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## CLASS STRUCTURE AND "TOTAL WAR"

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WARS ARE the products of the civilization in which they are waged. Their specific character is dependent upon the specific organization of society in times of peace. Since it is always a society that is at war with another society, any aspect of war is fully intelligible only when it is seen in relation to the given organization of those societies, their technologies and their institutions, their material resources and their morals. In this broad sense war has always been totalitarian, but today, the term "Total War" has a special connotation, and there is a good reason for using it in a narrower sense. Total war is unlimited in character; it is what Clausewitz called "absolute war." It differs from that type of war which prevailed in the two centuries prior to the World War. Then war was "limited."

The forces restricting war are either inherent in the conditions under which it is waged, particularly in the available techniques, or reside in the mores pertaining to the use of those techniques. For example, in the American Civil War, railroads played an important military role, but their utilization was limited not only by the time-bound technological deficiencies of the means of transportation but also by individualistic mores which prevented the government from making the most efficient use of the existing railroads.<sup>1</sup>

The rise of total war has been often described as a historical process in which the restricting forces lost their importance. There are writers who regard the development exclusively as a decay of moral standards and a barbarous relapse into contempt for international law,<sup>2</sup> while others, and by no means only military experts, neglect the moral aspect altogether; they account for the rise of total war merely in terms of technological change.<sup>3</sup> Both explanations fall short of a comprehensive analysis. It should be realized that the use made of given technological means is not prescribed by the means themselves. To illustrate, among the German Landsknecht and the Swiss mercenaries of the 16th century, mutual hatred was so great that they did not follow the normal practice of getting ransom for prison-

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<sup>1</sup> In the Congress of the Confederacy, there was an ultraconservative minority that opposed governmental action in replacing railroads or building new ones until the beginning of 1865. Cf. Francis B. C. Bradlee, *Blockade Running during the Civil War*, 206, 210-211, 232, 234, 237, Salem, 1925.

<sup>2</sup> For example, J. B. Moore, *International Law and Some Current Illusions*, New York 1925.

<sup>3</sup> For example, Paul Ruprecht, "Wesen und Grundlagen des totalen Krieges," *Militär-Wochenblatt*, 1937, no. 43, 2670-1.

ers but killed each other. This was called "bad war."<sup>4</sup> The difference between bad war and "good war" in which the rules of the fight were observed cannot be reduced to technological terms but is clearly moral in nature.

On the other hand, cultural differences in the technique of fighting cannot be imputed to differences in the morality of the fighters. The modern pilot who bombs a munition factory kills perhaps more persons in a few seconds than the mercenary soldier of the 16th century did in all his life. This indicates different technological levels of violence rather than different personal inclinations to kill.

The technological perfection of modern totalitarian war is a by-product of the technological advance that civilization has made. Today, we can no longer share the illusions of the early advocates of industrialization that technical progress is confined to peaceful pursuits. We know that war as well as peace has been technically improved. Again, this does not mean that the question of mores and moral norms in war dissolves itself into the history of technology, but the question of personal morality should always be raised with reference to a given level of technology and be separated from the question of "institutional morality."

Total war has three distinct traits: 1. a particularly close interdependence between the armed forces and the productive forces of the nation, which necessitates large scale governmental planning; 2. the extension of siege warfare enveloping the nation as a whole is both offensive and defensive actions; and 3. a general vilification of the enemy nation. From the point of view of the individual these traits mean: the elimination of freedom and privacy, a contraction of safety differentials among different parts of the population, and a distortion of moral judgement. The first two traits constitute the institutional basis of modern war, the third pertains to its norms or its ethos; the first two have to do with the routines of national life, while the third bears upon its morale. The interdependence between the armed forces and the productive forces refers, strictly speaking, only to the presuppositions of modern war; the extension of siege warfare and the vilification of the enemy pertain to war itself; that is, the first trait refers to intragroup while the latter two bear primarily upon intergroup relations.

I shall confine myself to a few comments on the first trait of total war. Reference will be made not only to war itself but also to its preparation. This is legitimate since modern armament policies, particularly in the totalitarian countries, anticipate some of the social consequences of war.

