipathy toward "monopoly" power and multi-sectoral conglomerates came through very clearly in the policies that were ultimately put in place. As in Germany, SCAP pursued policies that were both destructive and creative.

The earliest and most economically significant target of SCAP destructive policy were the *Zaibatsu* firms.[70] These were attacked in a number of ways, all of which effectively destroyed the coherent, centrally-controlled and diversified *Zaibatsu* as a governance structure in the Japanese economy.[71] First, a Holding Company Liquidation Commission (HCLC) was established which designated 83 holding companies for immediate dissolution. This list included all of the major *Zaibatsu* property interests (Mitsui, Mitsubishi, Sumitomo, Yasuda, Asano, etc.) and all of those who had significant interests in the steel industry. Then in 1947 the ten major families who controlled these 83 designated companies and other companies were declared to be "*Zaibatsu*" families. The ownership shares of both the families and the holding companies were transferred to the HCLC. Further, a 1947 Anti-monopoly law, also designed by the SCAP but implemented by the Japanese government, completely outlawed Holding companies (among other things). Then, the resale of the assets of the dissolved holdings were limited in crucial ways: In particular, no one was permitted to purchase more than one percent of the shares of any given company.[72] Taken together these policies effectively eliminated the traditional structure of family control through holdings of broadly-diversified multi-sectoral operations.

Next, there was a purge of leading managers in the largest companies (not only *Zaibatsu*): The SCAP mandated the removal of all the wartime chief officers of 200 important companies in the economy. Moreover, participation in the new management of the restructured companies by *Zaibatsu* family members or any of the high-ranking directors of 240 *Zaibatsu* -related companies were banned for a period of ten years. There are disagreements in the literature as to how many managers were actually purged as a result of these measures: Hadley estimates around 2500 while Aoki places the figure at 3500. In any case, it seems fairly clear that an entire generation of top leadership in firms was wiped away by SCAP efforts to cleanse the positions of power in the economy of "militarists and ultra-nationalists".[73]

So much for the diversified, multi-sectoral combines. These reforms undermined the old system of central coordination of diversified operating units and created essentially autonomous and isolated units, weakly related by interpenetrated property ties (and, crucially, without any controlling property interest). In the context of the steel industry, as in the German case, this had the consequence of cutting loose the individual producers from the security and technological and market resources provided by their association with up and downstream conglomerate units. The most dramatic example of this was the case of Kawasaki Steel which, due to the personnel and property changes in the Kawasaki Group, severed itself completely from its long-time parent, Kawasaki Heavy Industries. As in the German case, this new autonomy would profoundly affect the strategies that individual producers believed that they could then pursue (particularly after the break-up of Japan Steel as will be discussed below).

A final destructive intervention was the abolition of the Control Association infrastructure that had been created during the war at the bidding of the military. These organizations were viewed as monopolistic, market-hostile forces and as sources of cartelization—all of which undermined the emergence of a plurality of organizational forms in the economy. The Iron and Steel Control Association was among the first to be abolished (in February of 1946 by SCAP decree) but by the end of the year all remaining Control Associations had been ordered to be abolished.[74] The US was hostile to the control function of the Control Associations: i.e. The central control and allocation of investment resources within an industry. But SCAP was not opposed to the existence of trade associations in an industry, per se. In the Trade Association Act of July 1948, while banning all control functions and all other activities that were or could lead to cartel, monopolistic or unfair trade practices, the law explicitly allowed trade associations to "receive voluntary submissions of statistical data and to publish such data in summary form without disclosing business information or conditions of any particular entrepreneur".[75] The law also allowed the dissemination of technical information and cooperation in research. In other words, as long as trade associations acted like trade associations in the United States, representing the interests of their members and providing non-market related services and publicity, they were acceptable and fully compatible with a pluralist economic order.[76]

As in Germany, SCAP's actions were not all destructive. The military authority also made an effort to create a set of rules in the industry that would foster the development of a pluralist political and economic order. American style antitrust legislation was passed on April 14, 1947 by the not yet newly-constituted Japanese parliament. As in Germany, it completely outlawed all forms of cartel arrangements and severely curtailed the possibilities for merger and holding company arrangements as well. In the spring of 1948, US authorities allowed the law to be reformed to reduce the severity of obstacles to merger. They also established at that time a Deconcentration Review Board, staffed by American business and government officials, to review each individual market arrangement to determine precisely whether or not it constituted unfair competition. This innovation slowed the initial hell-bent anti-monopolist fervor of US deconcentration policy, but it established an effective mechanism to ensure that only organizations consistent with American pluralist conceptions of market order would find the space to reconstitute themselves.[77]

The central achievement of this new system was the break up of Japan Steel. Like the Vestag (and the HGW), this large firm was taken to be an "unreasonable" concentration of economic power by the Allied authorities. Unlike Vestag, Japan Steel was not fragmented into as many pieces: Instead of the 13 that came out of the Vestag, Japan steel was broken into two new and independent firms: Yahata Steel and Fuji Steel.[78] This move had a significant impact on the industry, in two ways. First, it increased the number of integrated producers in the industry from 2 to 3 (in addition to Yahata and Fuji, NKK was also integrated). Second, and more significantly, by making the formerly state-controlled Yahata and Fuji private firms with a responsibility to sell their production on the market at competitive prices, the break-up of the firm introduced significant uncertainty in the supply of pig iron to non-integrated producers. In the past, non-integrated firms such as Kawasaki, Sumitomo and Kobe had been content to purchase pig iron from Japan Steel at subsidized prices. Now this was no longer possible—and, moreover, since Fuji and Yahata had to be competitive in finished product markets as well, they posed a significant competitive threat to the non-integrated steel producers.[79] SCAP's hope was that by introducing greater competition into the integrated steel sector, this would ultimately foster the adoption of more efficient, vertically-integrated structures by all remaining producers and ideally, in the emergence of a new, stable oligopolistic market structure.

Indeed, taken together, it is clear that the combination of destructive and creative policies completely ruined the set of institutions and practices that had created the distinctive bifurcated structure in the prewar steel industry: Instead of one there were several integrated volume producers and the specialty producers no longer had dynamic relations with conglomerate partners nor the ability to arrange and stabilize the boundaries of their specialties in the market through cartelization. The new environment that the SCAP reforms created, moreover, structured incentives in such as way as to make the pursuit of volume and integration more attractive than attempting to re-cast the strategy of specialization.

Finally, again as in Germany, moves were made to foster the emergence of an organized labor presence both in Japanese industry generally and in the steel industry in particular. As in Germany, during the entire period of industrialization, labor organizations had suffered from considerable repression in the steel industry (though, unlike Germany, in Japan they had made few inroads elsewhere).[80] In October 1945, General Douglas MacArthur (the head of SCAP) instructed the Japanese Diet to enact labor legislation that would protect the rights of labor, including the right to organize. Ultimately three crucial laws were enacted in the ensuing year which established a very favorable environment for the formation of trade unions and collective bargaining.[81] The first law, the Labor Union Law, guaranteed workers the right to organize, collectively bargain and strike. Discrimination by employers for union activity was also outlawed. This law further established a national Central Labor Relations Commission as well as regional commissions in each prefecture. The second law, The Labor Relations Adjustment Act, explicated more precisely the role and purview of these boards. Essentially they were constituted as arbitration boards in which representatives from labor, employers and government sat in deliberation. Finally, a third piece of legislation, the Labor Standards Law, set minimum hours, wages, insurance, injury compensation and unemployment benefits for all workers, unionized and non-unionized[82].

The American authorities conceived of these moves as essential for the creation of a social infrastructure in Japan capable of sustaining democracy. Crucially, however, though supporters of union organization in markets for political reasons, the US authorities were strong opponents of political activism on the part of unions. As Cohen writes of the view of the Occupation labor department that he headed, "To the Americans, political unionism, that is unions as partners of a party, was an anti-democratic and un-American concept".[83] Japanese unions and workers did not agree with this idea, as we shall see. Indeed, in the following section we will see that many of the framework interventions undertaken by the occupying governments encountered resistance from the occupied societies, giving rise to a significant social, economic and political transformation in each society.

III. The Appropriation and Transformation of American Ideals in Germany and Japan

Most treatments of the American occupation of Japan and Germany have narratives that begin, as this one has, with aggressive American efforts to reform the indigenous systems. But typically the narratives then turn to internal conflicts or incoherence within the occupation governments, intransigence on the part of powerful local leaders and finally to a weakening of American resolve for reform, especially in the economy, with the onset of the Cold War and in particular the outbreak of the Korean War—all of which are held to undermine American reform ideals and lead to a "reverse course" in policy or the reconstitution of central institutions and actors from the prewar societies.[84]

Without in any way wanting to cast doubt upon the *existence* of factors disrupting American resolve and distracting attention, the discussion here will depart significantly from this traditional narrative of American failure. Its claim, as indicated at the outset, is both that American occupation profoundly altered the German and the Japanese political economies and that indigenous institutions, actors and ideas transformed the American ideas in the process of appropriating them. This mutual transformation of the occupied and the occupiers occurred not by the allies imposing particular institutional forms on the occupied lands and the occupied populations blocking some and not blocking others and/or deconstructing those imposed structures. Rather, the mutual transformation occurred because of the way in which contestation itself was constituted. American power successfully established a range of normative social, economic and political background ground-rules according to which deliberation about the construction of new institutions had to take place. Yet, these background rules (pluralism, cross cutting power, anti-monopolism, limited state power, etc.) were neither unambiguous nor directly reducible to a finite set of clearly "American" organizational forms or practices. The deliberative process of identifying a practice or institution that could be legitimately recognized as consistent with higher normative goals resulted in the mutual transformation of all participants understanding of the object of deliberation. We will look at the German case first and the Japanese second.

A. Engagement With American Reform Efforts in Germany

The defeat of the Nazis and occupation by foreign anti-national-socialist powers utterly delegitimized the understandings of market order and state power that the Nazis had attempted to institutionalize during the Third Reich. At the same time, a space was created by the occupation for the re-assertion of ideas about social and economic order that had been suppressed by the Nazis. Holders of these views were forced by the situation, however, to articulate their positions anew in ways that addressed the Allied critique of the authoritarian elements within the German political economy and of the Allies'priorities for a pluralist democratic order in the economy and the polity. This joint, interpenetrated, recomposition of imposed and traditional categories occurred in three areas in the context of the steel industry debate: a.) in the area of property rights in industry and the sovereignty of private property ownership; b.) in the area of codetermination, workplace democracy and the scope of trade unionism and c.) regarding the reconstitution of market competition, antitrust and cartelization.

Property in Industry

The property issue was central to all discussions of industrial restructuring in the occupation period and it was of decisive importance for restructuring in the steel industry.[85] While the US government and German industrialists both opposed the elimination of private control of the steel industry (unlike the British[86]), the two did not share the same conception of the political significance of private property or of its role in political order. In the American view, private property was, at its most basic level, a constitutive feature of a market economy, without which there could be no exchange. By protecting its sovereignty in market competition, and yet at the same time opposing monopoly, Americans believed that an ensuing healthy competition among private capital would drive innovation in the economy, expand the spectrum of opportunity for individual private actors and create the social power of organization to limit the unhealthy growth of state power. This view of property assumed an equality among property holders and understood social order to be a competitive equilibrium among plural sources of social and political power. Private property was constitutive of the American conception of liberal-democratic pluralism.

German industrialists had a conception of private property that had little to do with equality, liberal freedoms, democracy or competitively-constructed social order. For them, private industrial property entailed both a particular status in society and a whole range of mutual obligations with other social groups, the nation and the state. Whether as individual private property holder or as managerial representative of diffused joint-stock capital, the status associated with private industry came from an idea that society was divided into specialized roles—skilled workers, farmers, artisans, shopkeepers, bankers, lawyers etc.—and that private industrialists played the esteemed role of steering industrial production, providing employment and income, housing, education and social provision for their employees and driving industrial progress. It was significant for the private industrialists that their ownership of property entailed authority: If they were obligated to provide their employees with the benefits just noted, they fully believed that their employees owed them unconditional respect for their authority, and all matters relating to it, both within and outside of the factory walls.[87]

German private industrialists, in other words, understood themselves to be playing a crucial role , *as a corporate group*, in the maintenance of the traditional social and political order in Germany. As mentioned in part one of this chapter, this role was to be performed in support of and in conjunction with, but always independently of the state. Large industrialists understood their role as contributing to the greatness of the nation, not to the greatness of the state. For them, the state, as a higher authority, had complementary ends and reciprocal obligations to its citizenry to maintain public order, respect the order of status and entitlements in society and provide for the developmental needs of the nation. Industrialists believed that the power of the state should be limited vis-à-vis the rights of property, just as they believed their own power over their workers was tempered by obligations. Such mutual recognition and limitation contributed to good order. Though perhaps obvious, it is important to underscore that there is nothing in this view of the rights and status of private property that held that the state should be democratic or even equally limited in its power relative to all social groups—hence German industrialists' tolerance of Nazi labor measures and labor repression but resistance to Nazi efforts to influence managerial decision-making.[88]

In the context of Allied occupation and debates about the deconcentration of the steel industry, then, private property was not private property. And, in the face of Allied power (all steel assets were held by the Allied government in trust), German steel industrialists found it prudent in the struggles over restructuring to formulate their arguments for the social and political value of private property in industry in a way that was consistent with American understanding. Crucially, they did this in a way that did not involve the simple appropriation of the American view. Rather they highlighted elements within their traditional view that resonated with the American one. In particular, an important industrial argument regarding private property throughout the occupation period (and well into the mature Federal Republic) involved the important role that private capital and its organizations could play in the limitation of state power and as a bulwark against the return of authoritarianism. Weak property rights and poorly organized industrial associations, they argued, made society vulnerable to unjust incursions of state power and prey for demagogic political actors.[89] Further, this idea of the central significance of sovereign private power being capable of limiting state power was linked to the traditional idea of self-government (*Selbstverwaltung*) in which private industry as well as its associations were understood to have the social obligation and privilege of being able to govern its own affairs without outside interference.[90] These very traditional ideas about the significance and rights of property could be made to appear consistent with American desires to establish a regime of private property that would foster social pluralism, limited government and economic progress.

