

Was Marx a Crypto-Malthusian?

Marx...taught that...if a man had to fight for the hungers and necessities of ten or twelve children, he made a better revolutionary. "Let 'em have as many as they can," was the cry.¹

Marx, the most powerful critic of Malthus, may also be dismissed as being largely irrelevant to the mainstream of modern empirical demography.... Marx's theory of the process by which "population pressure" develops was not based on research.²

If the working-class movement was ever to articulate a demographic program of its own, Marx of all social theorists should have been most vitally interested in providing the requisite foundations. Yet even David Harvey, an orthodox Marxist social theorist, plausibly speaks of "Marx's rather surprising failure to undertake any systematic study of the process governing the production and reproduction of labour power itself." Although he regards the omission as one of the most serious gaps in Marx's theory and a very difficult one to plug, Harvey suggests that Marx's short-circuited approach can be defended by reference to the limited purpose to which Marx sought to put the discussion of the labor supply—namely, that within the framework of the general law of accumulation, capitalist production inexorably generates the industrial reserve army it needs regardless of the absolute size of the population. Other Marxist critics maintain that Marx and Engels failed to take a step beyond bourgeois economics not only in the general sense of treating population as an exogenous factor, but also more specifically in taking the existence of a laboring population as a self-explanatory and natural prerequisite of societal reproduction. By taking the proletarian family for granted, Marx is said to have mystified the production of children and hence of working-class reproduction.³

This chapter explains how the stereotyped charges that political and

academic critics have leveled against Marx fail to do justice to his surprisingly subtle theorization of the interaction between the mechanisms of capital accumulation and proletarian population development. By the same token, the fruitfulness of Marx's contribution to the debate over the need for direct societal regulation of population is shaped by his peculiar synthesis of the theory and practice of transformative historical change. Because Marx concluded that population, by and large, was not a significant impediment to the profitability of individual capitals or capital in general, he saw little systemic motivation for demographic intervention by the state. Thus, unlike the situation, for example, with regard to the length of the working day, which generated a tension between the short-term interests of individual firms and the long-term viability of British capitalism, ultimately resulting in compulsory state norms, demographic change failed to set in motion any capital-oriented state intervention. Marx's analysis of what he regarded as a surplus population specific to the capitalist mode of production does not simply presuppose that some economic mechanism would always insure a quantitatively adequate supply of labor, but actually constructs a detailed theoretical model. By the same token, Marx does not make the functionalist assumption that economic mechanisms automatically and agentlessly ward off all demographic threats to capitalism's long-term viability.

As for the other historically critical social formation, socialism, Marx denied in principle the possibility or even desirability of analyzing—and thus preempting active construction of—this future mode of production.⁴ Since Marx also believed that the subjective roots of the revolutionary working-class consciousness that would eventually impel the proletariat to overthrow capital would not, at least, given Marx's sense of the potential propinquity of a socialist society, within any politically relevant period, tap into workers' reproductive desires, habits, or patterns, he also refrained from proffering a transitional demographic program.

Despite these self-imposed methodological constraints, Marx has persistently been taken to task for having failed to develop a theory of population. Some critics appear to believe that *Das Kapital* was designed as a kind of *Encyclopædia Capitalistica* or *Pauly-Wissowas Real-Encyclopädie der classischen Kapitalismuswissenschaft*. Just as Marx has been faulted for ignoring “the implications of man's mortality” for human nature, for more than a century economists and demographers have identified his neglect of natality as a near fatal missing link in his analysis of capitalism.⁵

Even during Marx's lifetime, commentators began insisting that family and fertility were black boxes for him. One of the earliest discussions of *Das Kapital* in a scholarly economics journal mocked Marx for blithely assuming that early proletarian marriages were somehow forced upon workers by a capitalist law of nature which they were powerless to resist. In fact, wrote Julius Platter in the prestigious *Jahrbücher für Nationalökonomie und Statistik* in 1877, since marriage was a free act subject to human will, any number of motives would have supported late marriages and sparing procreation in order to thwart the interests of the class

enemy. Platter, ignoring that in preindustrial traditional Europe the positive correlation between household size and wealth or social status was a “moral law,” asserted that the highly positive correlation between poverty and procreativity was “a much more absolute, more abstract law of population” than Malthus’s and “a pure law of nature, equally in effect at all times and in all places..., a law that makes the poor poorer and poorer and the rich richer and richer,” and immune from knowledge and education. Platter completed his attack by charging that whereas Marx found a “purely physical relation between poverty and human fertility,” identifying poverty with overfertility, Malthus operated with a moral or psychic relation, identifying the poor with those who gave little thought to the future.⁶ Ironically, this interpretation, which resembles twentieth-century culture-of-poverty explanations, was also embodied in Marx’s and especially Engels’ understanding of proletarian fertility patterns.

Other nineteenth-century German critics labelled Marx’s account of the early age at which workers married under capitalism at best circular. Like much of neoclassical economics, Marxism stands accused of having failed to forge the mediating links between the theoretical or systemic demand for labor and the social-psychological microfoundations of human procreation.⁷

An even harsher, albeit less theoretically grounded, attack on Marx stemmed from Margaret Sanger, one of the founders of the birth control movement in the United States. After having passed through a more socialist-oriented phase, Sanger concluded, soon following World War I, that because Marx “failed to recognize the interplay of human instincts in the world of industry,” he neglected “the dangers of irresponsible parenthood and reckless breeding” and overlooked that the “greatest asset of the capitalism of that age was...the uncontrolled breeding among the laboring classes.”⁸

More recently, feminists have charged that “since Marx did not see women as an integral part of the proletariat, as both producers and reproducers, he had no basis for theorizing a ‘law of population’ whose dynamics included women’s need for fertility control, apart from shifts in the capitalist demand for labor; he did not see fertility control as part of the class struggle, much less the gender struggle.”⁹ Some Marxist feminists assert that because Marx’s labor theory of value assumes that the value of labor power, unlike that of other commodities, is not determined by the societally necessary labor time to produce it, Marxists fail to discuss the labor time that mothers devote to their children, that is, future workers.¹⁰ Alternatively, Harvey, a very friendly interpreter, is constrained to admit that Marx failed to rise above the dismal scientists of his era: “When it comes to features promoting a high rate of birth (early age of marriage, rising birth rates, etc.), Marx does not read very differently from Malthus.... Marx seems to be trapped in the same general swamp of ignorance with respect to the process of reproduction of labor power as were his contemporaries.” And even where Marxists understandingly condone Marx’s politically justified denunciations of Malthus, they charge him with having inadvertently misled his followers into abandoning demography to “our enemies.”¹¹

Critics have attacked Marx for mutually incompatible failings. Some take Marx to task for having been completely blind to the existence of population problems. Because he is said to have regarded the growth of the labor force as a necessary and automatic consequence of capital accumulation, some social scientists consider him a demographic optimist, who could not imagine that depopulation could ever be capitalism's undoing.¹² Yet Marx's failure to have problematized absolute population decline is, in light of capitalism's development during the twentieth century, largely academic. Thus, the demographic historian William Petersen chides Marx for having ahistorically constructed his system around the unusually strong population growth of the nineteenth century; consequently, demographic forecasts of population decline during the 1930s could not even have been a "hypothetical contingency."¹³ Marxist economics is, however, hardly an appropriate object of criticism for inadequate understanding of the Great Depression. Similarly, the actual population decline in several Western European countries since the 1970s has scarcely posed insoluble puzzles for Marxist analysis of economic development. It is William Stanley Jevons, one of the initiators of the marginalist revolution, against whom the charge of demographic obtuseness should be raised. Because he believed that the problem of economics was to find the mode of employing a given population and powers of production so as to maximize the utility of the output, for him the doctrine of population "forms no part of the direct problem of economics."¹⁴