The close interdependence between the armed forces and the productive forces of the nation is a result of the industrialization of modern warfare. The industrial mass production of the war material, its continuous reproduction in the course of the war and the supply of modern armies—all these factors necessitate a planned cooperation of soldiers and workers.

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<sup>4</sup> Sir Charles Oman, *A History of the Art of War in the 16th Century*. 37-38, New York, 1937.

With increasing industrialization of the armies, the relative importance of "natural supply," i.e., the needs of the soldier *qua man*, diminishes, but the "warlike supply," i.e., the needs of the soldier *qua soldier*, increases.<sup>5</sup> While Caesar's legionaries carried food for 17 days and Napoleon's soldiers for 15 days, the modern soldier carries the natural supply for one day only. During the 19th century, the weight of the natural supply to be carried by the soldier had to be reduced chiefly because of the increasing weight of warlike supply. Today, a soldier cannot even carry all the warlike supply he needs in order to fight. One has compared him with a Christmas tree hung with war's gifts. At the beginning of the World War, the total daily supply of a French army corps weighed 120 tons; at the end of the war, a single division needed no less than 200 tons a day, which was five times the weight necessary to supply a Prussian division in the Austro-Prussian War of 1866.<sup>6</sup> These figures indicate the dependence of modern armies on a highly developed and properly functioning system of transportation. For that reason, the "potential army quota" of the transportation service is very low.

By "potential army quota," I mean the number of workers in a given industry who can be mobilized for military service without interrupting the functioning of the economic system. The size of this quota in proportion to the number of workers employed in a given industry depends on the following factors: (a) the extent to which war requires or allows an expansion or contraction of the given industry: thus, the quota of luxury industries will be high, while in armament industries it will be very low; (b) the proportion of female workers (and children) "normally" employed in times of peace; (c) the proportion of unskilled male workers whose tasks are not too strenuous to be performed by substitute workers not available for military service, such as women, children, old and feeble persons; (d) the extent to which less skilled workers can be substituted for more highly skilled workers without disrupting production; this substitution often involves higher costs of production or requires technological changes; (e) the extent to which the labor demand of an industry is subject to seasonal fluctuations. During the World War, attempts were made to reconcile the demands of agriculture with those of the army by granting mass furloughs in harvest time to farmers and agricultural laborers drafted for military service.<sup>7</sup>

During the World War, the industrial divisions in which the potential army quota was lowest were not the industries manufacturing armament, but, above all, transportation, and also public service and utilities. In Austria-Hungary, out of 100 male workers, the exemptions from military

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<sup>5</sup> The terms are taken from G. G. Shaw, *Supply in Modern War*, London, 1938.

<sup>6</sup> Figures from Shaw, *op. cit.*, 206-207.

<sup>7</sup> This device is old. It had been already employed in the 18th century in the Prussian *Canton* system.

service in 1917 were as follows: 82.4 in railway service, 48.4 in the post and telegraph service, 21.4 in the public service, but only 19.5 in mining, and 11.8 in banking. The percentage of 8.7 for other industrial and commercial enterprises does not show the specific exemptions in the armament industries. Likewise, 2.8 for agriculture does not show the higher percentage for independent farmers; nor does it account for mass furloughs during the harvest season.<sup>8</sup> Somewhat more instructive are the following figures for France.<sup>9</sup>

TABLE I. ARMY QUOTAS IN FRANCE, 1914

Industrial Classification	Men Working in 1914		Percent of Mobilized
	Number (In 1000's)	Percent of Total Employed	
Agriculture	5237	41.40	45.30
Industry	3406	26.95	29.44
Commerce	1228	9.71	10.60
Domestic service	34	.27	.30
Liberal professions	310	2.45	2.62
Mines and quarries	246	1.95	2.11
Public service	640	5.06	2.78
Transportation	1543	12.21	6.85
Total	12,644	100.00	100.00

These figures show that the lower army quota for transportation and public service were balanced by proportionally increased quotas for agriculture and industry. Thus, the risks of war were unevenly distributed among the different sections of the population.