What the new German positions did not do, however, was abandon the idea of society being composed of deeply-entrenched functional groups, whose location and identity involved complex notions of status, entitlement and mutual obligation. By emphasizing the key limiting role of private property on the growth of state power, German industrialists were simply highlighting the part of their understanding of property that was compatible with the American notion of property. There was nothing manipulative or dishonest about this: This was simply a way in which the American discourse could be understood within the traditional frames of German understanding. Indeed, the American insistence on democratic pluralism encouraged this kind of recomposition in the German view.

By the same token, it is important to insist on the idea that this was not a process of the Americans being somehow duped. When the military authority decided to make the restructured steel assets exchangeable for shares in the *Altkonzerne* in May of 1951, the Americans did so because they understood German arguments as acceptance of their own understanding of private property as a vehicle for social and political pluralism. According to James Stewart Martin, who didn't believe this, the view was: "They were not Nazis; they are businessmen."[91] The American occupiers understood the category of "businessman" or private industrialist to have a transparent meaning—as did the Germans. Yet, in both cases the Germans and Americans were nodding their heads in agreement when the content of what they agreed upon differed quite radically.

For the German actors, their own position merely involved a recalibration of the kinds of entitlements and mutual obligations that were to be publicly associated with private property: Private property in industry was still understood to be crucial for the maintenance of social order and hence deserving of respect and recognition. The American view denied that distinctions of status and entitlement could be politically drawn among private actors, while the adapted German view assumed this to be a foundational dimension of what was meant by private control of industry. In both forms of understanding, however, private property constituted a countervailing power against the authority of the state—and this was crucial for Allied approval.

An additional arena in which a recalibration of indigenous understandings of social categories and political status took place in confrontation with American ideas was in the context of the governance of the workplace and the labor market. As in the case of property in industry, German and American understandings of markets, social order and democracy diverged despite formal harmonies and the appearance of consistency in social and political understanding. The interesting aspect of this process of recomposition is that it occurred in interaction with the developments in the reconstitution of property just outlined.

Codetermination, Workplace Democracy and the Scope of Trade Unionism

As noted earlier, the Allied government was favorably disposed to the formation of trade unionism in occupied Germany and very much encouraged the development of collective bargaining practices. This was in line with their idea of pluralist democracy as a system of countervailing powers. German workers embraced this idea enthusiastically. But they also extended it in a way that went far beyond the American understanding of a trade union or of the proper boundaries of countervailing power in the labor market. The reason for this stems from the fact that, unlike the American occupiers, the German workers understood the traditional roots of the social and political lines that German industrialists were drawing around their property. In response the labor movement sought to apply American notions of the limitation of power (or at least that language) to what it viewed as unwarranted concentration of corporate social power in the form of independent managerial control over industrial enterprises. In the German labor movement's view, the only way to get countervailing power was to have it inside industrial enterprises.[92]

To be sure, this idea had a wide variety of indigenous precursors: Social Catholics and social democrats had both advocated variants of industrial democracy during the Weimar Republic (and even before) and syndicalist ideas had informed the spontaneous takeovers of factories after both the First and Second World Wars.[93] But the particular variant that emerged after World War II in the context of occupation and restructuring in the steel industry was distinguished from these by the way in which its defenders indicated its consistency with American understandings of pluralist democratic order. Previously, codetermination had been argued for very much in corporate social terms, i.e. as an argument for the social entitlement of the working class to be able to co-influence the organization of work and the direction of the production unit's investment. In the postwar variant, the language was not about social entitlement for the working class, but about the need to limit concentrations of private power with countervailing social organizational power in order to create secure democratic order.

Though they were wary of the threat to their own understanding of private property that codetermination seemed to pose, the American governors, and other American observers seemed to be persuaded that, though unconventional, codetermination was at least consistent with their own democratic concerns. Clark Kerr, an early observer of the German labor movement from the United States, made sense of the codetermination in this revealing way:

> The program defies labeling for it is not social democracy, nor catholic corporatism, nor socialism, nor capitalism, nor syndicalism, nor voluntarism, although it bears some similarity to each. It might, perhaps, be termed "joint economic pluralism." "Pluralism" because it envisages many loci of power, "economic" because it emphasizes the role of functional interest groups; "joint" because power is shared by capital and labor. It is a sort of meeting ground between liberalism and socialism, for it has elements of both private enterprise and social control. It is also a meeting ground for capital and organized labor since each, in Germany, favors a privately controlled economy. The battle between them is not an ideological one of capitalism versus socialism; rather it is more a practical but nonetheless quite intense one over how joint shall self-administration be.[94]

The German unions sold codetermination as an institution for the limitation of private industrial power and the American occupiers understood it that way. Yet codetermination was not only that. It was also clearly understood by both trade unionists and employers in Germany as an institutional move to secure and improve the social and political status of the working class. It challenged the social and political entitlements involved in the industrialists' understanding of their social position and asserted the rights and entitlements of workers. This latter dimension of the struggle over codetermination was very far removed from the liberal pluralist concerns of the Americans. It involved the recalibration of corporate social rights. Or, as the eminent legal theorist Ernst-Joachim Mestmäcker criticized in the 1970s when revision of the law was being widely debated, the legal justification of codetermination by the trade unions has a liberal pluralist heritage, but this heritage has always paradoxically supported a system of political entitlement for the participating social groups.[95]

The system of codetermination was thus neither the direct product of Allied occupation nor thinkable in its precise form without it. Consistent enough with American pluralist ideals to lead the American authorities to keep arms length over the German debate over the passage of the law, calling it a "German affair", the system of codetermination was also an arrangement that never spawned any imitators in the United States. By all accounts, however, the system was a tremendous advantage for the steel producers during the great postwar economic boom. It fostered cooperation between labor and management in the labor market and on the shop floor and thereby gave steel producers remarkable flexibility in work and production.[96]

Reconstitution of Market Competition, Antitrust and Cartelization

As we saw in the previous section, Allied intervention into the order of markets in the steel industry was extremely aggressive: Firms were broken up and reconstituted as much more specialized units, downstream linkages to machinery and other product markets were severed and all manner of cartelization was banned. It was plain to the steel managers that the Allies were attempting to block the reconstitution of the old prewar industrial structure and encourage a more mass production-oriented, oligopolistic industrial structure to develop.

German steel managers were divided on the attractiveness of this situation. Some, such as Hermann Reusch of the GHH *Konzern* , found the entire Allied program unacceptable and abandoned their commitment to the steel industry and concentrated their business in the machinery sector. Others, however, recognized the kind of strategy the Allies were encouraging as reminiscent of a strategy that earlier actors in the industry, such as August Thyssen, had advocated, unsuccessfully, earlier in the century.[97] Thyssen and his allies failed in the earlier period both because of the intransigence of existing property relations in the industry blocked consolidation efforts and because the bifurcated industrial structure of a large volume producer and numerous more specialized *Konzerne* proved to be a profitable alternative strategy.[98] With the old firms physically and technologically broken up into distinct property units and Allied hostility toward the *Konzerne* strategy, the mass production and oligopoly strategy appeared both attractive and possible. Here, producers found that a strategy for development was being made available to them that was both consistent with a dimension of their past and in line with the American understanding of “modern” industrial structure.

Seen in this light, it should be of little surprise that the industry developed in precisely this way during the 1950s and 1960s: In response to strong demand during the Korean War and then subsequently with the growth of the automobile and other consumer goods industries, producers invested heavily in new, larger-scale, modern rolling-mill equipment, in particular wide strip mills, that enabled them to achieve greater production efficiencies at higher volumes. At the same time, a process of concentration occurred in the industry over the course of the 1950s as the smaller units created by the Allied deconcentration reforms were recombined to consolidate industry capacity and accommodate the large-scale technologies.

This process of recomposition in the industry can be clearly seen in the way that the companies of the old Vestag were recombined during the initial period of expansion. Of the thirteen steel companies originally created out of the break up of the Vestag in 1953, only four were left by the beginning of the 1960s: the August Thyssen Hütte AG (ATH), the Phoenix-Rheinrohr AG, Rheinische Stahlwerk AG (Rheinstahl) and the Dortmund-Hörde Hütten Union (DHHU).[99] For the most part, the consolidation and expansion of these companies did not result in direct competition between them. Instead, each expanded and consolidated its capacity in areas that the others ignored. The vast majority of the steelmaking capacity of the old Vestag was reincorporated within the operations of either ATH or Phoenix-Rheinrohr and their product offerings and specializations in rolled product markets were for the most part not overlapping.

ATH specialized on the production of lighter, semi-finished and finished rolled sheet and coils, and wire and specialty steels, whereas the Phönix-Rheinrohr specialized on the production of steel pipe, heavy plate, semi-finished steels and raw iron.[100] The coordinated growth and reconsolidation of these two companies was facilitated by the fact that both enterprises were controlled by different members of the Thyssen family.

Rheinstahl, which had very broad ownership, was less interested in getting involved in the reintegration of Vestag steelmaking interests. This company received all of the non-steel manufacturing interests of the old Vestag as a result of deconcentration. It held an interest in only a small number of relatively small and specialized steel works from the old Vestag, and, though it continued to produce steel during the 1950s, it was a very minor player in the industry.[101] The DHHU, for its part, was an important producer of crude steel. But unlike its larger Vestag cousins, the company was not as broadly diversified across steel industry markets. By the beginning of the 1960s, the company was concentrated on two general areas: It was the Federal Republic's largest producer of heavy plate and an important producer of steel bars and structural steel.[102]

Together, these four firms, with their coordinated capacities, accounted for nearly 35 per cent of west German crude steel output in 1960/61 – ATH and Phönix-Rheinrohr together accounted for 20.91 per cent. Another 41 per cent of total industry output was taken up by the steel operations of the former *Konzerne* Hoesch, Klöckner, Mannesmann, Hüttenwerk Oberhausen AG (HOAG)[103] and Krupp.[104] On the whole these producers followed the DHHU pattern of specialization, each attempting to organize its steel and rolled-product output in a way that would give the company a strong position in a limited number of markets. Thus, for example, Mannesmann concentrated its production on steel pipe and a variety of high quality fine and zinc-treated plate steels, Krupp on specialty steels, structural steels, bar and semis, Hoesch on sheet steels and fine plate, HOAG on heavy plate, structural steels and specialty wire and Klöckner on sheet steels, fine plates, wire and bar.[105] The producers accounting for the remaining 15 per cent of the industry's output in 1960, who were located both inside and outside of the Ruhr, followed a similar pattern of specialization.

The emergence of oligopolized sub-markets and more specialized firms oriented toward mass rather than specialty production ultimately resulted in a distinctly different industry structure than had existed prior to World War II. Before the war, only six companies controlled nearly three-quarters of the industry's total output, whereas by 1961 that same share was divided among nine enterprises. More significantly, the successor companies of the old Vestag did not recapture the same dominant share of industry output that had belonged to their ancestor: Vestag had accounted for roughly half the industry's total output during the 1930s, whereas the successor companies were only able to achieve 35% by 1961. Decartelization and deconcentration in the 1940s and early 1950s had succeeded in creating a more internally-specialized and more competitive German steel industry—much as the Allies had intended when they busted up the old structure at the end of the war.

Nonetheless, it would be misleading to characterize this newly structured German steel industry as a complete triumph of Americanization. Its new structure and practices differed in significant ways from the American pluralist conception of mass production and oligopoly. First, as indicated above, the actors in the industry, both in management and labor, understood themselves to be corporate groups with social and political status in the broader society and with an understanding of mutual obligation and responsibility. By all accounts, this mutually-accepting, and through codetermination, institutionalized, arrangement created significant flexibility within high-volume production. Labor and management were able to cooperate in ways that allowed firms to take on special orders, produce in varied lot sizes and reallocate labor and materials within plants in ways that the more rigid, bargained out arrangements of equal contracting citizens in American plants did not allow.