Others have charged that Marx was committed to an "implicit Malthusian theory of population," which blinded him to "the fact of mass progress... [which] made men rethink the calculus of having children" by means of a non-Malthusian check on the birth-rate....¹⁵ In a variant on this theme, other economists, echoing Sanger's judgment that Marx "fail[ed] to realize that it is to the capitalists' advantage that the working classes are unceasingly prolific," make the counterintuitive assertion that Marx and Marxists have actually understated the extent of capitalist exploitation by deemphasizing the reproductive surplus that the proletariat creates at home for capital, thus adding to the live stock of golden egg-laying geese. Marxists, so goes this argument, have deprived themselves of this additional agitational tool because it would only lend credence to neo-Malthusian propaganda.¹⁶

Unlike Malthus, however, Marx was not attempting to develop a general theory of population (change). Indeed, contrary to the claims of many of his critics and supporters, Marx did not even purport to have uncovered The Law of Population of the Capitalist Mode of Production. What Marx did theorize in *Das Kapital* was the "Progressive Production of a Relative Overpopulation or Industrial Reserve Army" as an indispensable element of the "General Law of Capitalist Accumulation."¹⁷ This self-sustaining mechanism of cyclical labor-saving capital investment booms that disemploy more workers than they hire is a perennial source of mystery to amnesic economic analysts, although sociodemographers confirm that the labor force participation rate of such "marginal" groups as women, the young, and the old fluctuates during the course of the business cycle in accordance with endogenous socioeconomic rather than exogenous demographic forces.¹⁸

The statement in the first volume of *Das Kapital* that has misled critics to characterize Marx as a demographer manqué, even of capitalism, is his insight that the laboring population, by producing the accumulation of capital, produces its own relative redundancy or overpopulation: “This is a law of population peculiar to the capitalist mode of production, as indeed every special historical mode of production has its special historically valid laws of population. An abstract law of population exists only for plants and animals, insofar as human beings do not intervene historically.” Marx is not saying here that he has laid bare the totality of the laws of population for capitalism. Rather, he has merely singled out one of the set of population laws that no mode of production prior to capitalism had fashioned for regulating the growth of its working population. Because the “population fanatics” applied the term *surplus population* exclusively to labor power and expressly exempted from it the leisure consuming class, Marx studied a class-based subset of capitalist laws of population.¹⁹

A decade before he published *Das Kapital*, Marx began exploring the concept of overpopulation in the context of the free laborer qua virtual pauper in the so-called *Grundrisse*. He observed that various societal modes of production were characterized by “various laws of the increase of population and overpopulation” (pauperism). These laws were “simply to be reduced to the various modes of relating to the conditions of production or with regard to the living individual conditions of reproduction of him as member of society.... It is only in the mode of production grounded on capital that pauperism appears as the result of labor itself, of the development of the productive power of labor.” Consequently, what appeared as overpopulation in one stage of societal production might not be in another. Marx criticized Malthus precisely for his inability to grasp these historical differences and thus for reducing the complicated and changing relationships of overpopulation in various historical phases “stupidly to one relationship...an abstract numerical relationship.” Malthus’s ahistorical approach caused him therefore to transmogrify the immanent, historically changing limits of human procreation into external limitations and the external checks of natural reproduction into internal limits or natural laws of procreation. Instead, Marx noted, surplus population had to be grasped generally with regard to “the social mediation through which the individual relates to the means of his reproduction and creates them.... The invention of surplus workers, i.e., of propertyless people, who work, belongs to the epoch of capital.”²⁰

Marx had formed this view of Malthusianism a decade earlier in the course of preparing a series of lectures for workers on wages. Based on the less sophisticated understanding of capital accumulation that he had developed by 1847, Marx charged that Malthus’s claim that it was a law of nature that population grew faster than the means of employment or subsistence enabled the bourgeoisie to transform a societal law into a law of nature. This naturalization process was an ideological benefit to the bourgeoisie by portraying the proletariat’s misery as its own fault.²¹

In contrast, Malthus, because he forged a mechanical linkage between

wages and population guaranteeing a perpetual equilibrium, was, counter-intuitively, a demographic optimist.²² Thus given stationary national resources and population, wages could not fall below what is necessary to maintain stationary population “because...the principle of demand and supply would always interfere to prevent such wages as would either occasion an increase or diminution of population.” Ironically, Malthus’s impressively long-lived population theory has been characterized by a leading developmental economist as a nonstarter “for the capitalist epoch.”²³ As Wrigley and Schofield explain in their monumental English population history, before 1800, faster population growth was associated with a declining standard of living; after about 1811, however, the Industrial Revolution broke that historic link:

And by an ironic coincidence Malthus had given pungent expression to an issue that haunted most pre-industrial societies at almost the last moment when it could still plausibly be represented as relevant to the country in which he was born.... After 1800 poverty was, so to speak, no longer inevitable and the stage was set for the high indignation about poverty so characteristic of many nineteenth-century reformers.... Perhaps now it can be seen that both Malthus and his successors were right in their generations, for the world viewed by a man of Marx’s generation had changed fundamentally.... The tension between population growth and living standards...gave way before a change in productivity so profound that an increase in poverty was no longer the price of an increase in numbers.²⁴

Marx’s estimation of the futility of population control as a means of counteracting the expansion of the reserve army and thus mitigating its wage-depressing effect was driven by his theory of capital accumulation, which explained the individual worker’s poverty not as a consequence of his personal superfertility, but, rather, of his displacement by constant capital—a fate to which even the childless were vulnerable. Marx’s insight was hardened by his observation of contemporary demographic ruptures in Ireland. The depopulation following in the wake of the famine of 1846 fashioned the best possible experiment for testing the Malthusian dogma that overpopulation causes misery and “equilibrium is restored through depopulation.” Yet the consequence for those who remained behind, liberated from overpopulation, was wages as low as ever because relative overpopulation more than kept pace with depopulation.²⁵ English agriculture in the 1850s furnished Marx with additional evidence. A rise in wages brought about by the confluence of factors such as the decline in labor supply caused by emigration and absorption by factories and heightened demand for soldiers had prompted tenant farmers to introduce new labor-saving machinery. The resulting “artificial overpopulation” and renewed decline in wages occurred despite the relative and absolute decrease in the agricultural population.²⁶ As generalized by Gunnar Myrdal: “If we could ‘wish away’...all the unemployed, this change would bring about secondary changes in the various supply and demand

curves, with the result that in...a short time a new unemployment would develop...if this...change is not assumed to improve the social organization of the economic process.”²⁷

Even before presenting his theory of accumulation, Marx made clear in that part of his model that assumed merely simple (that is, nonexpanding or nonaccumulating) reproduction that the continuous transformation of money into capital presupposed that the possessor of labor power had to be continuously present in the market. Since the seller of labor power was mortal, he had to immortalize himself through procreation. Marx’s starting point is therefore that “at the very least” the workers who are withdrawn from the labor market as a result of having been used up or died must constantly be replaced by an equal number of substitutes. Marx operates with the classical political economic assumption of a proletarian family wage, that is, that the means of subsistence required for the production of labor power include those for the departing worker’s replacements, which, conventionally enough, Marx assumed to be his children. Thus “this race of peculiar commodity owners immortalizes itself in the commodity market.”²⁸