In industrialized warfare, further demand for labor results from the extraordinarily high wastage rate of war material, the necessity of continuous repair, the inevitable increase in administrative personnel and the demand for skilled work in passive air defense. The percentages of war material that must be replaced each month in modern war are, according to a Russian estimate, as follows:<sup>10</sup> airplanes, 40-50; tanks, 30-40; rifles and light machine guns, 6; heavy machine guns and artillery, 5; other arms, 4-33.

The more complicated the war equipment is, the more pressing will be the problem of repair. The strength of a modern army does not only depend on the health, the training and the morale of the soldiers but, with increasing motorization and mechanization, also on the ability to keep engines and

<sup>8</sup> Wilhelm Winkler, *Die Einkommensverschiebungen während des Weltkrieges*, 922-923, Vienna, 1930.

<sup>9</sup> Arthur Fontaine, *French Industry during the World War*, 29, tables 13 and 14, New Haven, 1926.

<sup>10</sup> Quoted in Institut für Konjunkturforschung, *Industrielle Mobilmachung*, 24-25, Hamburg, 1936.

machinery in order. Similarly, the more intense the use of the war material is, the more significant will be the productive capacity of replacement. To illustrate, in modern war always one fifth to one third of the airplanes must be regarded as temporarily unusable<sup>11</sup> and "from one to two hours of inspection and overhaul are needed for every hour of flying time."<sup>12</sup>

A modern mass army is rendered helpless if the many specialized functions that it is supposed to perform are not properly coordinated. Thus, the industrialization of modern warfare swells the ranks of the communication service. At the same time, mass armies make for military bureaucratization, and industrialized mass armies especially require a large staff of administrative workers. In 1924, 64 percent of the British army consisted of actual combatants, the remaining 36 percent being administrative personnel, in the largest sense of that term. In 1935, this percentage had increased to 42 percent.<sup>13</sup>

There is no basis for estimating the demand for men especially trained in passive air defense, but it is bound to increase in the future, nor is it possible to give accurate figures concerning the number of persons at home engaged in suppressing unrest, strikes, and rebellion. Their number will be greater in totalitarian countries than in democracies.

Attempts have been made to estimate the ratio between soldiers and workers in a modern war. In the United States, seventeen men had to be employed at home in order to equip one soldier in the Expeditionary Force.<sup>14</sup> European critics regard this ratio as exceptionally high and account for it in terms of the particular difficulties of transportation which had to be overcome in this country. The lowest European estimate of this ratio under present conditions is 1:8. It is probably much too conservative. Possony, whose estimates are most carefully considered, gives two different ratios for two different types of warfare. He assumes that 9 to 9.5 workers are needed to equip one soldier when offensive in the air is combined with defensive action on the ground; 12 to 12.5 workers per soldier for offensive land warfare with strong air and tank forces.<sup>15</sup> There is unanimity among all students that since the end of the World War the ratio has increased.

Under these circumstances, the interdependence between the armed forces and labor represents a crucial problem of modern war, since the available population resources are limited and the demands of the generals

<sup>11</sup> Niessel, *La Maitrise de l'Air*, 195, Paris, 1928.

<sup>12</sup> R. Ernest Dupuy and George Fielding Eliot, *If War Comes*, 82, New York, 1937. On page 95, the authors say that "the rate of wastage of planes and pilots in the extensive air operations of future wars will be very high."

<sup>13</sup> G. C. Shaw, *op. cit.*, 275-276.

<sup>14</sup> Davis in *Army and Navy Journal*, December 5, 1935.

<sup>15</sup> Stefan Th. Possony, *Die Wehrwirtschaft des totalen Krieges*, 60, Vienna, 1938.—For a survey and discussion of other estimates, cf. Possony, *op. cit.*, 59 ff.; *Industrielle Mobilmachung* 40-50; and the articles by Gen. Debeney in *Revue Militaire Suisse*, vol. LXXVI, no. 12, vol. LXXVII, no. 1, and in *Revue des Deux Mondes*, March 15, 1933.

for soldiers conflict with those of industry for workers.<sup>16</sup> This interdependence has important consequences for the social structure.