Indeed, secondly, this reserve of flexibility within the new industry and its structure led the actors in the industry to favor a modified rather than the strongly American version of Cartel Law in the debates over the reform of German antitrust law that raged during the 1950s.[106] This modified version accepted the general American injunction to condemn cartels and monopoly of any kind. It insisted, however, on a concession to flexibility in that it rejected the proposal for a strict ban on cartels in favor of negotiated and constructive solutions to problems of market order among the industry players and the Cartel Office of the Federal government. Moreover, several forms of cartels, in particular rationalization cartels, were permitted under the antitrust law that was accepted by parliament in 1957. Both of these characteristics of the new rules of market order were sympathetically received (if not enthusiastically lobbied for) by the steel industry because it created space among firms for the flexible orientation to the market that the situation inside the plants was making possible. These provisions in the law proved to be significant for the industry in the late 1960s when overcapacity became a problem and producers avoided ruthless and destructive competition by forming distribution syndicates for the allocation of their finished steel. These syndicates both removed pricing from competition and facilitated the recombination of capacity and specialization within the industry.[107]

In conclusion, it is clear that though the German steel industry adopted or was forced to adopt American principles of market order and production and was profoundly changed by this encounter, this in no way resulted in an erasure of distinctively German features in the production of steel. Indeed, German producers embraced the vocabulary and practices of Americanism and pluralism, but in doing so transformed them in ways that either were consistent with their own prior understandings and practices or extended the received principles in ways that were not in evidence in the US nor foreseen by the Allied reformers. We will now see that, on this level, the case was very similar in Japan.

B. Engaging Allied Reforms in Occupied Japan

Allied reforms engendered debate and transformation in different areas in Japan than they did in Germany, in part because the character of the occupation was different, and in part because the two were very different political economies in different geopolitical locations. In Japan, for example, the centrality of private property for stable political order was never debated in the same way as it was in Germany: This is not necessarily because Americans and Japanese held the same political understanding of private property in a democratic market order, but more likely because there were neither British socialists nor threatening communist neighbors to push the alternative case in Japan.[108] Nonetheless, at a different level, there were many similarities between German and Japanese experiences. In particular, in Japan, as in Germany, defeat and reform created spaces in the debate for the re-articulation of abandoned, defeated or unrealized conceptions of social and industrial order from the past that the wartime regime had suppressed. Moreover, as in Germany, those advancing such ideas, though liberated, were also constrained by American insistence on the creation of a pluralistic democratic economy. The central areas of contestation relevant to the reform of the Japanese steel industry were: a.) the reconstitution of mutually-limiting relations between the state and industry; b.) the recomposition of firms, associations, and industrial structure; and c.) the recasting of authority in production. The outcome of these encounters was a completely new way of understanding the identity, boundaries and organization of the steel industry.

Government-Business Relations.

American reformers took it as their goal to establish a system of countervailing powers between the Japanese state and economy in order to prevent actors in either realm from gaining unchecked monopoly power. The abolition of the Japanese military, the break up of the *Zaibatsu* holding companies and the dissolution of the old Control Associations, for example, were all guided by the conviction that these institutions had been either monopolistic or unaccountable (or both) and in their basic structures were incapable of being reformed in a way that would allow them to be checked. As noted earlier, however, the central institutions of the civil bureaucracy were not targeted by SCAP either for dissolution or even serious reform.[109] Unlike the other institutions, SCAP believed that it was possible to check the power of the existing state bureaucracy through the construction of countervailing forces and institutions in both the state and in society. The creation of parliamentary institutions that monitored the bureaucracy, the creation of conditions that favored the formation of strong oligopolies in the economy and the construction of a trade association law that both forbade monopolization and encouraged the formation of interest groups, for example, all were directed at the construction of a set of rules and a population of social organizations that could fragment social, economic and political power.[110] Rather than destroy the bureaucracy as it did the other "authoritarian" institutions, SCAP attempted to make it one organization among many in a plural system of social and political power. Though it is possible to say that this is what the reforms did indeed achieve, the self-understanding of the Japanese actors in the change and the quality of state relations with industry differed very significantly from what the Americans had in mind.

Some Japan scholars view the above strategy on the part of SCAP with great irony because they point out that by removing the *Zaibatsu* and the military from the field of play, the occupiers actually enhanced the power of the civil bureaucracy in the postwar environment by removing the traditional indigenous checks on its power without introducing effective countervailing institutional forces.[111] This view, however, significantly underestimates the constraints the new reforms placed on bureaucratic power, and overestimates the power of the elements within the Japanese bureaucracy that believed in unilateral state control over resource allocation. After the reforms, bureaucratic ministries were newly constrained by the constellation of power in the parliamentary arena and by the competing interests and agendas of other ministries.[112] Moreover, Bai Gao argues that with the coming of the market-oriented Dodge Plan and the foundation of MITI, the elements within the bureaucracy which favored a heavily *dirigiste* planned economy lost influence in the construction of state intervention to those who favored a more cooperative and "managed" approach to private actors.[113] In other words, the civil bureaucracy that led Japan through its postwar miracle had an interest in limiting itself as an organizational actor in the economy and encouraging the development of private organizations and markets.

Even though seen in this way the reformed bureaucracy contains features that are compatible with American concerns for the limitation of power, it seems clear that the bureaucrats themselves understood their role and relation to private industry to be consistent with the long-standing developmentalist traditions of the Japanese state. But for the brief period of the ascension of the military in the 1930s and early 40s, the bureaucracy was never interested in directly controlling the allocation of resources in the economy and preferred instead to assist private firms and to use the market to achieve goals that all agreed were significant for the nation. SCAP believed it had modified the structural location of the bureaucracy in a way that made it compatible with its own New Deal-informed conception of a market-friendly interventionist state, while the Japanese believed that they were returning to more traditional mechanisms for the pursuit of national economic greatness. Neither was entirely wrong.

Thus, even in the immediate aftermath of the reforms, when it was in fact the case that the traditional checks on the bureaucracy had been removed, there were clear limits on its capacity and interest in intervening in the economy—some of which were unknown to and unanticipated by the reformers themselves. The subsequent development of the private economy and the associations that engaged it created the kind of societal checks against bureaucratic power for which the Americans hoped. But as is clear from the steel industry example, this new development resulted in a new constellation of relations between the three relevant actors (state, firms, associations) which produced not only mutual limitation, but also a cooperative orientation toward industrial improvement and technological transformation that ultimately far surpassed the competitive capacity of the American industry, embedded in its own less-cooperative system of countervailing power.

Business, Associations and the State

The dissolution of the Iron and Steel Control Association, the breakup of Japan Steel and of the *Zaibatsu* destabilized the steel industry in a whole variety of ways. The smaller and more specialized steel producers were simultaneously confronted with direct competition from larger integrated firms and deprived of the dynamic and nurturing downstream exchanges with diverse *Zaibatsu* units that had previously sustained their strategies of specialization. The large volume producer Japan Steel was broken up into two new units that found themselves in the unaccustomed position of having to compete with one another. The top leadership of all the major firms in the industry was purged and the central association linking firms and fostering intra-industry informational exchange was banned. Neither the structure of the industry, nor the identity of the firms that would constitute it, nor the identity or interests of the managers that governed the firms could be taken for granted nor their strategies for reconstitution clearly defined.

The only aspect of the situation that was very clearly defined for all the actors was that the Americans found the old bifurcated structure of volume producers and specialists to be unacceptable and that they wanted to encourage instead the formation of a competitive oligopoly structure with some number of volume-producing integrated firms. If clarity in the midst of disarray grabs the attention, it shouldn't be surprising that the actors in the industry attempted to recompose themselves along the American lines. There was no debate about reconstituting the old structure of bifurcation because the conditions that had made it possible no longer existed.[114] Ex-*Zaibatsu* firms such as Kawasaki, Kobe and Sumitomo found that they either had to abandon steel production entirely, or commit themselves to strategies of higher-volume production and integration. In the end, the latter option was the one that they took.[115]

This compelling structuralism belies a great deal of local innovation on the part of Japanese actors as they attempted to define precisely what the American constraints actually allowed and how much of their own knowledge of steelmaking and organization could be utilized in the pursuit of the new kind of strategy in production. Destabilization and constraint forced actors to draw on their knowledge of steel manufacture and organization in new ways and thereby led them to possibilities in the organization of integrated volume production and in the nature of oligopolistic competition that were not part of the American program. At the same time, their success in doing so dramatically changed the face of the industrial structure of steel production in Japan.

The move toward integration and volume production was very explicitly conceived of as an effort to adopt an American strategy and move away from the old strategy of specialization. Kawasaki led the way in the integration of the non-integrated works with the construction of its dramatic Chiba Works in 1953. The firm's new chairman, Nishiyama Yataro, decided to construct this plant because he was convinced that the only way for his firm, and for the entire industry to survive, was to adopt an American approach to production:

> The Japanese iron and steel industry must cut costs and develop the ability to compete internationally by switching to the American mode of production and away from the European mode of small-lot production. It is necessary to construct an integrated works with a blast furnace.[116]

Rather than purchase or build upstream operations to complement Kawasaki's existing facilities, Nishiyama sought to gain a competitive advantage by constructing a giant new integrated facility on a greenfield site located on the sea coast to facilitate easy and massive in-and-out transport through deep harbors. The construction of the Chiba Works was announced in late 1950 and was completed in 1953. According to Yonekura, at the time its construction was announced, it was forecast to have a capacity equal to nearly a fifth of Japan's entire 1950 iron and steel output. The plant had " two 500 tons per charge (tpc) blast furnaces, six 100 tpc open-hearth furnaces, matching slab mills and hot and cold strip mills with annual capacities of 350,00 tons of pig iron and 500,000 tons of crude steel."[117] The Chiba Works also had an extremely efficient and consolidated plant layout: The plant had only 60 kilometers of railroad track linking its various operations. This was 440 kilometers less than the Yahata works at the time.[118] In this and other ways, the Chiba Works took American principles of large-scale production and the technologies to achieve it and constructed them in ways that outstripped the best forms of organization of its domestic competitors. Moreover, in the efficiency of organization and completeness and newness of its conception, the works exceeded the ambition of most American producers of the time as well. In many ways, Chiba took Americanism and perfected it beyond what American producers themselves had achieved.[119]

The success of the Chiba Works emboldened the other significant non-integrated producers to follow suit. Soon after the construction of the Chiba Works, both Sumitomo and Kobe decided to integrate their blast furnace operations, first in 1953 and 1954, by buying smaller integrated works and then, like Kawasaki, by building their own greenfield plants near deep harbors. Others followed these firms like dominos. By 1961, there were ten fully integrated steel producers in Japan: Yahata, Fuji, NKK, Kawasaki, Sumitomo, Kobe, Amagasaki, Nakayama, Osaka and Nisshin.[120] The top six firms (Yahata, Fuji, NKK, Kawasaki, Sumitomo, Kobe) accounted for about 90% of pig iron production and 80% of crude steel, but the market structure of producers was much more oligopolistic (i.e. evenly distributed among all producers)(**see Table 4**).

As in the German case, the effect of the allied interventions in Japan was to create a set of competitive conditions in industry that gave rise to a very different, less monopolistic, more pluralistic industrial structure of high-volume producers. Indeed, if you compare the industry structures of the Japanese, German and US steel industries by the beginning of the 1960s, they all look very similar. (**see Table 5**) The difference, of course, was that the Japanese (and the Germans) by this time were using forms of organization (and as we shall see shortly, technologies as well) in production that were superior to those in place in the American industry. The imitators had taken American principles and made them better by making them their own. What made oligopolistic competition in Japan so much more dynamic than the same form of competitive industry structure in the US?

Table 4: Concentration in Pig Iron and Rolled Steel, 1950-67 (Percent of Total Production)

	# of Firms	1950	1955	1960	1965	1966	1967
Pig Iron	3	89	81	69	58	57	60
	6	91	94	87	89	88	93
	8	92	97	94	95	96	98
	10	93	98	95	98	98	99
Hot-Rolled Steel							
	3	50	51	51	45	46	49
	6	68	69	69	70	70	76
	8	74	75	75	75	77	81
	10	77	77	79	78	80	83

Source**: Walter Scheppach, Die japanische Stahlindustrie, (Mitteilungen des Instituts für Asienkunde Hamburg, No. 48, 1972), 94**

Table 5: Comparison of Market Shares of the Largest Firms in the USA, UK, West Germany and Japan, 1965 (Percentage of Total Industry Output)

USA	UK	FRG	JAPAN
US Steel 25%	US 12.5%	ATH 23.3%	Yahata 18.6%
Bethlehem 16%	RTB 12.2%	Hoesch 15.6%	Fuji 17.4%
Republic 7.5%	Wales 10.1%	Krupp 10.5%	Kokan 10.4%
National 6.5%	Colvilles 9.8%	Klöckner 8.3%	Kawatetsu 10.4%
Armco 5.9%	S&L 7.4%	Mannesmann 7.1%	Sumikin 10.1%
J&L 5.6%	GKN 7.3%	Oberhausen 6.1%	Kobe 6%
Inland 4.9%	Dorman 7.2%	Salzgitter 5.1%	Nisshin 2.2%
Youngstown 4.6%	John 6.2%	Röchling 3.4%	Nakayama 2%
Kaiser 2.1%	S. Durham 5.5%	Dilinger 3.3%	Otani 1.5%
Wheeling 1.6%	Consett 3.7%	Ilseder 2.9%	Daido 1.4%

Source: adapted from Walter Scheppach, Die japanische Stahlindustrie, (Mitteilungen des Instituts für Asienkunde Hamburg, Nr 48, 1972), 94.