Marx’s view thus far bears a superficial resemblance to Ricardo’s, which posited that the “natural price of labour” sufficed to enable labourers “to subsist and to perpetuate their race, without either increase or diminution.” But in spite of Ricardo’s insistence that the natural price of labor included a historical, moral, political, cultural, and place-based component, he also maintained a naturalistic-biologicistic version, according to which labor became dear when it was scarce; when the market price of labor—that is, “the price which is really paid for it, from the natural operation of the proportion of the supply to the demand”—exceeded its natural price, the laborer’s enhanced purchasing power enabled him to rear a “numerous family. When, however, by the encouragement which high wages give to the increase of population, the number of labourers is increased, wages again fall to their natural price, and indeed...sometimes fall below it.” At this depressed standard of living, the mirror-image process of readjustment of wages and supply of labor was ignited: “It is only after their privations have reduced their number” that the market price moves back up to the natural price of labor.²⁹

This naturalistic mechanism was explicated even more explicitly by J.B. Say, a Smithian popularizer for whom Marx had bottomless contempt. After stating that the diminished supply that would result from the inability of workers to raise families on their wages would soon lead to higher wages as demand exceeded supply, Say remarked that the same process would apply if significant numbers of workers did not marry. Since the childless could offer their labor more cheaply than, and would thus displace, worker-parents, they would soon bulk proportionately larger within the working class: “not only would they not contribute to recruiting the class, but they would prevent others from being able to recruit it.” But the old equilibrium would promptly reassert itself because the lower wage level of the childless would be followed by an increase resulting from the decline in the number of workers.³⁰

Marx criticized this received dogma of political economy as an unrealistic

abstraction from the way capitalism functioned and had to function. Malthus had laid out the logic of what became known as the wage-fund doctrine in his critique of Adam Smith in the first edition of the *Essay on the Principle of Population*:

the comforts of the labouring poor depend upon the increase of the funds destined for the maintenance of labour, and will be very exactly in proportion to the rapidity of this increase. The demand for labour which such increase would occasion, by creating a competition in the market, must necessarily raise the value of labour, and, till the additional number of hands required were reared, the increased funds would be distributed to the same number of persons as before the increase, and therefore every labourer would live comparatively at his ease.³¹

Schematically, then, Ricardian political economy believed in the following cyclical mechanism: ↑ capital accumulation → ↑ wages → ↑ working-class procreation → over-full labor market → ↓ wages → ↓ working population (or ↑ exploitation) → ↑ capital accumulation. Marx explained why this model was unrealistic:

For modern industry with its ten-year cycle and its periodic phases...it would indeed be a pretty law that regulated the demand and supply of labor not by the expansion and contraction of capital, that is, according to its valorization needs at any particular time, so that the labor market now appears relatively under-full because capital is expanding, and now again relatively over-full because it is contracting, but, instead, made the movement of capital dependent on the absolute movement of the absolute amount of population.... A pretty method of motion this for developed capitalist production! Before any positive growth of the really able-bodied population could take place as a result of the increase in wages, the deadline would have run again and again during which the industrial campaign must have been conducted, the battle fought and decided.³²

A more realistic account of capitalist development showed that a surplus-worker population or, as political economy characterized it, overpopulation, both was a necessary product of capital accumulation and in turn became a lever of the latter and “a condition of existence of the capitalist mode of production. By having this industrial reserve army at its disposal, capital has, for its changing valorization needs, ready access to the “exploitable human material, independent of the limits of the real increase in population.” Real or mere biological population growth would be much too inflexible to meet accumulating capital’s sudden and explosive expansive force as its frenetic invasions of branch after branch require the capacity to throw large masses of workers into these operations without interrupting the scale of production in other industries. This enormous volatility of capitalist production not only was unprecedented, but was also impossible even in early

capitalism, when accumulation progressed in step with the relative growth of demand for labor and finally ran up against “natural limits of the exploitable worker population” that historically were cleared away through enforced proletarianization of noncapitalist producers. The expansion-contraction cycles of developed capitalism, in contrast, hinge on the availability of an increased supply of workers that is both “independent of the absolute growth of population” and largely generated within the capitalist sector of the economy. Specifically, this reserve army is recruited by “constantly setting free a part of the workers through methods that reduce the number of employed workers in proportion to the increased production” and thus make some of them unemployed or underemployed.³³

Marx’s repeated insistence that capitalist production cannot be satisfied with the quantity of labor power supplied by the natural increase of population and “needs for its free play an industrial reserve army independent of this natural limit” manifestly presupposes that this violently fluctuating labor reservoir was superior to a (theoretically conceivable) system of a vast perpetually inexhaustible surplus population that would so far exceed the needs of capital even at the height of the investment cycle that capital would be additionally freed of the limits of the disemployment mechanism inherent in an increasing organic composition of capital. This reinstatement of what amounts to Malthus’s “narrow-minded” naturalistic conceptualization of overpopulation was presumably not practicable because it would have required an enormous program of alimentionation of this enlarged pool of quasipermanently unemployed; since the British propertied classes had already forced an end to the Old Poor Law regime, which had fed the unemployed victims of the Industrial Revolution, because the taxes were unacceptably high, there was no political, economic, or ideological leeway in mid-Victorian England for restoring such a system on an even larger scale. Moreover, to the extent that some subset of the reserve army was unemployed for such extended periods that it lost its industrial skills, discipline, and morale, it became dysfunctional for capital although it was a necessary product of the accumulation process. As such, this pauperized dead weight already constituted *faux frais* that capital strove to avoid or shift to others.³⁴ At the same time, however, Marx acknowledged that the history of modern industry demonstrated that constant overpopulation was possible “although it formed its stream from quickly-lived, swiftly succeeding generations of humans picked unripe so to speak.”³⁵

Although the relative diminution of variable capital vis-à-vis constant capital seems to bring forth a more rapid absolute growth of the worker population than of the variable capital, the accumulation process constantly produces an addition to the worker population that is, relative to capital’s average valorization needs, an excessive and redundant population. Capital’s ability to create such a flexible labor force is, however, even greater if the assumption is dropped that the increase or decrease of the number of workers employed corresponds exactly to the increase or decrease in variable capital. Capital can extract more labor from the same number of workers through greater extensive or intensive exploitation of individual workers. Capital can thus increase its supply of labor faster than its

demand for workers, and by overworking part of the working class, capital further inflates the reserve army, which in turn exerts yet greater competitive pressure on the overworked sector to submit to its deteriorating conditions. So convinced was Marx of the crucial importance of this segmentation of the labor force as a substitute for biological demographic growth that he believed that, if the working day were reduced to a “rational” level in England, the existing working population would be insufficient to carry on the existing volume of production, which could be achieved only by converting “unproductive” workers into “productive” ones.³⁶ The extraction of more labor from the same absolute number of workers is also secured, for example in the United States, by means of multiple jobholding by 8 million workers. This method, which—unlike one employer’s increasing the length of its employees’ workday—benefits capital in general and circumvents the financial deterrence embodied in overtime statutes, substitutes for biological accretions to the labor force inasmuch as multiple jobholding parents and especially mothers have correspondingly less time to devote to childbearing and -raising.³⁷

The system-immanent relative overpopulation, fluctuations in which regulate the general movements in wages, not only depresses wages during the stagnation and average prosperity phases of the business cycle, but also moderates wage demands during the phase of highest production sufficiently so that, even when the law of supply and demand should be operating for the benefit of the active worker army, capital’s rule is not threatened. Capital can succeed in this manner because, just as the demand for labor has become distinct from the growth of capital, the supply of labor is not identical with the growth of the working class: “Les dés sont pipés. Capital acts on both sides simultaneously.” By setting free some workers, whose consignment to the reserve army puts additional pressure on the workers newly absorbed into production, the process of accumulation “to a certain degree makes the supply of labor independent of the supply of labor.”³⁸