First, armament and war reduce *unemployment*, eventually causing a shortage of labor. This has become a truism today. However, immediately prior to the World War, those few authors who advocated economic mobilization supplementary to military mobilization feared that war would create large scale unemployment and for that reason endanger the stability of the social structure;<sup>17</sup> strangely enough, they did not visualize that industrialized warfare would create employment. In fact, unemployment did increase at the outbreak of the World War in all belligerent countries, but after a period of adjustment, the extensive demand for labor inherent in the dynamics of modern war made itself felt as a serious labor shortage.<sup>18</sup>

Since armament creates employment, it can be presented and popularized to a certain extent as an effective measure against unemployment in times of peace. Democratic governments will find it particularly difficult to embark upon large scale armament policies in a period of economic recovery because the resistance and opposition of capitalistic classes against public spending will then be especially strong. Dictators are politically less dependent on the business cycle, because they rule by force, controlling profits and capital investments no less than the labor market. It is erroneous to assume that their policy serves wholly the economic interest of the upper classes.

Second, long before unemployment disappears in the course of armament, serious difficulties arise from the *scarcity of skilled labor*. This scarcity hampers total preparedness even in times of peace, when battles do not yet drain the available population resources. It affects the amount of output and possibly its quality. Recent experiences prove that this shortage makes itself felt in spite of high industrialization, large scale unemployment and a limited armament program. The expansion scheme of the Royal Air Force in Great Britain cannot compare with the schemes of totalitarian states, and yet, already in October, 1937, almost all the aircraft manufacturing firms were on the waiting lists of the labor exchanges for skilled

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<sup>16</sup> Ernst von Wrisberg, who was Director of the *Allgemeine Kriegsdepartement* in Germany during the war, says in his *Heer und Heimat, 1914-1918*, 80, Leipzig, 1921, that "man power was the only means of war which could not be replaced within a short time."

<sup>17</sup> See the suggestions of the German Senator Posedel in *Reichsarchiv., Der Weltkrieg, 1914-1918: Kriegsrüstung und Kriegswirtschaft*, vol. I, 333 ff. and 397 (note), Berlin, 1930. Also in England there was fear of labor surplus at the beginning of the war rather than of labor shortage. See Humbert Wolfe, *Labour Supply and Regulations*, 16 ff., London, 1923. On the lack of foresight of the military bureaucracy in Russia, see Nickolas N. Golovine, *The Russian Army in the World War*, 37 ff., 71-72, New Haven, 1931.

<sup>18</sup> For France, see Fontaine, *op. cit.*, 22 ff.; for England, Wolfe, *loc. cit.*; for Germany, R. Meerwarth, A. Günther, W. Zimmermann, *Die Einwirkung des Krieges auf Bevölkerungsbewegung, Einkommen und Lebenshaltung in Deutschland*, 348 ff., Stuttgart, 1932; and Paul Umbreit and Charlotte Lorenz, *Der Krieg und die Arbeitsverhältnisse*, 65 ff., Stuttgart, 1928.

metal workers.<sup>19</sup> In this country, the Navy Department has to cope with a shortage of naval architects, marine engineers, shipfitters and copper-smiths. The objective is merely to increase the number of trained employees at the yards and other naval establishments from 72,000 to 100,000, and yet this has been said in a recent statement of the Naval Department:<sup>20</sup>

The United States Civil Service Commission and the labor boards at the navy yards and stations are giving the widest publicity to the local needs, but it is apparent that, notwithstanding the unemployment still existing throughout the country, capable men in the wanted trades are becoming harder and harder to obtain.

The apprentice schools at all naval yards have been ordered to operate at maximum capacity. For comparison, it may be mentioned that in Germany the percentage of nonagricultural apprentices increased, 1934 to 1937, from 566,000 to 857,000—from 4.5 percent to 5.4 percent of the gainfully occupied.<sup>21</sup> During a war, the shortage of skilled labor will be particularly serious not only because of the increased production of war materials but also because industrialized armies must recruit a large proportion of soldiers from the industrial classes of the population.