The answer is that in embracing competitive oligopoly, the Japanese reinterpreted and transformed the American understanding of oligopolistic competition in a way that produced both extremely rapid growth and striking leaps in technology and innovation. The key was the union of competition and cooperation among actors in the industry. Actors in the industry did not abandon the cooperative exchanges among firms and between firms and the bureaucracy that had been a hallmark of development in the old prewar structures. Instead, they recast the operation of cooperation within the industry away from the old model of cooperation between a state monopoly and broadly-diversified holding companies to cooperation among relatively equal rival steel firms—a strategy, as we saw earlier, that was foreshadowed by the industry reform efforts of steel managers who had been active in the Control Associations during the war.

The advocates of cooperative oligopoly within the industry were eagerly encouraged and guided by bureaucrats within MITI and by players within the newly-reconstituted trade associations (many of whom had previously been members of the Control Association as well) who saw it as their mission to foster the reconstruction and modernization of private industry in the interest of the recovery of the nation. These bureaucrats and trade association figures, we saw, abandoned their market-supplanting or *dirigiste* orientation toward industrial coordination and turned toward an older market-preserving approach of discussion, collective priority setting and problem solving with private operating units in the industry. Under the new conditions of pluralistic oligopoly and competing institutional actors, this new system was congenial (if not identical) to the original political-economic norms established by the Americans for democratic industrial practice.[121]

This dynamic three-way interaction between MITI bureaucrats, trade associations and newly-competitive firms led to the development of two sequential "Rationalization Plans" for the steel industry which drove its rapid technological development in the 1950s (and then, with subsequent plans, beyond).[122] In the development and execution of these plans, MITI engaged steel producers in constant discussions and exchanges about their capacity requirements and technological needs, while the trade associations played a crucial role in bringing managers from the various firms together to discuss mutual technological, production and market concerns with one another and with representatives from the bureaucracy (in particular MITI). All of the discussions involved the identification of competitive organization and technology from abroad and developing strategies for the adaptation and appropriation of those practices in Japan.[123] MITI used its resources to affirm and coordinate decisions on capacity expansion that the three-way discussion produced and it also subsidized cooperative research efforts, coordinated by the trade associations and involving all the major firms, on the development of key technologies which had been identified as crucial for the industry's competitive evolution: Most crucial in this regard were, of course, basic oxygen furnace technology [BOF], the development of high-quality domestic refractory brick for use in blast furnaces and, later, continuous casting technology.[124]

These new technolgies, of course, were systematically incorporated into the physical plant in virtually all of the new greenfield facilities built alongside deep harbor ports following the opening of the Chiba works noted above. In fact, the decision to integrate production and to adopt the BOF were linked. Japan's steel producers were plagued by extremely high materials costs—especially due to the extremely high cost of imported scrap—and sought integration and BOF because they minimized these costs: Integration backward into pig iron production radically reduced producers' need for scrap inputs and BOF was an attractive technology because it could make high-quality steel with little or no scrap.[125] Crucially, MITI and the Japan Iron and Steel Federation worked hard in the mid 1950s to ensure that the technologies necessary for this lower-cost production strategy would diffuse among all the producers in the industry. [126]

This cooperative investment strategy was enormously successful. Already at the beginning of the 1960s, Japanese steel producers had more Basic Oxygen Furnace capacity than any other steel-producing nation in the world. By the beginning of the 1970s, the same was true of continuous casting. The enormity of these achievements should not go unappreciated. In effect, cooperation among the state, associations and leading firms, recomposed and reconstituted through engagement with American reforms, produced a radical revolution in the mass production of steel: The American model had been appropriated and transformed in a way that ultimately led the industry to surpass

US producers in technological sophistication, plant layout, organization, capacity and quality of output.[127]

So, there you have it: The Japanese industry was dramatically transformed by the SCAP reforms and the direction of that transformation was, on the level of industrial structure (oligopolistic competition) and in the strategy of production (high-volume mass production), very consistent with what the Americans wanted and attempted to encourage. Nonetheless, the outcome diverged markedly from what Americans understood to be pluralist oligopoly or integrated steel production. Rather than applying the American understanding of pluralist competition and the limitation of power through the construction of comparable adversaries, the Japanese organized oligopoly, with the eager involvement of the state and of newly reconstituted trade associations, as a process of collaborative discussion and cooperative learning. Rather than attempting to replicate the organization of American integrated steel production, the Japanese took American principles and applied them in a way that was more efficient and elegant. Developments in the workplace, as the next section will show, which were also profoundly influenced by American intervention and example, only enhanced the dynamism of Japanese steel firms.

Recasting Authority in Production: Pluralism and Status

As in the German case, Japanese workers seized the opportunity presented to them by Allied support of trade unionism and worker organization. Only in Japan, where the extent of trade union organization prior to occupation had always been relatively muted and suppressed, the encouragement of organization had the effect of opening a flood gate of pent-up interest in worker organization: In October 1945, there were only 5,000 people in trade unions in Japan; by December of 1946, that number had increased astronomically to nearly 5 million.[128] Workers took the American political values of democracy and the need for countervailing organizational power in society very seriously, but as was the case with their German counterparts, they interpreted these political values through the lens of their own traditions and of their understanding of the social and political position of workers in Japanese society. The result was a profoundly different set of industrial relations institutions than Americans typically associated with voluntary labor organization.

As in Germany, the structures of authority at the level of the enterprise emerged immediately as a constitutive arena in the Japanese worker's conception of democratic order. For the Japanese worker, the creation of a countervailing organization in the labor market was not sufficient, by itself, to check the power of management in society at large, or within the enterprise. This was because the enterprises themselves were structured in ways that presupposed a hierarchy of status in society in which managers enjoyed ascribed social privilege and workers a caste-like social denigration. The creation of organizational power for labor without explicitly attacking these traditional differences in status would not have created equality or plural power. It merely would have created a social organization for a subordinate estate in society. [129]

Thus, in the initial years of the occupation when the expansion of worker organization was most dramatic, organized workers in numerous industries, including steel, repeatedly called the role of managerial authority into question, and attacked status distinctions in plants between blue-collar and white-collar workers—all in the name of democracy.[130] In response to worker demands Labor-Management councils were formed which gave workers joint control with management over the workplace, personnel management and corporate strategy.[131] And, according to Andrew Gordon, this made possible a whole cascade of profound firm level reforms:

> through council deliberations or collective bargaining, workers eliminated many petty and substantive status divisions between white-collar staff and blue-collar staff that they found pervasive and repugnant throughout the prewar era. Under union pressure managers did away with separate gates, dining halls, and toilets as well as distinctions in dress and terminology (some companies replaced the terms *worker* and *staff* with the single term *employee*). Workers also gained a new equality in wages and bonuses. Some enterprises replaced a distinction between workers, who were paid by the day, and staff, who were paid by the month, with a common calculation in terms of monthly wages and paid bonuses to all employees as multiples of this monthly amount.[132]

These targets of democratic struggle were not anticipated by the Americans when they advocated labor organization as a key component of democratization, but American encouragement made the struggles possible. Moreover, American advocacy of democratic order also provided them with a vocabulary (democratization) in which to acceptably express traditional desires about status change against the claims of other positions (in particular, management) in the social order. Moreover, (initial) SCAP toleration of the gains won allowed them to become institutionalized in Japanese factories.[133] It is also true that many of these early gains were possible because management itself was extremely weakened, both economically and ideologically, by the defeat, occupation, purges etc. and could not but cede to labor's transformative demands.

All of this naturally was very short-lived in the occupation: SCAP's enthusiasm for labor power shifted abruptly when labor began to cross the line into politics in January 1947 and threatened to topple the government with a General Strike. As in the German case, the American conception of democratic order did not include "politicized" labor organizations; only countervailing organizations in the labor market. American resistance to labor's moves into politics emboldened the Japanese employers to counterattack and roll back many of the reforms that the workers had won in the initial years.[134] But the roll back, though significant, was not by any means a return to the social order in the factory or in society that antedated the initial years of labor mobilization. The initial postwar achievements created a new balance of power and new poles in debate in the struggle between labor and capital. In future struggles, employers argued away from the gains workers had made; but they could not and did not argue for the complete abandonment of the workplace and status change that the early gains had implemented. To that extent, mobilization under American encouragement and in the name of democracy brought lasting change to working life in Japan.

There was, however, significant rollback. Struggle over authority and power in the workplace continued for another fifteen years or so in Japan before a stable equilibrium was reached, and much of this struggle ultimately produced outcomes favorable to employers and against the most aggressive factions within the unions. Of the early enterprise-level gains, unions were forced to compromise most significantly on the degree of their formal influence on labor management councils. Their role was shifted from direct participation in decision making with management to the lesser one of a body to be consulted by management in its decisions and planning. This was a setback, to be sure; but not a defeat. According to Kume, "management regained the power to control the management system in the company, but labor maintained its right to be consulted in the case of personnel as well as managerial decision making...Labor continued to be a legitimate participant within the company rather devolve into a mere production factor."[135]

Gains in the form of wage payment and production control were also rolled back over the course of the 1950s and 60s, and in these cases, the rollback was driven by management's desire to implement what they considered to be more advanced American practices. The result, however, was not more Americanism or even familiar forms of managerial control. Rather, given the organizational strength of labor on the shop floor, managers were forced to recompose the American techniques in the interest of achieving their desired goals in production. The result in both cases was the creation of the very distinctive Japanese hybrid systems of combined seniority and merit-based wages and decentralized, shop floor-based, cross-functional quality control.

The homogeneous seniority-based payment system actually began to diffuse in Japanese industry during the final years of the war before it spread widely during the period of worker radicalism in the initial postwar years.[136] Employers disliked the pure seniority system, calling it "evil egalitarianism",[137] because it offered them no way to link pay to performance on the job. They began to attack it as soon as the balance of power began to shift in their favor during the course of the 1950s. In the steel industry an effort was made to introduce American "job wages" in which different jobs would be compensated at different rates—the idea was not to supplant seniority completely as a method of payment (the newly-mobilized workers had far too much invested in the old system for that), but to factor in the differential contribution of different jobs to the overall value output of the company.

Though it made some initial headway, the solution soon proved inadequate. First, the technological changes in the steel industry over the course of the 1950s created a more automated industry and as a result undermined the rough correspondence that had existed between seniority and level of skill in the early postwar years. Increasingly, young and old were engaged in comparable production tasks—a fact that made younger workers resentful of the seniority principle. Second, management itself became dissatisfied with the job-wage system because when combined with the seniority principle it allowed workers within a given category to have their wages increased over time regardless of performance. These problems led in the beginning of the 1960s to a shift away from seniority and job wages to pay based on a combination of seniority and merit—a solution that satisfied both older workers and younger workers, as well as managers interested in maintaining a tight relationship between pay and performance. In this case, an American idea introduced by management (linking payment to the contribution of the specific job) was modified beyond recognition (pay for individual performance) in an effort to adapt it to Japanese circumstances.[138]

This was similarly the case with the emergence of quality control circles. In this case the American idea was the creation of centralized bureaux for production engineers responsible, in good taylorist fashion, for instructing shopfloor workers how best to maintain quality in production. Centralized quality control engineering bureaux were thus established in numerous steel production facilities during the early 1950s. But it soon became apparent that the production engineers from the Quality Control bureaus were greeted with significant distrust on the shop floor from both production workers and foreman, both of whom regarded their own knowledge of production as far superior to that of the distant and elite engineering interlopers. Given this resistance, steel management began to reverse the centralizing impulse in the quality control initiative. nstead of separating engineering from the shop floor, they began to create committees—or "circles"—that systematically brought them together. As Gordon notes, these reversals of the taylorist American logic of separating engineering and planning from production and execution marked “the first stirrings of quality control as a system of widespread small group activities, foreshadowing a shift in the meaning of the abbreviation QC from “quality control” to “quality circles”. This was the start of a crucial breakthrough to “total quality control” (TQC) involving technicians, foreman and the rank and file.”[139]

Once again, in the context of a new balance of power between management and labor, American techniques were modified and transformed in improbable ways. The hybrid institutional forms that emerged in this case as well as in that of the wage payment system, however, were hailed as cornerstones of Japanese competitive advantage in international manufacturing markets during much of the post war period.[140]

Though very significant for the long-term competitiveness of Japanese production, these workplace level conflicts were at the time dwarfed in intensity by industry-level conflicts over the institutional role and position of organized labor in the Japanese political economy. Literally epochal struggles during the 1950s focused on the issue of the scope of collective bargaining and the extent to which labor would be able to act as a countervailing power in postwar Japanese society: Should collective bargaining concentrate on the level of the enterprise or should it be extended to the level of the entire industry: i.e., enterprise vs industrial unionism? This was a matter of particularly intense conflict in the steel industry throughout the 1950s, with the leadership factions within the unions at all the major producers solidaristically fighting for industry wide bargaining and the employers at these firms just as solidaristically opposing this.