A contentious theoretical question arises here as to whether Marx’s alleged proclivity to take population growth for granted as an implicit precondition of capitalist production fatally undermines his claim that the processes sustaining the reserve army of the unemployed operate independently of absolute increases in population.³⁹ In an alternative formulation, critics argue that by presupposing that variable capital increases absolutely even if it declines in relation to constant capital, Marx could not demonstrate the inevitability of the formation of the reserve army without implying that population grows more rapidly than variable capital.⁴⁰ A half-century ago, Paul Sweezy, a Marxist economist, conceded that Marx, writing in the middle of the nineteenth century, not implausibly assumed that, with a growing population, a mechanization-induced rise in the organic composition of capital would bring about a relative decline in demand for labor together with an expansion of the reserve army as a more or less stable share of the total labor force. But regardless of the particular historical circumstances underlying Marx’s theory, “the principle of the reserve army is independent of any particular population assumption; it works equally well with a stationary or even a declining population....” In other words, capitalism is sufficiently dynamic that, with time,

it can adapt to and remold the demographic supply of labor through restructuring, which enables it to increase and differentiate the supply of and reduce the demand for labor.⁴¹

To be sure, Marx did not contend that capital had at its disposal magical powers that enabled it to maintain profitability in the face of any demographic disaster. Thus after recounting that Ireland's population had fallen by almost one-third in less than two decades following the famine year of 1846, Marx explained that agricultural rents and profits had nevertheless risen. But if a similar loss of population had taken place in England, a predominantly industrial country of developed capitalist production, it would have "bled to death." And even less catastrophically, Marx argued that where the rate of exploitation—in part as a result of workers' resistance—temporarily cannot be raised, the size of the working population would become the limiting factor on the mass of extractable surplus.⁴²

This reasoning, however, has been contested. Samuel Hollander, a historian of political economy, argues that, vis-à-vis declining population, the aforementioned mechanism of labor-saving accumulation "could only limit the resultant wage increase; there is no reason to expect the creation of an excess labor supply with downward pressure on the wage."⁴³ Hollander, for his part, overlooks the fact that although reduced population may shrink the reserve army as compared to a scenario in which population continues to grow, a one-time loss of population "may provoke offsetting technological changes which raise the *level* of the reserve army back to where it was before the population change [or trigger] a resumption of the original *growth rate* of that reserve.... Even if the counteracting effects do not provide a complete offset, they may still be substantial, rendering population control a very limited means of improving the workers' condition."⁴⁴

Although Marx did not expressly adopt a position on the issue in *Das Kapital*, in the course of criticizing Ricardo's theory of accumulation in a preliminary draft, he discussed the question of how the surplus value from the previous period of production is transformed into capital. Assuming that the "mode of production" and hence the organic composition of capital were unchanged—that is to say, that the increase of capital cost the same amount of labor as the previous year's production of capital of the same amount—Marx traced through the possibilities for transforming part of the surplus value into variable capital in order to buy "new labor." After disposing of a longer working day because it was not a constant means of accumulation, and bracketing the incorporation of previously nonworking women, children, and paupers, he focused on the absolute growth of the working population together with the absolute growth of the general population: "If accumulation is to be a constant, continuous process, then this absolute growth of population (although it decreases relatively as against the applied capital) [is a] condition. *Augmentation of population* appears as the foundation of accumulation as a constant process.... Capitalist production takes care of sudden cases by overworking one part of the working population and holding the other in readiness as reserve army half[-] or pauperized."⁴⁵

Here, then, Marx explicitly assumed biological growth as a prerequisite

of accumulation, but only under the further assumption that constant capital was not increasing faster than variable capital. As Marx observed later in the same manuscript, however, if population increases at the same rate as capital, a mechanism inherent in capitalist development—the faster growth of constant at the expense of variable capital—insures that a part of the population becomes redundant.⁴⁶ Implicit in this argument is the possibility that where absolute population growth lags behind the increase in capital, stronger increases in the organic composition of capital could compensate for the absence of newly produced recruits by making even larger masses of workers superfluous.

Precisely because these mechanisms inherent in capitalism constantly accommodate the number of workers to capital's valorization needs, Marx was contemptuous of Ricardian-Malthusian preaching to the working class of the necessity to regulate its procreativity in accordance with these same profitability considerations. The bourgeoisie's counsel to the proletariat to reduce its rate of reproduction was permeated with "stupidity, vileness, and hypocrisy" since the bourgeoisie knew that the advice was impossible for the class as a whole to follow and capital benefited from overpopulation.⁴⁷ As early as 1853, Marx mocked the *Economist* for reprimanding the working classes for having thrown away the "golden opportunities" "of not marrying and not multiplying,...of living less luxuriously, of not asking for higher wages, of becoming capitalists at 15 shillings a week, and of learning how to keep the body together with coarser food, and how to degrade the soul with the pestiferous doctrines of Malthus."⁴⁸

Although Marx rejected such bourgeois reproductive sermons as both superfluous from capital's perspective and harmful to workers, he has been criticized for following in the footsteps of the bourgeois economists he despised by virtue of viewing procreation naturalistically—for taking for granted that the working class would deliver sufficient absolute-biological increases to the capitalist class to satisfy the specific requirements of large-scale machine industry. Yet Marx was under no illusion that the laws of capital accumulation executed themselves agentlessly: he was, for example, acutely aware of the energetic and complicated recruitment campaigns throughout Britain and Ireland that firms had to undertake periodically to overcome temporary and cyclical shortages of labor in certain industries.⁴⁹

By the same token, however, the capital-functional impact of the reserve army is insulated from demographic constraints in the sense that proletarian producers and sellers of labor power cannot act as minifirms, which would withdraw supply from the labor market as demand declines because supply is driven by the need to secure subsistence rather than investment opportunities. Moreover, nineteenth-century working-class families were trapped by their own response to capital's growing absorption of child labor and devaluation of adult labor: by accommodating that demand, individual families may have survived but only at the expense of the whole class, whose conditions deteriorated as a result of the very effort at improvement by means of increasing the supply of working children.⁵⁰

The rapid consumption of the labor power of young men in mechanized factories characterized by a detailed division of labor meant that capital developed

a differentiated age- and gender-specific demand for workers as a contradictory result of which “the natural accretion of the mass of workers does not sate the needs of capital accumulation and nevertheless at the same time exceeds them....”⁵¹ Since these industries required fresh labor power and could not rely on partially consumed recruits from the reserve army, a demographic question arose as to where young men come from. Thus whereas in other settings Marx could neglect the issue of the real, absolute, or natural growth of the working class in favor of its social reconstruction and redistribution within the reserve army, here he had to face the Malthusian question. The brevity of Marx’s published answer suggests its self-explanatory character for him—as if the underlying phenomenon had become second (or remained first) nature:

Under these circumstances the absolute growth of this fraction of the proletariat requires a form which swells its numbers although its elements are used up quickly. Hence rapid replacement of the generations of laborers. (The same law does not apply to the other classes of the population.) This societal need is satisfied by early marriages, necessary consequence of the relations in which the workers of large-scale industry live, and by the premium that the exploitation of working-class children sets on their production.⁵²

The question raised here is how this objective requirement of capitalist production, this societal need, came to functionalize for its own ends the contemporaneous form of proletarian familial reproduction. Was this functional correspondence serendipitous? And if the new industrial proletariat had not been in a position to begin procreating at an early age, where would capital have recruited its requisite fresh troops? Marx may have been right to point out that unlike previous and other fractions of the proletariat, these new industrial workers, whose earnings at the outset of their careers were as high as they would ever become, were economically able to found families at a younger age; in any event, they had no reason to postpone marriage in the expectation that their income would rise later. The question, however, is why for Marx these early marriages were a “necessary consequence” of, rather than merely a possibility created by, large-scale industry. The choice of words suggests that working-class procreation, if not a natural phenomenon, was at least a social phenomenon that stood in no particular need of critical theoretical explanation.