In the 18th century, the officers of European armies came from the landed aristocracy, the privates partly from the lower agricultural classes, partly from the unsettled and otherwise unemployable elements of the population. Even in those countries in which conscript systems were introduced, the industrial classes were largely exempt from military service.<sup>22</sup> Industrial skill was too valuable to be wasted in war, and war could be waged without technical intelligence. During the 19th century and until the outbreak of the World War, the countryside was still regarded as the most important and desirable source of manpower for the armies. However, as industrialization made progress, the occupational composition of the population shifted, engendering a change in the occupational composition of the mass armies. The proportion of recruits coming from the cities increased. The industrialization of society was less visible, however, in the occupational stratification of the armies than in that of the population as a whole. In countries like Germany, in which the big landowners had more political power than the business leaders in industry and commerce, members of the old political élite were afraid that an army with increasing proportions of industrial workers in the rank and file and of sons of wealthy commoners in the corps of officers might endanger the stability of the

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<sup>19</sup> *The Times*, October 23, 1937.

<sup>20</sup> *The New York Times*, December 14, 1938.

<sup>21</sup> Reichs-Credit-Gesellschaft, *Deutschlands wirtschaftliche Entwicklung im ersten Halbjahr 1938*, 39, Berlin.

<sup>22</sup> See Hans Speier, "Militarism in the Eighteenth Century," *Social Research*, August 1936, 309 ff. A similar situation prevailed in Russia after the introduction of compulsory universal service in 1874; see Nicholas N. Golovine, *op. cit.*, 1-29.



whole class structure. Therefore, they retarded necessary adjustments of the recruiting methods and were even reluctant to increase the size of the army. Thus, the class composition of the army lagged somewhat behind that of the population as a whole.<sup>23</sup>

When the World War broke out, the available man power had to be utilized regardless of any political considerations. But then the structure of industrial society itself compelled the military bureaucracies to put an especially heavy burden upon the agricultural population and industries with a high potential army quota. Thus, the class composition of the mass armies again failed to tally with the class composition of the total population.

With the new thrust toward motorization and mechanization after the World War, however, a greater proportion of technically skilled soldiers becomes indispensable for operating the war machines. The fighting ability of the soldier in unindustrialized warfare could be defined in terms of endurance, drill, and courage. The modern soldier has to be also intelligent. This must necessarily increase the shortage of skilled workers at home, since the intelligence and skill required of the modern soldier resembles those of the engineer and of the skilled mechanic. In a recent description of the training of recruits in a German tank regiment, it was stated that "most of the young recruits . . . were skilled plumbers, mechanics and fitters."<sup>24</sup>

Finally, a most important factor that is found to aggravate the shortage of skilled labor is the exceedingly high rate of deaths and fatalities in the most highly modernized sections of the army. The flying personnel of the air force and the soldiers of the tank corps have a much lower chance of survival in war than other soldiers. Of the total number of officers and privates that were trained for the British Air Force during the World War, about 16 percent were killed during their training and in service behind the front. The total losses, including wounded and missing, amounted to 76 percent,<sup>25</sup> which was far above the average for the armed forces as a whole. According to Possony, 15 to 20 out of 100 fighting soldiers died within a year during the World War, while, under modern conditions, the combined death rate of the flying personnel of the air force and of the tank corps is 200 to 300 percent a year.<sup>26</sup>

In the history of capitalism, risks and uncertainties in life have been

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<sup>23</sup> Cf. Lujo Brentano and Robert Kuczynski, *Die heutigen Grundlagen der deutschen Wehrkraft*, München, 1898; and Eckart Kehr, "Klassenkämpfe und Rüstungspolitik im kaiserlichen Deutschland," *Die Gesellschaft*, vol. IX, Mai 1932, 391-414.

<sup>24</sup> *Berliner Börsen Zeitung*, November 20, 1935, quoted in A. Müller, *Hitlers motorisierte Stossarmee*, 170, Paris 1936.

<sup>25</sup> Otto Riebigke, *Was brauchte der Weltkrieg?*, 70-71, Berlin, 1936.