The conflict resulted in three major strikes in 1956, 1957 and 1959. Had the unions been able to win one of these strikes and force the employers into accepting industrial unionism, it would have positioned them as sovereign institutional rivals of capital in debates on the distribution of the social surplus as well as placed them in a position to re-enhance their power within the enterprises[141]. But this was not to be: In the heat of each of the strikes, the employers were able to get one or more enterprise unions to break from the national coalition (frequently the more conservative Yahata union) and thereby insist on local rather than industrial wage deals. After the defeat in 1959, factionalism within the unions, already a source of instability during the fifties, intensified. Eventually those elements within the unions which did not want to further jeopardize their enterprise-level gains by continued conflict at the industry level gained control. They abandoned the idea of industrial unionism and re-focused union energy on the enterprise level.[142]

A victory in the struggle for industrial unions might have launched the trade-union movement in Japan onto a European trajectory, where strong centralized unions bargained with peak-level employers' associations over the distribution of much of society's surplus. So these losses at the end of the 1950s were significant for Japanese labor. But they did not by any means erase the significant gains in organizational, economic and social power *relative to their prewar position* that the unions had gained in the early postwar years. With American encouragement and support, Japanese workers were able to redefine their status within enterprises—and in the society at large—by abolishing the symbolic markers of difference and asserting institutional reforms that insisted upon equal treatment (and equitable and just reward) among employees within the enterprise and respectful and informed relations between all employees and management. Here again, a very distinctively Japanese reality was created with the vocabulary and at crucial moments encouragement of American occupiers.

Conclusion:

This chapter has attempted to show the way in which political ideas about the proper relationship between democracy and market order were constitutive in the reconstruction of core institutions and practices in both the German and Japanese political economies after World War Two. The power of the American occupation was its ability to establish the discursive and conceptual terrain upon which debate and struggle for the reconstruction of industrial institutions and governance mechanisms would take place. My claim here is neither that the US occupiers had a unitary conception of the kind of economy they wanted to see emerge in Germany and Japan, nor that they had specific institutional arrangements or governance practices that they viewed as indispensable for the construction of a pluralist economy. Indeed, both cases of steel-industry reconstruction have shown in a very rich way how the occupation tolerated and even encouraged institutional forms that corresponded neither to their original conceptions nor to the institutional arrangements that then existed in the United States itself. Rather, the occupation first destroyed those institutional arrangements in the economy that it deemed morally and politically incompatible with a pluralist democratic economy and then established normative guidelines and pressures intended to encourage the creation of countervailing institutional powers within the economy that German and Japanese actors were compelled to take into account. This was a profound form of domination and the chapter makes plain that it led to the permanent transformation of both societies.[143]

The irony in the story, of course, is that the transformation of the German and Japanese steel industries created forms of practice and institutional design in production and at the level of the industry as a whole that were far more competitive than their American competitors for much of the postwar period. Destabilization and political constraint imposed by the occupation gave rise to a remarkable process of collective reflection among actors in both societies about the plasticity and recomposability of their own practices and institutions. As we saw in both cases, experimentation with technologies and organizational practices from elsewhere (especially America) as well as struggles for control were part and parcel of this process of collective reflexivity and redefinition. The new structures that emerged and became so competitive were in many cases distinctive hybrids that combined traditional indigenous practices with American ideas in ways that resembled neither but which often established entirely new international standards of performance.

NOTES

[Θ] Thanks to Jonathan Zeitlin, Carol Horton, Steve Tolliday, Kazuo Wada, Dick Samuels, George Steinmetz, Lisa Wedeen, Christian Kleinschmidt, Peter Kjaer, Sei Yonekura, Gerald Feldman, Beverly Crawford, Michael Storper, Robert Salais, Gregory Jackson, Karl Lauschke, the participants of the conference that produced this volume and the members of the Workshop on Organization Theory and State-building at the University of Chicago, the Center for German and European Studies at the University of California Berkeley, the Workshop in Historical Sociology at the University of Michigan, and the Franco American Seminar on Rationality, Conventions and Institutions for critical readings and discussions of this paper. Thanks as well to Laura Kjeraulf for valuable research assistance. The usual disclaimers should be strongly enforced in this case, for this is my initial foray into the very fascinating yet complicated history of Japanese industrial development. My hermeneutically-challenged condition, I fear, has led me on occasion not always to be able to appreciate the good sense of my more knowledgeable colleagues.

[1] I have been influenced in my efforts to describe the character of American power as profoundly shaping and yet accommmodating of broad experimentation, creativity and strategizing by the work of the Comaroffs on the colonial experience in South Africa. See Jean and John Comaroff, Of Revelation and Revolution. Christianity, Colonialism and Consciousness in

South Africa, Vol. I (Chicago: University of Chicago Press, 1991), especially their theoretical discussion in ch. 1, 1-48.

[2] SCAP document excerpted in Wolfgang Benz, ed., "Amerikanische Besatzungsherrschaft in Japan 1945-1947" in Vierteljahresschrift für Zeitgeschichte, 26, 1978, 331

[3] For a discussion of the phenomenon of the state creating the initial firm in the industry and then using its position to lure in private actors, see Richard Samuels, The Business of the Japanese State: Energy Markets in Comparative and Historical Perspective, (Ithaca: Cornell University Press, 1987), especially ch. 3, 68-134. The Japanese state, particularly in the decade after the Meiji restoration, pursued this policy of starting and then spinning off or luring in private actors in an array of other industries (beyond coal and steel) as well. On the historical period of industrial promotion and ownership on the part of the Meiji state, see, among many others, E. Sydney Crawcour, "Economic Change in the Nineteenth Century" and Kozo Yamamura, "Entrepreneurship, Ownership, and Management in Japan", both in Yamamura, ed. The Economic Emergence of Modern Japan, (New York: Cambridge University Press, 1997), 1-49; 294-352; Tessa Morris-Suzuki, The Technological Transformation of Japan, (New York: Cambridge University Press, 1994), 71-105; William W. Lockwood, The Economic Development of Japan, (Princeton: Princeton University Press, 1968), ch. 1.

[4] Hidemasa Morikawa, "The *Zaibatsu* in the Japanese Iron and Steel Industry" in Hans Pohl, ed., Innovation, Know-how, Rationalization and Investment in the German and Japanese Economies, Beiheft 22, Zeitschrift für Unternehmensgeschichte, 1982, 134-150, esp. 136

[5] Morikawa, "The *Zaibatsu* in the Japanese Iron and Steel Industry", 140, on the facilities, see Table 1 in the text.

[6] Morikawa, "The *Zaibatsu* in the Japanese Iron and Steel Industry", 141-3.

[7] G.C. Allen, A Short Economic History of Modern Japan, 1867-1937, (London: George Allen and Unwin, 1946), 74.

[8] E.B. Schumpeter, ed., The Industrialization of Japan and Manchukuo, 1930-1940, (New York: Macmillan Company, 1940), 596 ff.

[9] Yonekura, The Japanese Iron and Steel Industry, 1850-1990 (New York: St. Martins, 1994), 57-77.

[10] This distinctive kind of close and coordinated relationship between private business (in this case *Zaibatsu*) and government has frequently been noted by scholars of Japanese industrialization--though they disagree about the balance of power between the state and the private economy. A classic account of the Japanese state as a "developmental state" in which

the balance of power is placed in the state's favor is given in Chalmers Johnson's MITI and the Japanese Miracle (Palo Alto: Stanford University Press, 1981). Samuels, The Business of the Japanese State, and John Owen Haley, Authority Without Power. Law and the Japanese Paradox, (New York: Oxford University Press, 1991) are good examples of a scholars who place the balance of power towards the other end.

[11] Morikawa, "The *Zaibatsu* in the Japanese Iron and Steel Industry".

[12] *Zaibatsu* were very distinctive horizontal business organizations: Neither hierarchically-controlled multidivisional companies nor holding companies of loose ownership ties, they were complex agglomerations of specialties, given boundaries by family property rather than technology, related markets or even contiguous space. For good discussions of their organization, see Hidemasa Morikawa, Mitsubishi, (Tokyo: University of Tokyo Press, date?) and Norbert Voack, Die japanische "***Zaibatsu***" und die Konzentration wirtschaftlicher Macht in ihren Händen, (Ph.D. dissertation, Universität Erlangen-Nürnberg, 1962).

[13] These factors are generally emphasized in the standard accounts of the move toward cartelization and Control Associations in the interwar and wartime period. Unless otherwise cited, I have relied primarily on the following sources for my information: Eleanor Hadley, Anti-trust in Japan , (Princeton: Princeton University Press, 1970), 357-89; Schumpeter, The

Industrialization of Japan and Manchukuo, especially 596-604, 680-740; 789-865; T.A. Bisson, Japan's War Economy, (New York: Macmillan, 1945); Jerome Cohen, Japan's Economy in War and Reconstruction, (Minneapolis: University of Minnesota Press, 1949); Secretariat, Institute of Pacific Relations, ed., Industrial Japan. Aspects of Recent Economic Changes as Viewed by Japanese Writers, (New York: Institute of Pacific Relations, 1941), chs. 1,3, 8, 13; Johnson, MITI and the Japanese Miracle, pp. 116-197; Lockwood, The Economic Development of Japan; Johannes Hirschmeier and Tsunehiko Yui, The Development of Japanese Business, 1600-1980, second edition (London: George Allen & Unwin, 1981) esp. 236-51; Mitsubishi Economic Research Bureau (MERB), Japanese Trade and Industry. Present and Future, (London: Macmillan, 1936), 40-52; 114-130; 195-210; Leonard H. Lynn and Timothy J. McKeown, Organizing Business. Trade Associations in America and Japan, (Washington DC: American Enterprise Institute, 1988), 15-28.

[14] A concise description of the purposes of the law are given in MERB, Japanese Industry and Trade. Present and Future, 117.

[15] Yonekura, Japanese Iron and Steel Industry, 117-18. MERB, Japanese Industry and Trade, 118, lists steel sectors belonging as of 1936; see also Lynn & McKeown, Organizing Business.

[16] E.g., MERB, Japanese Industry and Trade, 119.; Lynn & McKeown, Organizing Business.

[17] Yonekura, Japanese Iron and Steel Industry, 150.

[18] Ibid., 150.

[19] Bisson, Japan's War Economy, 25ff.

[20] Ibid.; Cohen, Japan's Economy in War and Reconstruction, 1-48, (25-8 explicitly on the Steel Industry), Seiichiro Yonekura, "Industrial Associations as Interactive Knowledge Creation. The Essence of Japanese Industrial Policy Creation" in Japanese Yearbook on Business History, 13 (1996), 27-51; Johnson, MITI and the Japanese Miracle, 153, 162-163. For an entertaining debate on the postwar influence of these initiatives, see, on the one side (lots of influence), Tesuji Okasaki, "The Japanese Firm under Wartime Planned Economy" in Masahiko Aoki and Ronald Dore, eds., The Japanese Firm. Sources of Competitive Strength (New York: Oxford University Press, 1994), 350-78; and on the other side (not much influence), Juro Hashimoto, "How and Why Japanese Economic and Enterprise Systems Were Formed" in Japanese Yearbook on Business History, 13 (1996), 5-27. As an outsider, I am largely persuaded by Hashimoto's side, but as will be clear below, the entire debate is a bit orthogonal to my concerns.

[21] Lynn & McKeown, Organizing Business, 21-4

[22] Bisson, Japan's War Economy; Cohen, Japan's Economy in War and Reconstruction,

Yonekura, “Industrial Associations”; Johnson, MITI and the Japanese Miracle.

[23] Yonekura, “Industrial Associations”; idem, Japanese Iron and Steel Industry. Lynn & McKeown, Organizing Business agree with Yonekura on the predominance of business leaders in the Associations, though they also suggest that the identity of these figures was blurry since most had spent significant portions of their careers inside the regulating state agencies.

[24] Even Hashimoto and Okasaki agree on this, see Okasaki, “Japanese Firm” and Hashimoto, “Japanese.Economic and Enterprise Systems”. Also please note that by “*dirigisme*” in this context I mean merely the supplanting of market mechanisms by the directives of the Control Associations. I do not mean to suggest with this word that the Control Associations were direct organs of the state. Control Associations were corporatist bodies staffed by private industrialists acting against market mechanisms to organize industry according to state interests.

[25] The early history of the industry is summarized in my book, Industrial Constructions: The Sources of German Industrial Power, (New York: Cambridge University Press, 1996), ch. 3. See also Wilfried Feldenkirchen, Die Eisen- und Stahlindustrie des Ruhrgebeits, 1879-1914, (Stuttgart: Franz Steiner Wiesbaden, 1982); and Ulrich Wengenroth, Unternehmensstrategien und technischer Forschritt. Die deutsche und die britische Stahlindustrie, 1865-1895,

(Göttingen: Vandenhoek & Ruprecht, 1986)

[26] For the most part this was true, though there was brief state participation in the firm in the early 30s. For detail on the changing and complicated ownership structure of Vestag, see Gerhard Mollin, Montankonzerne und >>Drittes Reich<<, (Göttingen: Vandenhoeck & Ruprecht, 1988).