If the industrial proletariat, unlike independent producers, who had to rely on their children to carry on their businesses, had no such self-interested reproductive motivation, Marx apparently saw the matter of producing children for capital as a sufficiently analogous lucrative side business to furnish a proletarian self-interested motivation to reproduce. As early as 1847, Marx had argued that one reason that bourgeois Malthusianism’s advice to the working class that it exercise moral restraint could not be taken seriously was precisely the premium that modern industry distributed for procreation by replacing adults with children. A dozen years later, Marx reiterated in the *New York Daily Tribune* that many

working-class parents conspired with factory owners to violate factory laws so that their young children could be paid full-time wages.⁵³ As one of Marx's bourgeois-economist contemporaries put it: "A population in which child labor has taken root must necessarily produce many children." Widespread nineteenth-century European reports of parents' resistance to compulsory education as an interference with their optimal utilization of their children as economic resources and the very high rates of labor force participation still prevalent among young children in the latter part of the century formed the basis for and thus lend force to Marx's view.⁵⁴

Marx's literally mechanical view of the mechanics of working-class reproduction also appears in his popular-propagandistic 1865 address to the General Council of the First International, posthumously published as *Value, Price and Profit*. In explaining the value of labor power, Marx observed that "the man, like the machine, will wear out, and must be replaced by another man. Besides the mass of necessaries required for his own maintenance, he wants another amount of necessaries to bring up a certain quota of children that are to replace him on the labour market and to perpetuate the race of labourers." One Marxist has characterized this approach as a "teleological absurdity" because it attributes the existence of a reproductive component within labor power to capital's desire for workers two decades later rather than to workers' struggle for such provision.⁵⁵

Marx, however, also sketched a richer account of the specific social background to proletarian reproduction. In an unpublished draft of *Das Kapital* he observed that capital increased the relative number of workers even with a stationary total population by increasing productivity, and extensivity and intensity of working time, subjecting artisans to capitalist wage labor, and incorporating women and children into the labor force. Additionally, however, capital produced an absolute rise in the working population since it could be achieved not only through an increase in births, but also as a result of the fact that more children grew up and could be fed until they were old enough to work. "The development of the forces of production under the regime of capital increases the mass of annually produced means of subsistence and cheapens them so far that the average wage can be calculated on the larger scale of reproduction of the workers although its value sinks..."⁵⁶ At a time when he had not yet accorded a central place to the theory of the reserve army of the unemployed, Marx devoted more attention to the reasons for proletarian procreation:

[T]he life situation in which capital places the working class, the conglomeration and the separation from all other enjoyments of life, the total hopelessness of reaching a higher social standpoint and of maintaining a certain decorum, the lack of substance of his whole life, the mixing of the sexes in the workshop, the isolation of the worker himself, all drives to precocious marriages. The shortening and almost abolition of the learning period, the early age at which children themselves can appear as producers, the shortening of the time during which they have to be fed, increases the stimulus towards accelerated human production. If the average age of the worker generations

declines, then an always superfluous and constantly rising mass of shortlived generations is found in the market and that is all that capitalist production needs.⁵⁷

Significantly, although Marx did not anticipate the modern feminist claim that mass child production was “extorted by capitalist-patriarchal compulsions,” both the prosperity and depression phases of capital accumulation conspire, in Marx’s view, to increase proletarian procreation: a temporary excess of surplus capital beyond its potential labor force would bring about a higher wage level, which would in turn alleviate the influences decimating working-class progeny and stimulate marriages; but faster than it would increase population absolutely, this excess capital would, by prompting the introduction of labor-saving and relative surplus value-extracting mechanization, create an “artificial, redundancy of population, which in turn again—as misery creates population within capitalistic production—is the hotbed of real increase of population.”⁵⁸

When Marx observes that if production has the capitalist form, reproduction does too, the interpretation that suggests itself initially is that he is referring to overall societal reproduction rather than to its procreative variety. Yet, closer examination reveals that Marx viewed human reproduction under capitalism as subsumed under the reproduction of capitalist relations. Because the worker’s labor was, even before he entered into the process of production, alienated from him and incorporated into capital, during that process it constantly objectifies itself in an alien product—capital. Just as the worker constantly produces objective wealth as capital, as a power that dominates and exploits him, so too the capitalist reproduces and perpetuates the worker as wage laborer. In the course of this process the worker engages in two types of consumption, which appear to be “totally different.” In the first or productive consumption, the worker consumes the means of production while the capitalist consumes his labor power. In the other, individual, consumption, the worker uses the money he received for selling his labor power to buy his means of subsistence. In the former he “belongs to the capitalist; in the second he belongs to himself and performs vital functions outside the process of production. The result of the one is the life of the capitalist, that of the other is the life of the worker himself.”⁵⁹

When this microperspective is abandoned in favor of a class-wide view of the whole capitalist process of production, however, it is revealed that the capital that the capitalist exchanges for labor power “is transformed into means of subsistence the consumption of which serves to reproduce the muscles, nerves, bones, brain of existing workers and to beget new workers.” In this sense, then,

the individual consumption of the working class is reconversion of the means of subsistence...into labor power that can be newly exploited by capital. The worker’s individual consumption thus remains a moment of the production and reproduction of capital, whether it proceeds inside or outside the workshop, factory, etc....just like the cleaning of the machine, whether it happens during the labor process or certain pauses.

It is immaterial that the worker carries out his individual consumption for his own sake and not the capitalist's. A beast of burden's consumption does not remain a less necessary moment of the process of production because the beast itself enjoys what it eats. The constant maintenance and reproduction of the working class remains the constant condition of the reproduction of capital. The capitalist can confidently leave its fulfillment to the workers' instinct of self-preservation and propagation.... From the societal point of view the working class is therefore, even outside the immediate labor process, just as much appendage of capital as the dead instrument of labor. Even its individual consumption is within certain limits only a moment of the reproduction process of capital.⁶⁰

To be sure, Marx emphasized that despite the fact that the conditions of the worker's existence and the narrow scope of monetary value of his labor power forced him to spend his wages in a circumscribed circle of goods, some variation was possible which enabled, for example, the English urban worker to buy newspapers or to save something. By the same token, he was as a free agent also able to waste it on schnapps. Unlike the serf or slave, the free wage laborer learned to be his own master, taking the responsibility and bearing the consequences of his consumption decisions. Marx was quick to recognize the enormous cultural leap that this emancipation process represented, but also stressed that when independent peasants or artisans underwent proletarianization, their lives were subjected to capital's one-dimensional abstractification.⁶¹ This new class of proletarians thus enjoyed a long-term potential for self-liberation, but in the near term was materially, psychologically, and culturally subordinated to a new structure of needs that capital was imposing on societal life.

It is not, however, the mere fact that workers exercise some control over discretionary spending within the sphere of individual consumption that prompted Marx to conclude that capital could rely on them to reproduce at a level appropriate for capital.⁶² Marx must have also held the opinion that it was implausible that any contemporaneous national proletariat would undergo, within a politically relevant time period, a social-psychological upheaval so radical as to depress its child-bearing habits or desires to such an unprecedentedly low threshold that it could render inoperative the built-in mechanisms of capital accumulation to generate a range of labor supplies adequate to the self-valorization of capital in general.