<sup>26</sup> Possony, *op. cit.*, 63-64. The author does not say, however, on what basis this estimate rests. The argument is not affected, even if the figures were somewhat lower.

unevenly distributed among the different sections of the population. The agricultural classes have run relatively greater risks and suffered proportionally higher losses of life in times of war, whereas the industrial classes have been disproportionately exposed to the risks and insecurities of the business cycle in times of peace. With the rise of the mass armies, on the one hand, and the shrinking importance of family farms in agriculture, on the other, this inequality has become less and less accentuated. In some countries, it perhaps was reversed during the World War. It is difficult to gain a clear picture as to which social and occupational classes suffered the highest losses in proportion to their size during the World War. This is due to differences in social structure and military policy among the different nations. In Austria, the available figures for the first two years of the war show higher death rates for manual workers than for officials, liberal professions, and the farm population.<sup>27</sup> For France, however, more comprehensive figures pertaining to the whole war period indicate that the relative losses of the liberal professions and the farmers were above the proportions of these groups in the population as a whole.<sup>28</sup> It is probable that in total war, for the first time in the history of capitalism, those classes which possess the highest technical intelligence and skill will be exposed to the greatest relative danger, both at home and at the front.

The shortage of skilled labor and of technical intelligence is likely to exert a restricting influence on total war. It is no longer true that the three most important means of war are money, money, and money. Today, they are rather labor, raw materials, and organization.

For that reason, any government which prepares for total war must necessarily encroach upon what in liberal democracies is called the rights of labor. In order to increase the potential army quota of the national economy and to maximize the warlike supply of the military forces, labor has to be allocated and distributed so as to preclude waste. This involves the liquidation of politically independent trade unions, comprehensive registration of available labor resources, and the prevention of free mobility.<sup>29</sup> The rationale of modern militarism is efficiency unmitigated by any humanitarian considerations. Its spirit is that of positivistic science. In this regard, total war is an upshot of modern civilization.<sup>30</sup>

Much of what is waste from the point of view of the collectivity is freedom and privacy to the individual. Total preparedness means large scale planning with an inflated bureaucratic organization, its inevitable con-

<sup>27</sup> See Winkler, *op. cit.*, 22-23.

<sup>28</sup> See Fontaine, *op. cit.*, 31.

<sup>29</sup> For a survey of German labor policy, today, cf. Frieda Wunderlich, "Germany's Defense Economy and the Decay of Capitalism," *Quart. J. Econ.*, May 1938, 449 ff.; and Max Ascoli and Arthur Feiler, *Fascism for Whom?*, part III, chapters 7 and 8, New York, 1938.

<sup>30</sup> Modern militarism is no longer a "cult" and as such opposed to the scientific "military way," as Alfred Vagts in his *History of Militarism*, New York, 1937, says.

comitant.<sup>31</sup> As Max Weber has pointed out, all bureaucratic organizations make for negative or "passive" democratization, i.e., for an abolition of privileges. Militaristic bureaucratization makes for an equality without rights. Total war levels class distinctions. This tendency toward social equality manifests itself in the following ways.

First, it is in the interest of the government to curtail profiteering, because in mass war, profiteering is bound to disunite the nation and to undermine the morale of the soldiers. It may cause sabotage, unrest, and revolution. Profiteering must be understood in its widest sense so as to include not only the conspicuous cases of enrichment but also the development of minor gains. In particular, income differentials between soldiers and workers at home may constitute profiteering in the psychological sense of the term and create resentment. Significantly enough, an equalization of the incomes of soldiers and workers in case of war is being seriously discussed in Germany today.<sup>32</sup>

Second, the inclination of the upper classes to indulge in conspicuous consumption will be suppressed in war. Not only luxury industries will lie idle, but even food and clothing will be allocated according to need rather than social status. Thus, one of the most important symbolic expressions of social rank will disappear. A German research worker says that during the World War, "clothing lost the social importance which it had before."<sup>33</sup>

Third, the experience of the World War shows that the large industrial plant is preferable to the small plant for the efficient production of war materials. The advantages of large establishments are many: easier mobilization, better facilities for research, stricter organization, easier supervision<sup>34</sup> and higher productivity of labor. For all these reasons, modern total war tends to destroy the basis of the independent middle classes. To use the Marxian terminology, it proletarianizes them. In Germany, today,

<sup>31</sup> For illustration, it may be mentioned that in the United States, at the time of greatest expansion of the Federal Administration during the World War, the number of changes in organization, personnel, or function in departments amounted to 300 to 500 a day. Cf. *Complete Report of the Chairman of the Committee on Public Information*, 69, Washington, 1920.