[27] For a more detailed description of Vestag, see Industrial Constructions, and, for the company during the Third Reich, Mollin, Montankonzerne und >>Drittes Reich<<.

[28] Herrigel, Industrial Constructions, ch. 3.

[29] Ibid.

[30] An excellent source on this relationship--which I ignore in this discussion--is Volker Wellhöner, Grossbanken und Grossindustrie im Kaiserreich, (Göttingen: Vandenhoeck & Ruprecht, 1989).

[31] This paragraph condenses a much longer story from Herrigel, Industrial Constructions, ch. 3.

[32] Note that this is a story about large firms and the German state, not a general claim about all industry and its relationship to government in Germany. For alternative relations between industry and the state see chs. 2 and 5 in Herrigel, Industrial Constructions,

[33] Ironically, the Control Associations in Japan were modeled after these *Wirtschaftsgruppen*, though they seemed to have been far more successful in controlling the affairs of the steel industry in Japan than their German counterparts. On the *Wirtschaftsgruppen* as role model for the Control Associations, see Cohen, Japan's Economy in War and Reconstruction, 1-48, and Yonekura, "Industrial Associations".

[34] Mollin, Montankonzerne und drittes Reich; see also R.J. Overy, "Heavy Industry in the Third Reich: The Reichswerke Crisis", "'Primacy Always Belongs to Politics': Gustav Krupp and the Third Reich" and "The Reichswerke 'Herman Göring': A Study in German Economic Imperialism" in idem., War and Economy in the Third Reich, (New York: Oxford, 1994), 91-174.

[35] Other producers of this character were the Otto Wolf AG, Röchling (from the Saar region) and Ballestrem (from Silesia). These firms (or their steel holdings) were all spun out of the Vestag after the latter firm's 1932 restructuring.

[36] On the foundation and development of this firm, see Mollin, Montankonzerne in >>Drittes Reich<<, and Overy, "Reichswerke 'Hermann Göring'", and "Heavy Industry in the Third Reich", 144-74, 93-118.

[37] Mollin, Montankonzerne in >>Drittes Reich<<, has a very extensive discussion of the political

ties and interest of the state bureaucrats involved in the formation and operation of the HGW and their political interests in the Konzern.

[38] Ibid. provides interesting insights into these producers, although they are not the primary focus of his concern, see especially 257-70.

[39] For two discussions from the early postwar years of the general belief that German Big Business, especially the steel and chemical industries, helped the Nazis to power and underwrote its war effort, see Gustav Stolper, German Realities, (New York, NY: Reynal and Hitchcock, 1948), 172-96; and Joachim Jösten, Germany: What Now? (Chicago: Ziff-Davis Publishing Co., 1948) pt. 3. Graham D. Taylor discusses this phenomenon as it affected American antitrust policies in occupied Germany in his "The Rise and Fall of Anti-Trust in Occupied Germany, 1945-48", Prologue 11.1 (1979): 22-39 esp. 27-28. These popular understandings of the implication of German business in Nazism did not, as much other work has shown, correspond to the actual relationship between the two. Stolper makes this point, in a very impatient way, in the book mentioned above. But for the most recent scholarship and the complexities of the relationship, see Henry Turner, German Big Business and the Rise of Hitler, (New York: Oxford University Press, 1985); Peter Hayes, Industry and Ideology. IG Farben in the Nazi Era (New York: Cambridge University Press, 1987); Reinhard Neebe,

Grossindustrie, Staat und NSDAP1930-1933, (Göttingen: Vandenhoeck & Ruprecht, 1981) , and for a general discussion, Dick Geary, "The Industrial Elite and the Nazis" in Peter D. Stachura, ed., The Nazi Machtergreifung, (London: publisher?, 1983), 85-100; Gottfried Plumpe, Die IG Farbenindustrie AG. Wirtschaft, Technik und Politik, 1904-1945 (Berlin: Duncker & Humblodt, 1990); Peter Wolfram Schreiber, IG Farben. Die unschuldige Kriegsplaner (Stuttgart: Neuer Weg, 1978); Raymond Stokes, Divide and Prosper: The Heirs of I. G. Farben under Allied Authority, (Berkeley: University of California Press, 1988), ch. 1; Neil Gregor, Daimler Benz in the Third Reich, (New Haven: Yale University Press, 1998).

[40] Hadley, Anti-trust in Japan , 3. Reference to "descriptive title" is to John D. Montgomery, Forced to be Free: The Artificial Revolution in Germany and Japan, (Chicago: University of Chicago Press, 1957).

[41] In both Germany and Japan there was a battle within the American camp between radical progressive trust-busters and more conservative so-called "New Deal" advocates of American-style oligopolistic big business and mass production. On these divisions within US policy in Germany, see Volker Berghahn, Unternehmer und Politik in der Bundesrepublik, (Frankfurt: Suhrkamp, 1985), 84-111; and Taylor " Anti-Trust in Occupied Germany", 22-39. For an account of the deconcentration and decartelization process in Germany by a radical trust

buster, see James D. Martin, All Honorable Men (Boston: Little Brown, 1950). For debates within the occupation of Japan, see Theodore Cohen, Remaking Japan. The American Occupation as New Deal (New York: The Free Press, 1987), 3-48, 154-86, 301-98; Hadley, Anti trust in Japan, part 1; T.A. Bisson, *Zaibatsu* Dissolution in Japan, (Berkeley: University of California Press, 1954), *passim*. New Dealers were more concerned with the consumer than with size of enterprise: As long as prices could be established competitively, they believed that this would have salutary macroeconomic (and political) effects. For one of the seminal developers of this kind of thinking in the US, see Thurman Arnold, The Bottlenecks of Business (New York: Reynal and Hitchcock, 1940). In general on division in American antitrust thinking during this period, see for example, Rudolph Peritz, Competition Policy in America, 1888-1992, (New York: Oxford University Press, 1996), 111-229. For a general overview of New Deal conceptions of the state and democracy in relation to the market see the concise overview article by Alan Brinkley, "The New Deal and the Idea of the State" in Steven Fraser & Gary Gerstle, eds. The Rise and Fall of the New Deal Order, 1930-1980, (Princeton: Princeton University Press, 1989), 85-121.

[42] The New Deal is invoked even in the title of his memoir: Cohen, Remaking Japan: The American Occupation as New Deal.

[43] Arnold characteristically observed: "The inevitable result of the destruction of competitive domestic markets by private combinations, cartels and trade associations is illustrated by Germany today....Industrial Germany became an army with a place for everyone, and everyone was required to keep his place in a trade association or cartel. Here was arbitrary power without public control and regimentation without public leadership. That power, exercised without public responsibility was constantly squeezing the consumer. *There was only one answer.* Germany was organized to such an extent that it needed a general and Hitler leaped into power. Had it not been Hitler it would have been someone else. When a free market was destroyed, state control of distribution had to follow. (The Bottlenecks of Business, 15-16).

[44] See, for example, the testimony of Paul Hoffmann, head of the Economic Cooperation Administration, before the Senate Foreign Relations Committee, Executive Sessions of the Senate Foreign Relations Committee (Historical Series) Volume II, Eighty First Congress, First and Second Sessions, 1949-1950, 184 and *passim*

[45] For the linkage between traditional middle classes and fascism, see Seymour Martin Lipset's seminal, Political Man: The Social Bases of Politics, (New York: Anchor/Doubleday, 1963).

[46] In addition to the above references, this characterization of American views is drawn from a reading of Cohen, Remaking Japan; Bisson, *Zaibatsu* Dissolution in Japan; Hadley, Anti-trust

---

in Japan; Montgomery, Forced to be Free; Volker Berghahn, "West German Reconstruction and American Industrial Culture, 1945-1960" in Reiner Pommerin, ed., The American Impact on Postwar Germany, (Oxford: Berghahn Books, 1995), 65-82; Richard Pells, The Liberal Mind in a Conservative Age. American Intellectuals in the 1940s and 1950s, (Middletown: Wesleyan University Press, 1989). On feudal elements in industry, see Reinhard Bendix, Work and Authority in Industry, (Berkeley, University of California Press, 1956); David Landes, "Japan and Europe: Contrasts in Industrialization" in Lockwood, State and Economic Enterprise in Japan, 93-182; Gustav Ranis "The Community Centered Entrepreneur in Japanese Development" in Explorations in Entrepreneurial History, VIII, 2 (1955), 80-98; Johannes Hirschmeier, The Origins of Entrepreneurship in Meiji Japan, (Cambridge, MA: Harvard University Press, 1964); Ralf Dahrendorf, Society and Democracy in Germany, (NY: Norton, 1964) (on the notion of "feudal remnants").

[47]According to Article 12 ,Economic Section (Section B) Potsdam Agreement. Joint Report on Results of the Anglo-Soviet-American Conference, Berlin, 1945, released August 2, 1945: "At the earliest practicable date, the German economy shall be decentralized for the purpose of eliminating the present excessive concentration of economic power as exemplified in particular by cartels, syndicates, trusts and other monopolistic arrangements" (excerpts reprinted as Appendix B in Gustav Stolper, German Realities, 264-72, quotes in text from 267).

Similarly, in Japan, as early as September 6, 1945, the President of the United States issued to the Strategic Command of the Allied Powers (SCAP) an executive order, Number 244 for the Liquidation of Holding Companies. This edict charged the SCAP with:

1.) breaking up existing *Zaibatsu* companies and other holding company arrangements;

2.) elimination of various mechanisms for the creation of private monopolies;

3.) the foundation of a system of free competition.

The first two measures were understood to be transitional measures; the third was to be a fundamental principle of order in the new Japan. See Bisson, *Zaibatsu* Dissolution in Japan, 234-44; and Joseph Hiroshi Iyori, Das japanische Kartelrecht. Entwicklungsgeschichte, Grundprinzipien und Praxis (Köln: Carl Heymans Verlag, 1967), 21.

[48] "United States policy was unequivocal in demanding legal support for Trade Unions for the first time in Japanese history. In September 1945, President Truman ordered that 'encouragement shall be given and favor shown to the development of organizations in labor, industry, and agriculture, organized on a democratic basis'" in Andrew Gordon, The Evolution of Labor Relations in Japan. Heavy Industry, 1853-1955, (Cambridge, MA: Harvard University Press, 1985), 331.

[49] Diethelm Prowe, "German Democratization as Conservative Restabilization: The Impact of American Policy" in Jeffrey M. Diefendorf, Axel Frohn, and Hermann-Josef Rupieper, eds., American Policy and the Reconstruction of West Germany, 1945-1955 (New York: Cambridge University Press, 1993), 307-30. Prowe, however, suggests that American authorities opposed more corporatist arrangements because they involved a different kind of democratic representation than the Americans wanted. He opposes these corporatist groups to political parties. I don't believe that this is the appropriate distinction to make: Americans didn't approve of the corporate arrangements Germans proposed because they preferred representative parties. They disapproved of those groups because they thought these would be monopolistic groups which would undermine social competition and pluralism. US occupiers did not have a conception of democracy narrowly confined to party competition and elections.

[50] Lucius Clay, ultimately only a moderate enthusiast for deconcentration, was very clear on the unacceptability of the traditional organization of the iron and steel industry. Clay was confident that the breakup of the industry would lead in an efficient direction because it would follow a plan drawn up by a committee drawn up by George Wolf of the United States Steel Corporation, see Clay, Decision in Germany, (Garden City New York: Doubleday & Co., 1950), 329-30.

[51] Isabel Warner, "Allied-German Negotiation on the Deconcentration of the West German Steel Industry" in Ian Turner, ed., Reconstruction in Post-War Germany. British Occupation Policy and the Western Zones, (Oxford: Berg, 1989), 155-85, and more generally, Isabel Warner, Steel and Sovereignty. The Deconcentration of the West German Steel Industry, 1949-1954 (Mainz: Verlag Philipp von Zabern, 1996) *passim*.

[52] Warner, “Allied-German Negotiation”.

[53] See Stahltreuhändervereinigung, Die Neuordnung der Eisen und Stahlindustrie im Gebiet der Bundesrepublik Deutschland, (Munich: C. H. Beck'sche Verlagsbuchhandlung, 1954); Ernst Schröder, “Die Westdeutsche Montanindustrie heute,” Der Volkswirt 44 (1952): 27-32; K.H. Herchenröder, Johan Schäfer and Manfred Zapp, Die Nachfolger der Ruhrkonzerne. Die Neuordnung der Montanindustrie, (Düsseldorf: Econ Verlag, 1953); Gerd Baare, Ausmass und Ursachen der Unternehmungskonzentration der deutschen Stahlindustrie im Rahmen der Montanunion, ein internationaler Vergleich, (Dissertation. Tübingen, 1965); Franz Lammert, Das Verhältnis zwischen der Eisen schaffenden und der Eisen verarbeitenden Industrie seit dem ersten Weltkrieg, (Köln: publisher?, 1960), 140-55; and Paul Weil, Wirtschaftsgeschichte des Ruhrgebietes (Essen: Siedlungsverband Ruhrkohlenbezirk Essen, 1970). The Stahltreuhandervereinigung, Schroeder article and Herchenroeder *et al.* volume all have charts

outlining lineages of firms.