In 1847, Marx characterized the Malthusian advice that the working class resolve not to have children as nonsensical because such a classwide decision was an impossibility; moreover, he accepted as a social fact of capitalism that the proletarian condition made the sex drive that class's principal pleasure. Because he adhered to such a view, economic logic and political strategy dictated that Marx reject any tactic that recommended to the working class a fertility pattern that would have succeeded only in improving the living conditions of a small subset of exceptionally self-disciplined proletarian families. Moreover, Marx suggested that even if the class as a whole succeeded in restricting its growth below the standard

of the accumulation of capital, paradoxically the ensuing rise in wages “would only accelerate the application of machinery...and, hence, make the population redundant.” In particular, Marx argued that the chapter on the effect of machinery on the condition of the working class that Ricardo had added to the third edition of his *Principles* refuted the Malthusian population theory and especially the vulgar economists’ advice to workers “to keep their multiplication below the standard of accumulation of capital.” For such “keeping down of the labouring population, diminishing the supply of labour, and, consequently, raising its price, would only *accelerate* the application of machinery...and, hence, make the population artificially ‘redundant’...”⁶³

Marx’s characterization of the parallel growth of societal wealth, capital, and the proletariat on the one hand and the industrial reserve army on the other as the noncontradictory presence of overproduction of capital and relative overpopulation—the “absolute general law of capitalist accumulation”—must be analyzed in connection with his gloss that the law’s realization was modified by manifold circumstances that he alluded to as inappropriate for discussion at the level of abstraction at which he had written the chapter on accumulation.⁶⁴ Perhaps the most significant of these modifications is the development of labor unions, which seek to “break or weaken the ruinous consequences of that natural law of capitalist production” for the working class by organizing cooperation between the employed and unemployed.⁶⁵

Outside of Marx’s magnum opus, neither he nor Engels devoted much attention to demographic questions. Some demographers argue, however, that late in life Marx acknowledged the power of Malthus’s proposition even for socialism. This claim is based on Marx’s statement in his comments on the Gotha Program that: “If this [Malthus’s population theory] is correct, then I can not abolish the law [Lassalle’s Iron Law of Wages], even if I abolish wage labor a hundred times, because the law then rules not only the system of wage labor, but every societal system.”⁶⁶ But this claim overlooks the fact that Marx was not at all conceding the correctness of Malthus’s theory of population. Rather, in the context of a polemic against what he viewed as the generally worthless programmatic principles of the newly united German workers’ party, he was merely explaining to Lassalle’s acolytes that their proposed “abolition of the wage system with the iron law of wages” was rhetorical nonsense since the abolition of wage labor of necessity entailed the abolition of its laws “whether they be iron or spongy.”⁶⁷

Marx was merely trying to make clear that acceptance of Lassalle’s iron law of wages—which Marx contested sharply—entailed acceptance of Malthus’s population theory on which it was based. Far from being resigned to the correctness of that theory, Marx stressed that it undermined the socialist movement because if Malthus were right, socialism could not abolish misery, which was allegedly grounded in nature. By the same token, it is undeniable that Marx, like many other socialists and scholars before and after him, was deeply suspicious of Malthus because he had, as the British economist Edwin Cannan observed, been

“inspired...by the desire...to produce acquiescence, if not contentment, with the existing order of things.”⁶⁸

The potential problem that population might pose for an ideal socialist society was not, as a German Social Democratic revisionist later asserted, the misery associated with Malthusian overpopulation. Rather, it was the fact that, contrary to Engels’ flippant and sibylline assertion that if communist society were ever forced to “regulate the production of people just as it has already regulated the production of things,” it and only it would be able to do so “without difficulties,” no society can plan and regulate the production of human beings as easily as that of steel. Even if there were societal consensus that members should and would strive for (say) replacement-rate fertility, it would be impossible to predict whether and when all members making good-faith efforts would succeed biologically or how many members were biologically incapable of reproducing. These inescapable uncertainties would necessarily introduce some disproportionalities in economic planning of consumption and accumulation funds especially with regard to age-specific types of investment goods such as education as well as possible over- or underproduction of certain products such as children’s clothing.⁶⁹

Contrary to the impression left by some scholars, Marx’s position on Malthusianism was not opportunistic. Thus James Bonar, an economist who wrote an intellectual biography of Malthus immediately after Marx’s death, asserted that: “Marx is seeking to demonstrate the hopelessness of the labourer’s position; and he is too acute not to know that his demonstration would be seriously weakened if he admitted the truth of the Malthusian doctrine and the bare possibility of the adoption of prudential habits by the labourers.” It was not the case that Marx believed that small proletarian families would eliminate capitalist poverty or the proletariat for that matter; nor was he of the opinion that the correctness of Malthus’s population theory and the availability of contraceptive methods had to be withheld from the working class lest its class consciousness be jeopardized.⁷⁰ On the contrary: the whole thrust of Marx’s theory of the industrial reserve army was that the process of capital accumulation was relatively immune to the problem of “natural” underpopulation because it had its own methods for creating surplus labor, which reinstated the proletarian condition regardless of the size of working-class families.

This implied charge of opportunism later became express when feminist scholars claimed that SPD leaders had rejected so-called birth-strike propaganda because they feared that smaller families might reconcile workers to existing society.⁷¹ By the same token, in light of the intense barrage of ad hominem (but largely accurate) invective against Malthus strewn throughout *Das Kapital*,⁷² it appears bizarre to charge that Marx was “reticent to launch an all-out attack on the law of population” because the population question was “touchy” among German socialists as a result of Lassalle’s incorporation of Malthusianism into his iron law of wages.⁷³

Arguably the most pertinent shards of a theory of population that Marx and Engels left for their followers were contained in Engels’ correspondence with

third persons. At the time Marx was writing *Das Kapital*, Engels commented to the German social economist and working class advocate, Friedrich Lange, that the rational kernel of Malthusianism consisted in the fact that “humanity could multiply more rapidly than modern bourgeois society can endure.” For Marx and Engels, however, this finding constituted yet further proof that bourgeois society was a barrier to development, which had to fall. Not until science was applied to agriculture as it had been to industry, and production in such areas as southeastern Europe and western America nevertheless failed to increase faster than world population, would Engels be willing to reconsider Malthus’s theory. Until then, he remained convinced that scarcity was a function of underproduction caused by “moneyless stomachs, the labor that cannot be employed *profitably*...”⁷⁴

Of greater policy interest to socialist parties was a letter from Engels to Karl Kautsky, the future chief theoretician of the SPD, but who in 1881 was a neo-Malthusian and not yet a Marxist. Commenting on the latter’s book on population, Engels dismissed the challenge posed by academic socialists as to how a socialist society would ward off overpopulation and collapse as a waste of time, particularly since the rise of American mass agricultural production threatened to suffocate Europe and would necessarily bring about an increase of population. To be sure, Engels conceded the “abstract possibility” that population growth might become so great that limits would have to be set on its further increase. A principal reason for Engels’ lack of concern, however, was his belief that if France and Austria were able to achieve this result spontaneously (*naturwüchsig*), so, a fortiori, could a planned society. Here the socialist Engels appeared to come close to sharing the belief of many, especially British, neo-Malthusians, that population problems could be avoided individually by procreating couples who accommodated their reproduction to the economic realities facing them.⁷⁵