<sup>32</sup> For a general survey of the German discussion of the labor problem in a defense economy, cf. Hans Heinrich Bischoff, "Arbeitseinsatz im Kriege," *Vierteljahrshefte zur Konjunkturforschung*, 63-73, vol. XII, 1937-38. For a critical discussion, see Frieda Wunderlich, "Labor in Wartime," in *War in our Time*, ed. by Hans Speier and Alfred Kähler, New York, 1939.

<sup>33</sup> Zimmermann, in Meerwarth, Günther, and Zimmermann, *op. cit.*, 357. In Austria the failure to curtail profiteering and the subsequent rise of a parvenue class were reflected in the production of millinery. According to Winkler, *op. cit.*, 52, it developed as follows (index numbers):

First half of 1914.....	100	Second half of 1916.....	100
Second half of 1914.....	0	First half of 1917.....	150
First half of 1915.....	20	Second half of 1917.....	150
Second half of 1915.....	25	First half of 1918.....	175
First half of 1916.....	100	Second half of 1918.....	25

<sup>34</sup> Karl Justrow, *Der technische Krieg*, 25-26, Berlin, 1938.

an increasing number of small shopkeepers and artisans are officially "charged with 'bourgeois prejudices,' derided as 'sham existences,'"<sup>36</sup> and forced to become wage earners. From August, 1936, to August, 1937, 640,000 more workers were employed than the reduction of unemployment would indicate. No less than 26 percent of these 640,000 wage earners had been shopkeepers and other self-employed persons.<sup>36</sup>

Fourth, total preparedness is independent of the legal property structure. In a planned war economy, the ruling economic classes, too, are subjected to the control of the political élite. They cease to rule. Private property may be maintained, but the use made of property will be strictly controlled. The logic of total preparedness transforms the capitalist into a functionary of the government. Is he still a capitalist when everything is prescribed to him, the amount and the kind of his production, the time and scope of his investments, prices as well as wages, and even the number of workers to be employed?

In conclusion, let me re-emphasize that the interdependence of the armed forces and the productive forces of the nation in modern war is inherent in the character of war. In other words, the social implications of modern war do not depend on the form of government. The difference between the American Protective Mobilization Plan and the German defense economy, apart from being a difference between a plan and its realization, is a difference of degree, not of principle. As such, it can be reduced to differences in geographical location.

Recently, George Fielding Eliot has pointed out that the United States, like England prior to the rise of air power, can entrust her national security to a strong navy.<sup>37</sup> The natural protection offered by an insular position renders large land forces unnecessary while a great navy and even a large air force can be maintained by a rich country without militarizing society at large. The argument is sound if its political presuppositions hold, i.e., as long as the United States can reasonably expect that no aggressive power will come to dominate the continent of Europe.<sup>38</sup>

<sup>36</sup> Arthur Feiler, in Max Ascoli and Arthur Feiler, *op. cit.*, 239.

<sup>36</sup> Further, 48 percent were old workers who had to continue working beyond the customary age limit, additional female workers, and foreign laborers; only the remaining fraction could be ascribed to a change in the age composition of the population. See Reichs-Credit-Gesellschaft, 41, *op. cit.*

<sup>37</sup> George Feilding Eliot, *The Ramparts We Watch*, New York, 1938.

<sup>38</sup> According to Eliot, the United States has a vital military interest in the political status quo of the Dutch West Indies and Surinam, the Danish Faroe Islands, the Portuguese Azores, South America, and the Caribbean; not to speak of the sentimental interest in the Philippines.