[54] Stahltreuhändervereinigung, Neuordnung, 129ff, 301-4. For complaints about disruptions to rolling mills, see Schroeder, "Westdeutsche Montanindustrie". Schroeder lists nine newly created companies with uneconomic combinations of steelmaking and rolling capacity.

[55]Stahltreuhändervereinigung, Neuordnung, 129-31 and 191-3. Norman Pounds in 1953 noted that the recomposition of the industry had not followed the guidelines that technical efficiency would have dictated: "It is too early to suggest the shape which the future organization of the heavy industry of the Ruhr is likely to take. It is clear, however, that the unwisdom of too great a fragmentation has been realized." in Norman J. G. Pounds, The Ruhr A Study in Historical and Economic Geography, (Bloomington: Indiana University Press, 1952), 259.

[56] Ibid., 129-31 and 133-41.

[57] For this sensibility, see Kurt Pritzkoleit, Männer, Mächte, Monopole Hinter den Türen er westdeutschen Wirtschaft, (2nd ed., Düsseldorf: Karl Rauch, 1960); William Manchester, The Arms of Krupp (New York: Bantam Books 1968; Joseph Borkin and Charles Welsh, Germany's Master Plan: The Story of an Industrial Offensive (New York, NY: Duell, Sloane and Pearce, 1943).

[58]Herchenroeder *et al.*, Nachfolger der Ruhr Konzerne, 57-118; Kurt Pritzkoleit, Männer,

Mächte, Monopole, 131-41.

[59] On the break up of Hoesch, see Herchenroeder *et al.,* Nachfolger der Ruhr Konzerne, 230-41. On Mannesmann, 199-218 and on Klöckner, 171-94.

[60] Dietrich Wilhelm von Menges, Unternehmens-Entscheide. Ein Leben für die Wirtschaft (Düsseldorf: Econ Verlag, 1976) (former GHH manager) ; Herchenroeder *et al*., Nachfolger der Ruhr Konzerne, 119-40.

[61] For complicated reasons, the steelmaking facilities were never, in fact, sold off but were kept in a separate holding, apart from the rest of its business in the manner dictated by the Allied settlement, until the late 1960s--when the firm went bankrupt and had to be completely reorganized. Descriptions of the reconstitution and development of the Krupp empire are given in Gert von Klass, Krupps (London: Sidgewick and Jackson, 1954), 431-433; Herchenroeder *et al.*, Nachfolger der Ruhr Konzerne, 145-70; Dietrich Weder, Die 200 Grössten deutschen Aktiengesellschaften 1913-1962 Beziehungen zwischen Grösse, Lebensdauer und Wettbewerbschancen von Unternehmen (Dissertation, Frankfurt, 1968), 323; and Wirtschaftswoche, no 2, January 14, 1972, 62-3; Manager Magazine, 12/1973, 30-4; and 11/1975, 27-34.

[62] British Zone Law Number 56; American Zone Law Number 78; and French Zone Law

Number 96. Eberhard Günther, "Entwurf eines Gesetzes gegen Wettbewerbsbeschränkungen" in Wirtschaft und Wettbewerb, Jg 1, November 1951, n 1, 17-40. A contemporary overview, the article is also good on contrasting American thinking about antitrust and countervailing power with German views.

[63] Duncan Burn, The Steel Industry 1939-1959 (Cambridge: Cambridge University Press, 1961), 407-16; and Lammert, Das Verhältnis, 201-4.

[64] On the logic behind this claim that cartels were used in the stabilization of specialization, see the more extensive discussion in ch. 2 of my book, Industrial Constructions.

[65] Elizabeth Domansky-Davidsohn, "Der Grossbetrieb als Organizationsproblem des Deutschen Metallarbeiter-Verbandes vor dem Ersten Weltkrieg," in Hans Mommsen, ed. Arbeiterbewegung und industrieller Wandel. Studien zu gewerkschaftlichen Organisationsproblemen im Reich und an der Ruhr, (Wuppertal: Peter Hammer, 1980), 95-116.

[66] See Michael Fichter, "Hicog and the Unions in West Germany. A Study of Hicog's Labor Policy toward the Deutscher Gewerkschaftsbund, 1949-1952" in Diefendorf *et al.*, American Policy and the Reconstruction of West Germany, 257-80; for contemporary accounts by a sympathetic American which describe US measures, see Matthew A. Kelly, "The

Reconstitution of the German Trade Union Movement" in Political Science Quarterly, 64 (1949), 24-49; and M.A. Kelly, "Labor Relations in American-Occupied Germany" in Colston E. Warne, ed., Labor in Postwar America, (Brooklyn: Remsen Press, 1949) pp. 607-21.

[67] Fichter, "Hicog and the Unions in West Germany", 260.

[68] Ibid., 262.

[69] For general overviews of US Occupation and its structure, in addition to Cohen, Remaking Japan, see Kazuo Kawai, Japan's American Interlude, (Chicago: University of Chicago Press, 1960); Richard B. Finn, Winners in Peace. MacArthur, Yoshida and Postwar Japan (Berkeley: University of California Press, 1992) ; Hadley, Anti-trust in Japan , and Robert E. Ward and Sakamoto Yoshikazu, eds., Democratizing Japan. The Allied Occupation (Honolulu: University of Hawaii Press, 1987).

[70] Cohen, Japan's Economy in War and Reconstruction, 427, quotes Edwin Pauley as representative of SCAP feelings regarding the *Zaibatsu*: "Japan's *Zaibatsu*...are the comparatively small group of persons, closely integrated both as families and in their corporate organizations, who throughout the modern history of Japan have controlled not only finance, industry and commerce, but also the government. They are the greatest war potential of Japan. It was they who made possible all Japan's conquests and aggressions. Not only were the

Zaibatsu as responsible for Japan's militarism as the militarists themselves, but they profited immensely by it. Even now, in defeat, they have actually strengthened their monopoly position..Unless the *Zaibatsu* are broken up, the Japanese have little prospect of ever being able to govern themselves as free men. As long as the *Zaibatsu* survive, Japan will be their Japan."

[71] Excellent comparisons of the pre and post-*Zaibatsu* dissolution character of large Japanese corporations can be found in Hadley, Anti-trust in Japan, 205-315, and Kozo Yamamura, Economic Policy in Postwar Japan. Growth versus Economic Democracy, (Berkeley: University of California Press, 1967).

[72] On the American influences on this law and Japanese modifications, see Masahiko Aoki, "The Japanese Firm in Transition" in Kazo Yamamura and Yasukichi Yasuba, eds., The Political Economy of Japan. Volume 1. The Domestic Transformation, (Stanford: Stanford University Press, 1987), 263-288; Hadley, Anti-trust in Japan, *passim*; and Hirosi Acino, "Zehn Jahre Antimnopolgesetz in Japan" in Georg Jahn & Kurt Junckerstorff, eds., Internationales Handbuch der Kartelpolitik, (Berlin: Duncker & Humblot, 1958), 307-26; Iyori, Das japanische Kartelrecht.

[73] Aoki, "The Japanese Firm in Transition", 268-9; Hadley, Anti-trust in Japan.

[74] Cohen, Japan's Economy in War and Reconstruction, 431.

[75] Yamamura, Economic Policy in Postwar Japan, 25.

[76] For a discussion of US and Japanese trade association similarities and differences, before, during and after the Occupation period, see Lynn & McKeown, Organizing Business, 24-32 and *passim.*

[77] Shen-Chang Hwang, Das Japanische Antimonopolgesetz im Lichte des deutschen Kartellrechts, (Dissertation, Department of Law, Ruprecht-Karl Universität, Heidelberg, 1968),10f ; Iyori, Das japanische Kartelrecht; Hadley, Antitrust in Japan, and Cohen, Remaking Japan. Cohen in particular gives step-by-step detail on the formation of the Deconcentration Review Board, 353-77.

[78] Yahata Steel took over the Yahata Works while Fuji took over the Hirohata, Kamaishi, Wanishi and Fuji Works: Yonekura, Japanese Iron and Steel Industry, 189-211; idem, "The Post-War Japanese Iron and Steel Industry: Continuity and Discontinuity" in Etsuo Abe and Yoshaka Suzuki, eds. Changing Patterns of International Rivalry, (Tokyo: University of Tokyo Press, 1991), 193-241; and Walter Scheppach, Die japanische Stahlindustrie, (Hamburg: Mitteilungen des Instituts für Asienkunde, No. 48, 1972).

[79] Yonekura's article, "Postwar Reform in Management and Labor: The Case of the Steel

Industry" in Juro Teranishi and Yutaka Kosai, eds., The Japanese Experience of Economic Reforms, (London: St. Martins Press, 1993) pp. 205-40 addresses precisely this issue of oligopoly creation.

[80] This is not to say that there were not efforts to organize or that there were no union-like organizations prior to the occupation. There were. But they were very embattled and persecuted by both the state and employers. See the outstanding account of prewar developments in heavy industry in Gordon, Evolution of Labor Relations in Japan. 1-326. Theodore Cohen notes that the Japanese labor movement reached its prewar high for union organization in 1936 with 420,000 members --approximately 7% of the non agricultural workforce. Cohen, Remaking Japan, 191.

[81] Gordon, Evolution of Labor Relations in Japan, 330-9; and idem, The Wages of Affluence. Labor and Management in Postwar Japan, (Cambridge, MA: Harvard University Press, 1998), ch. 3.

[82] Gordon, Evolution of Labor Relations in Japan, 330-9.

[83] Cohen, Remaking Japan, 204.

[84] Examples of this kind of narrative with respect to the steel industry are Gloria Müller, Mitbestimmung in der Nachkriegszeit. Britische Besatzungsmacht-Unternehmer-

Gewerkschaften, (Düsseldorf: Schwann, 1987);*eadem*, Strukturwandel und Arbeitnehmerrechte. Die wirtschaftliche Mitbestimmung in der Eisen- und Stahlindustrie, 1945-1975, (Essen: Klartext Verlag, 1991).

[85] Isabel Warner, Steel and Sovereignty , *passim*, emphasizes this aspect of industrial interest above all others (such as industrial structure, cartels, etc.) on the domestic front in the negotiations with the Allies.

[86] On Britsh interests, see Eberhard Schmidt, Die Verhinderte Neuordnung, (Frankfurt: EVA, 1970); and Turner, Reconstruction in Post-War Germany, esp. 37-154

[87] On the paternalistic views of German large-scale private industrialists, see the discussion of Gustav Krupp in excellent essay by Richard Overy, "'Primacy Always Belongs to Politics'"; Turner, Big Business and the Rise of Hitler ; Berghahn, Unternehmer und Politik.

[88] Overy, "'Primacy always belongs to Politics'"; Turner, Big Business and the Rise of Hitler., *passim*. For conflicts between the state and industry that reveal private industry's sense of the norms regarding the limits of state power in their domain, see especially the Overy "Heavy Industry in the Third Reich".

[89] Various articles from Die Volkswirt, most by anonymous industrialists in the context of the codetermination debate in the late 40s make this argument.

[90] Essays by Berg on self government in Fritz Berg, Die Westdeutsche Wirtschaft in der Bewährung. Ausgewählte Reden aus den Jahren 1950 bis 1965, (Hagen: Linnepe Verlagsgesellschaft KG, 1966) as well as the articles on the reconstitution of Chambers of Industry and Commerce (IHKs) after the war.

[91] Martin, All Honorable Men, p. 91. The reference to Nazis in this quote may distract: The view conveyed is that the Americans were persuaded that a businessman was a businessman was a businessman, while I am pointing out that this was not the case. Where Martin would probably associate the corporate dimensions of the German industrialists understanding of property immediately with Nazism, I would not. The corporate idea of private property is much older and industrialists were forced to recompose the idea to accommodate the Nazi regime as well.

[92] Müller, Strukturwandel und Arbeitnehmerrechte., Wolfgang Streeck, "Codetermination: After Four Decades" in, idem. , Social Institutions and Economic Performance. Studies of Industrial Relations in Advanced Capitalist Economies, (London: Sage Publishers, 1992), 137-168.

[93]On the history of codetermination efforts in Germany prior to the 1950s, see Hans Jürgen Teuteberg, Geschichte der industriellen Mitbestimmung in Deutschland, (Tübingen: JCB Mohr [Paul Siebeck], 1961).

[94] Clark Kerr, "The Trade Union Movement and the Redistribution of Power in Postwar

Germany", Quarterly Journal of Economics, Vol LXVIII, ,4, (1954), 553-4.

[95] Ernst-Joachim Mestmäcker, "Mitbestimmung und Vermögensverteilung. Alternativen zur Umverteilung von Besitzständen" in idem, Recht und ökonomisches Gesetz. Über die Grenzen von Staat, Gesellschaft und Privatautonomie, (Baden Baden: Nomos Verlag, 1978), 135-54, especially 143 ff.