Two years later, a few weeks before Marx’s death, Engels returned to the subject. In another letter to Kautsky, he made light of the fact that within a few years Kautsky had shifted from being a “Neonato-Malthusian” to underpopulationism. Despite the fact that under the latter circumstance (Francis Place’s) famous sponge or some other contraceptive procedure would not be in much demand, Engels noted that it could nevertheless remain

very practical in bourgeois families, in order to keep the the number of children in proportion to income, in order not to ruin the woman’s health through too many pregnancies, etc. The only thing is that I remain of the view that that is a private matter between husband and wife, and at most the family doctor...and that our proletarians also in the future as in the past will do honor to its name by numerous proles.⁷⁶

These fragments of a theory, then, constituted the whole of the demographic legacy that Marx and Engels left to the European proletariat for its use in analyzing and shaping public discourse and struggle over micro- and macrolevel population issues. The quasi-inexorability of Marx’s capital-accumulation-oriented mechanisms of surplus labor production can create the impression that Marx

himself believed in the existence of a demographic invisible hand. Although Marx's theory posits that capital in general can, over a broad range of possible historical-empirical circumstances, liberate itself from the limitations of biological population growth, the periodic overproduction of workers was functional for capital but only within a self-contradictory regime that progressed by means of disruptive and cleansing crises. By the same token, although the constant replenishment of an industrial reserve army was dysfunctional for the working class, Marx did not view proletarian procreational proclivities as causative because capital accumulation could wring surplus labor out of virtually any empirically relevant absolute level of population. Consequently, because Marx's narrowly conceived demographic theory was not geared toward formulating practical policy recommendations, it tended to leave Marxist parliamentary political parties without an independent purchase that might have enabled them to overcome the appearance of indifference to the here-and-now problems of working-class existence insofar as they were exacerbated by individual superfertile families' inability to secure subsistence incomes.

NOTES

1. Margaret Sanger, *An Autobiography* 275 (1938).
2. Donald Bogue, *Principles of Demography* 15, 17 (1968).
3. David Harvey, *The Limits to Capital* 163 (1989 [1982]); Gunnar Heinsohn, Rolf Knieper, & Otto Steiger, *Menschenproduktion: Allgemeine Bevölkerungstheorie der Neuzeit* 116-27 (1979).
4. Marc Linder, *Reification and the Consciousness of the Critics of Political Economy: Studies in the Development of Marx' Theory of Value* 52-53 (1975).
5. Jon Elster, *Making Sense of Marx* 61 n.3 (1985). For a sympathetic account and partial vindication of Marx's theory, see Charles Tilly, "Demographic Origins of the European Proletariat," in *Proletarianization and Family History* 1-85 (David Levine ed., 1984).
6. J. Platter, "Carl Marx und Malthus," *Jahrbücher für Nationalökonomie und Statistik* 29:321-41 at 331, 332-33 (1877); Peter Laslett, *The World We Have Lost* 48, 67 (1973 [1965]) ("moral law").
7. Heinrich Soetbeer, *Die Stellung der Sozialisten zur Malthus'schen Bevölkerungslehre* (1886); D.E.C. Eversley, *Social Theories of Fertility and the Malthusian Debate* 268 (1959).
8. Margaret Sanger, *The Pivot of Civilization* 148, 139 (1969 [1922]).
9. Rosalind Petchesky, *Abortion and Women's Choice: The State, Sexuality, and Reproductive Freedom* 40 (rev. ed. 1990 [1984]). Despite her thesis that "[f]ertility control is not...simply a private strategy of individuals or families to help them cope with economic...pressures [but] occurs within definite social contexts and sexual power relations," Petchesky herself lacks a theory as to why women want children. *Ibid.* at 25.
10. Ann Ferguson & Nancy Folbre, "The Unhappy Marriage of Patriarchy and Capitalism," in *Women and Revolution: A Discussion of the Unhappy Marriage of Marxism and Feminism* 313-38, at 317, 335 n.1 (Lydia Sargent ed., 1981). For an example of party-Marxist admission that these so-called invisible costs correspond to the opportunity costs

or wage income that mothers forgo and should be added to the visible costs, see Harry Maier, "Die Reduktion der komplizierten auf einfache Arbeit im Lichte der Marx'schen Werttheorie," in *Probleme der politischen Ökonomie* 10: 147-207 at 197-98 n.128 (1967). See generally Ludmilla Müller, "Kinderaufzucht im Kapitalismus—wertlose Arbeit; über die Folgen der Nichtbewertung der Arbeit der Mütter für das Bewußtsein der Frauen als Lohnarbeiter," *Probleme des Klassenkampfes*, No. 22, at 13-65 (1976).

11. Harvey, *The Limits to Capital* at 164-65 (quote); Wally Secombe, "Marxism and Demography," *New Left Rev.* No. 137 at 22-47 at 22 (Jan.-Feb. 1983) (quote).

12. Lewis Lipsitz, "Political Philosophy and Population Policy: Insights and Blindspots of a Tradition," in *Political Science in Population Studies* 129-39 at 131-32 (Richard Clinton et al. eds., 1972); Richard Lewinsohn, "Die Stellung der deutschen Sozialdemokratie zur Bevölkerungsfrage," *Schmollers Jahrbuch für Gesetzgebung, Verwaltung und Volkswirtschaft im Deutschen Reiche* 46:813, 816-25 (1922); Werner Sombart, *Der moderne Kapitalismus: Das Wirtschaftsleben im Zeitalter des Hochkapitalismus* 3/1:312-15 (1927). Some have even charged that Marx never read Malthus carefully or at all. Warren Thompson, *Population Problems* 40 (1953); Michelle Perot, "Malthusianism and Socialism," in *Malthus Past and Present* 257-74 at 261 (J. Dupâquier et al. eds., 1983).

13. Michael Teitelbaum & Jay Winter, *The Fear of Population Decline* (1985); Jay Winter, "Socialism, Social Democracy, and Population Questions in Western Europe: 1870-1950," in *Population Resources in Western Intellectual Traditions* 122-46 (Michael Teitelbaum & Jay Winter eds., 1989); William Petersen, *The Politics of Population* 84 (1964).

14. W. Stanley Jevons, *The Theory of Political Economy* 254 (1970 [1871]).

15. W.W. Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto* 153, 154 (1960). For a competent exegesis of Marx's critique of Malthus, see Samuel Levin, "Marx vs. Malthus," *Papers of the Michigan Academy of Science, Arts, and Letters* 22:243-58 (1936).

16. Sanger, *The Pivot of Civilization* at 150; Herman Daly, "A Marxian-Malthusian View of Poverty and Development," *Population Studies* 25 (1):25-37 at 29-30 (Mar. 1971).

17. Paul Mombert, *Bevölkerungslehre* 420 (1929); Karl Marx, I *Das Kapital*, in Karl Marx [&] Friedrich Engels, *Werke* 23:657-70 (1962 [1867]). Although Erich Unshelm, *Geburtenbeschränkung und Sozialismus: Versuch einer Dogmengeschichte der sozialistischen Bevölkerungslehre* 10 (1924), correctly noted that Marx did not attempt a theory of population, he incorrectly reduced what Marx was attempting to a theory of unemployment.

18. Louis Uchitelle, "Corporate Spending Booms, But Jobs Stagnate," *N.Y. Times*, June 16, 1994, at C1, col. 3 (nat. ed.); Philip Hauser, "The Labor Force As a Field of Interest for the Sociologist," *Am. Sociological Rev.* 16: 530-38 (1951); S. Wolfbein & A. Jaffe, "Demographic Factors in Labor Force Growth," *Am. Sociological Rev.* 11: 392-96 (1946).