[96] On the postwar benefits of the system, see Streeck, "Codetermination"; Kathleen Thelen, Union of Parts, (Ithaca: Cornell University Press, 1991) *passim*; Herrigel, Industrial Constructions, ch. 6.

[97] On Thyssen's (essentially American) image of the industry, see Alfred D. Chandler, Jr., Scale and Scope. The Dynamics of Industrial Capitalism (Cambridge, MA: Harvard University Press, 1990), 493, and my discussion in Industrial Constructions, ch. 3.

[98].Ibid. See also Christian Kleinschmidt , Rationalisierung als Unternehmenstrategie. Die Eisen- und Stahlindustrie des Ruhrgebiets zwischen Jahrhundertwende und Weltwirtschaftskrise, (Essen: Klartext, 1993) for an excellent discussion of the interwar period.

99 The attentive reader will note that three of these companies--ATH, Phönix and Rheinstahl--correspond, at least in name, to companies that existed prior to the formation of the Vestag, and which were instrumental in its creation. DHHU, as noted above, was a creation of the

allies, brought about by the merger of two plants form the old Vestag. Prior to the creation of the Vestag, the Dortmund plant of the DHHU was part of Hugo Stinnes' giant Rhein-Elbe Union, while the Hörder plant belonged to the Phönix group. The two plants were formally linked together by the Vestag during the 1930s, but both continued to operate independently. All of these companies, especially the former three, differed substantially, in holdings and specializations, from these earlier incarnations.

100 Bernd Huffschmid, Das Stahlzeitalter beginnt erst, (Munich: Verlag Moderne Industrie, 1965), 110-115; on Thyssen family ownership, see Franz Lammert, Das Verhältnis, 207-8; Müller, Strukturwandel, 300-303.

101 On Rheinstahl, see Huffschmid, Stahlzeitalter, 185-91; Müller, Strukturwandel, 304-5; and Lammert, Verhältnis, 206-7.

102 Huffschmid, Stahlzeitalter, 147-55.

103 Hüttenwerk Oberhausen AG belonged to GHH until 1945.

104 Krupp's steel interests were grouped in a separate holding which included the Hütten- und Bergwerke Rheinhausen AG.

105 Huffschmid, Stahlzeitalter provides information of the product profile and output of each of

these companies, 122-46, 156-84 and 192-7.

[106] On this debate, see Rüdiger Robert, Konzentrationspolitik in der Bundesrepublik--Das Beispiel der Entstehung des Gesetzes gegen Wettbewerbsbeschränkung, (Berlin: Duncker & Humblot, 1976); Viola Gräfin von Bethusy-Huc, Demokratie und Interessenpolitik, (Wiesbaden: Franz Steiner, 1962); and Berghahn, Industrie und Politik.

[107] Burkhardt Röper, ed., Rationaisierungseffekte der Walzstahlkontore und der Rationalisierungsgruppen, (Berlin: Duncker & Humblot, 1974).

[108] And SCAP simply refused to allow the minority Communist views in Japan to push the issue onto the agenda

[109] On the feeble efforts to reform the state bureaucracy on the part of SCAP, see Cohen, Remaking Japan, 378-97.

[110] Haley, Authority Without Power, 139-68.

[111] Chalmers Johnson acidly observes about this: "Ironically, it was during the Occupation that one of the fondest dreams of the wartime "control bureaucrats" were finally realized. With the militarists gone, the ***Zaibatsu*** facing dissolution and SCAP's decision to try to set the economy on its feet, the bureaucracy found itself working for the *tenno* [MacArthur] who really

possessed the attributes of "absolutism" See his"Japan: Who Governs? An Essay on Official Bureaucracy", Journal of Japanese Studies, 2,1 (1975), 16, quoted in Haley, Authority Without Power, 141.

[112] Ibid., ch. 7.

[113] Bai Gao, "Arisawa Hiromi and His Theory for a Managed Economy" in Journal of Japanese Studies, 20, 1 (1994), 115-53; idem, Economic Ideology and Japanese Industrial Policy. Developmentalism from 1931-1965, (New York: Cambridge University Press, 1997) The key shift that occurred with the Dodge Plan and the foundation of MITI, according to Gao, was that "from then on state intervention in the Japanese economy changed from control over resource allocation to control over credit": ibid., 150.

[114] It may strike some readers that I am overestimating the difference in the conditions facing the steel producers because the reconstitution of Japanese corporations formerly affiliated with *Zaibatsu* into *Keiretsu* was in the end simply the recreation of the old *Zaibatsu* conditions under a new name. I disagree with this view--and moreover, so does much of the historical literature. Rather, from the perspective of interest here, the recasting of groups as *Keiretsu* is, in fact, a further indication of the way in which the steel firms were cut off in the new structure. Though *Keiretsu* involved extensive inter-unit cross-holdings and cooperation, the

centralized control of the *Zaibatsu Honsha* (central holding office) was eliminated. The salience of inward coordination and cooperation by steel units with filial downstream consumers relative to non-filial downstream consumers was weakened, while the pressure to reorganize along mass production lines was considerably strengthened, as we shall see. On the crucial differences between prewar *Zaibatsu* and postwar *Keiretsu*, see, among others, Yamamura, Economic Policy in Postwar Japan, 110-128.

[115] Yonekura, Japanese Iron and Steel Industry; Scheppach, Die Japanische Stahlindustrie, 27-31.

[116] Yonekura, "Postwar Reform in Management and Labor", 221.

[117] Idem, Japanese Iron and Steel Industry, 213.

[118] Ibid., 213ff.; Scheppach, Die japanische Stahlindustrie, 88ff.

[119] Indeed, it was only in the 1960s that the balance of US production began to shift toward facilities located near deep harbor ports and even then significant portions of capacity were still located inland in the Pittsburgh-Youngstown area. See the discussion in Burn, Steel Industry, 518-36, esp. 528-31.

[120] Scheppach , Die Japansiche Stahlindustrie, 88ff.

[121] And in part, as Lynn & McKeown, Organizing Business, 55-119 emphasize throughout their

account, this was facilitated by the fact that the bureaucrats and association leaders had personal experience within steel companies or had dealt with the *Zaibatsu* holdings directly. Chalmers Johnson also emphasizes the centrality of personal contacts between bureaucrats, upper-level steel managers, trade association officials and their revolving affiliations, as central for facilitating tripartite coordination in steel --and also, paradoxically, for maintaining the autonomy of each: "All of the big six [steel producers] had high-ranking former MITI officials on their boards of directors.…But even so it was hard to give direct orders to the industry because so many of its executives were top leaders in business organizations such as Keidanren and Keisai Doyukai": see Johnson, MITI and the Japanese Miracle, , ch. 7, *passim*, quotation, 268. This emphasis on Johnson's part is ironic because after pointing out the autonomy of the actors, he suggests that "From the era of priority production just after the war down to approximately 1960, MITI had exercised detailed control over investments in the steel industry….", ibid., 269. On his own evidence, it seems more accurate to conclude that MITI engaged in extensive dialogue over the direction of investment with the other two interlocutors.

[122] A concise outline of these plans is provided in James E. Vestal, Planning for Change. Industrial Policy and Japanese Economic Development, 1945-1990, (New York: Oxford University Press, 1993), 115-144, esp. 118-132. An overview of the first plan is given in the English publication of the Japanese Iron and Steel Industry Federation, Industry of Japan?, The

Iron and Steel Industry and Fabricated Products, 1952 (Tokyo: Tokyo Liaison and Translation Service).

[123] On state steel policy: Vestal, Planning for Change ; Patricia O'Brien, "Industry Structure as a Competitive Advantage: The History of Japan's Post-war Steel Industry" in Business History, 34 (1992), 128-159; eadem, "Governance Systems in Steel: The American and Japanese Experience" in J. Rogers Hollingsworth, Phillipp Schmitter and Wolfgang Streeck, eds., Governing Capitalist Economies. Performance and Control of Economic Sectors, (New York: Oxford University Press, 1994), 43-71. On the cooperative and collectively-deliberative nature of trade association, government and industry interaction, see Yonekura, "Industrial Associations ", 27-51; Lynn & McKeown, Organizing Business, 90-119; 140-71; Kozo Yamamura, "The Role of Government in Japan's 'Catch-up' Industrialization: A Neoinstitutionalist Perspective", in Hyung Ki Kim, Michio Muramatsu, T.J. Pempel and Kozo Yamamura, eds., The Japanese Civil Service and Economic Development, (New York: Oxford University Press, 1995), 103-32, esp. 117-22.

[124] The first rationalization plan, which ran from 1950 to 1954, focused on the replacement of capacity and modernization of technologies, while the second rationalization plan (1955-60) targeted capacity expansion and the dramatic adoption of new technology--eleven new blast

furnaces for the production of pig iron were constructed in the period and a phenomenal thirteen basic oxygen furnaces for steel production were introduced. See Vestal, Planning for Change, 122ff.; and Lynn & McKeown, Organized Business, 90-119; 140-71.

[125] This argument is laid out in Gordon, Wages of Affluence, 63. The problem of high scrap costs had actually shaped the way that numerous producers adopted technology in the prewar period as well: see for example the interesting article by Yoischi Kobayakawa, "Problems of Technology Choice Faced by the Private-Sector Steel Industry in Prewar Japan. Nippon Steel Pipe's Steel Manufacturing Integration and the Introduction of Converters" in Japanese Yearbook of Business History, 13 (1996), , 53-71.

[126] Gordon, Wages of Affluence, 62-3.

[127] Ibid., 60-1.

[128] Idem,"Contests for the Workplace" in idem, ed., Postwar Japan as History, (Berkeley: University of California Press, 1993), 378.

[129] On the significance of social status in working class action in prewar Japan, see Thomas C. Smith, "The Right to Benevolence: Dignity and Japanese Workers, 1890-1920" in idem, Native Sources of Japanese Industrialization, 1750-1920, (Berkeley: University of California Press, 1988), 236-71; for a discussion of how these sentiments played out at the NKK steel mill in the

early post war years, see Gordon, Wages of Affluence, ch. 2.

[130] Otake Hideo writes: "The term "democratization" thus acquired in some quarters an extremely radical content, quite contrary to the intentions of the Occupation. Especially with respect to the economic order, it was variously used to legitimize 'enterprise democratization', management participation by labor, and even management exclusively by labor....": "The Zaikai under the Occupation: The Formation and Transformation of Managerial Councils" in Ward and Yoshikazu, Democratizing Japan, 366-91 (quotation, 366-?).

[131] On these councils, see ibid.; Ikuo Kume, Disparaged Success. Labor Politics in Postwar Japan, (Ithaca: Cornell University Press, 199?), 59-67; Gordon, Evolution of Labor Relations in Japan, 339-49; and idem, Wages of Affluence, chs. 1-3, esp. 36ff.

[132] Idem, "Contests for the Workplace", 379; idem, Wages of Affluence, chs. 1-3 for discussion of these events at NKK.

[133] For a contemporary's interesting effort to make sense of labor gains, see Cohen, Remaking Japan, 206.

[134] The change in American priorities is a cornerstone of the historical narrative of the Japanese occupation. For the story of its impact on labor see the various discussions in Kume, Disparaged Success; Gordon, Wages of Affluence, ch. 3; and Joe Moore, Japanese Workers

and the Struggle for Power, 1945-1947, (Madison: University of Wisconsin Press, 1983).

[135] Kume, Disparaged Success, 61.

[136] Gordon, Evolution of Labor Relations in Japan, 257-98, 374-86.

[137] Idem, Wages of Affluence, 66.

[138] Ibid., 66-70; 164-7.

[139] Ibid., 71.

[140] The two most notable authors bringing this dimension of Japanese success to the forefront are, of course, J.C. Abegglen, The Japanese Factory, (Glencoe IL: Free Press, 1958), and Management and Worker: The Japanese Solution, (Tokyo: Sophia University Press, 1973);and Ronald Dore, British Factory/Japanese Factory. The Origins of National Diversity in Industrial Relations, (Berkeley: University of California Press, 1973).

[141] And hence block entirely the Americanization efforts noted above in favor of internationally unprecedented labor control in production. The Japan of today could have been dramatically different than what it became and this possibility existed until at least as late as 1959. Gordon and others in emphasizing the significance of the pivotal decade of the 1950s have rightly criticized those who try to portray the Japanese system as somehow entrenched in

transhistorical institutional and cultural features of the Japanese people. See Gordon, Wages of Affluence, *passim*.

[142] This account follows Andrew Gordon, “Conditions for the Disappearance of the Japanese Working Class Movement” in Elizabeth Perry, ed. Putting Class in its Place. Worker Identities in East Asia, (Berkeley: University of California Press, 1996), pp.?, and idem, Wages of Affluence, *passim*, as well as Kume, Disparaged Success,. For the very important point about factionalism within the steel workers’ unions during the 1950s, I have relied on the excellent Ph.D. dissertation by Akira Suzuki, “The Polarization of the Union Movement in Post War Japan: Politics in the Unions of Steel and Railway Workers”, (University of Wisconsin-Madison, 1997), ch. 2.

[143] Again, for reflection on power in this way see Comaroff and Comoraff, Of Revelation and Revolution.