19. Marx, I *Kapital* at 660 (quote); Karl Marx, *Ökonomische Manuskripte 1857/58*, in Karl Marx [&] Friedrich Engels, *Gesamtausgabe (MEGA) II/1.2:496-97* (1981) (quote). G.S.L. Tucker, "Ricardo and Marx," *Economica* 28 (No. 111):252-69 at 264-65 (Aug. 1961), asserts that Marx's revolutionary political objectives required him to devise the theory of the reserve army because otherwise exploitation would be compatible with supra-subsistence wages buoyed by increases in productivity translated into a higher standard of living. See also Mark Blaug, "The Empirical Content of Ricardian Economics," *J. Pol. Econ.* 64 (1):41-58 at 57 (Feb. 1956); *idem*, *Ricardian Economics: A Historical Study* 120-27 (1958).

20. Marx, *Ökonomische Manuskripte 1857/58* at 493-96. Marx's critique of Malthus was adumbrated in Friedrich Engels, "Umrisse zu einer Kritik der National-ökonomie," in Karl Marx [&] Friedrich Engels, *Werke* 2:499, 518-21 (1964 [1844]).

21. Karl Marx, "Arbeitslohn," in Karl Marx [&] Friedrich Engels, *Werke* 6:535-56 at 551, 553 (1959 [1847]).

22. Sombart, *Der moderne Kapitalismus* at 310. But see T.H. Marshall, "The Population Problem During the Industrial Revolution," *Econ. J.* (Econ. Hist. Ser. No. 4), Jan. 1929, at 429-56 at 435: "Nature does not, as a rule, imitate the ballet dancer, who springs accurately through the air and lands in perfect equilibrium. She is more likely, under the influence of a severe shock, to oscillate like a drunkard steering for a lamp-post."

23. Thomas Robert Malthus, *Principles of Political Economy*, in *The Works of Thomas Robert Malthus* 5:246 (E.A. Wrigley & David Souden ed., 1986 [1820]); Angus Maddison, *Phases of Capitalist Development* 8 (1982). Malthus was scarcely blind to the wage-depressing capacity of a machine-created reserve army of the unemployed. In his testimony before the Select Committee on Emigration from the United Kingdom of the House of Commons in 1827, Malthus agreed with his questioner that in the English manufacturing districts whose population was in "the greatest redundancy," capitalists could prevent any detriment in the form of higher wages resulting from the emigration of some workers by introducing machinery: "[M]achinery may sometimes increase with such rapidity as to deteriorate the condition of the labourers for a certain time, as it appears to do at present." When asked whether "the tendency of a redundant supply of labour ready at all times to fill up the decrease of the labouring population by want and disease, [is] beneficial to the manufacturing and commercial interest, inasmuch as it lowers wages and raises profits," Malthus lamely responded that he could not imagine people who "could possibly bring themselves to encourage such a system...." *Third Report from the Select Committee on Emigration from the United Kingdom: 1827*, at 316-17 (1827).

24. E.A. Wrigley & R.S. Schofield, *The Population History of England 1541-1871: A Reconstruction* 404, 412 (1981). This realistic historically oriented demography should be compared with Hayek's, which concedes that an increase in population may lead to a decline in average incomes, but insists that this outcome results simply from the fact that the incremental population is poorer: "The proletariat are an additional population that, without new opportunities of employment, would never have grown up." F. Hayek, *The Fatal Conceit: The Errors of Socialism* 123 (1991 [1988]).

25. Heinsohn, Knieper, & Steiger, *Menschenproduktion* at 119; Marx, *Das Kapital* 1:730-32 (quote).

26. Karl Marx, 3 *Das Kapital*, in Karl Marx [&] Friedrich Engels, *Werke* 25:641-42 (1964 [1894]). For contemporaneous acceptance of the argument that a decrease in labor supply would merely trigger further mechanization and recreation of relative overpopulation, see H. M. Hyndman, *The Historical Basis of Socialism in England* 254 (1883).

27. Gunnar Myrdal, *Population: A Problem for Democracy* 138 (1940). In structure, this anti-wage-fund argument is reminiscent of the refutation that a British socialist offered of a similar ecological fallacy to the effect that poverty would disappear if the poor were all "industrious, sober, and thrifty": "It is quite true that a sober man will succeed better than a drunken man; but it is not true that if all the people were sober their wages would increase." Robert Blatchford, *Merrie England* 162 (1895).

28. Marx, *Kapital* 1:185-86.

29. David Ricardo, *On the Principles of Political Economy and Taxation*, in *The Works and Correspondence of David Ricardo* 1:93, 96-97, 94 (Piero Sraffa ed., 1975 [1817]). Ricardo and Malthus engaged in what may merely have been a terminological

dispute over wage determination. Malthus argued that what Ricardo termed the “natural price of labour” was “really...a most unnatural price [which] could not generally occur for hundreds of years.” It was, consequently, erroneous to regard the market price as only a temporary deviation from the natural price. Malthus’s point, apparently, was that Ricardo’s assumption of zero population growth among the working class was improbable; to the extent that the rate of growth was instead either positive or negative, the market price would usually deviate from the natural price. Malthus’s alternative definition of the natural or necessary price of labor was “that price which, in the actual circumstances of the society, is necessary to occasion an average supply of labourers, sufficient to meet the average demand.” T.R. Malthus, *Principles of Political Economy* 247 (1820), reprinted in *The Works and Correspondence of David Ricardo* 2:227-28 (Piero Sraffa ed., 1966 [1820]). In his notes on Malthus’s book, Ricardo remarked that “natural price” meant that “necessary to supply constantly a given demand” just as the natural price of corn was that “at which it can be supplied affording the usual profits.” Only if maintaining the usual rate of profit performs the same function for pricing other commodities as perpetuating the race of laborers does for labor (power), would Ricardo’s concession that Malthus’s definition “will do nearly as well for my purpose” mean that the new terminology did not implicate a change in meaning. David Ricardo, *Notes on Malthus’s Principles of Political Economy*, in *Works and Correspondence of David Ricardo* 2:227-28.

30. Jean-Baptiste Say, *Traité d’économie politique* 2:278-79 (5th ed. 1826 [1803]).

31. Thomas Robert Malthus, *An Essay on the Principle of Population* (1st ed.), in *idem*, *On Population* 109-10 (Gertrude Himmelfarb ed., 1960 [1798]).

32. Marx, *Kapital* 1:666-67.

33. *Ibid.* at 661-62.

34. *Ibid.* at 664, 663, 673. See also Francesco Nitti, *Population and the Social System* 45 (1894): “it is not presumable that the capitalist class should always induce the development of a systematic over-population...; the loss which capital experiences when one part of the population becomes excessive, is much graver than the advantage which Marx presumes to be derived from it.”

35. Karl Marx, *Zur Kritik der politischen Ökonomie (Manuskript 1861-1863)*, in Karl Marx [&] Friedrich Engels, *Gesamtausgabe (MEGA)*, II/3.1:162 (1976).

36. Marx, *Kapital* 1:658, 664-66.

37. *Employment and Earnings* 43 (3):tab. A-35 at 50 (Mar. 1996); Louis Uchitelle, “Moonlighting Plus: 3-Job Families on the Rise,” *N.Y. Times*, Aug. 16, 1994, at A1, col. 1 (nat. ed.); John Stinson, Jr., “Multiple Jobholding Up Sharply in the 1980’s,” *Monthly Labor Rev.* 113 (7):3-10 (July 1990); ch. 2 above.

38. Marx, *Kapital* 1:668-69.

39. Petersen has repeated these claims for several decades. William Petersen, “Marx versus Malthus: The Men and the Symbols,” *Population Rev.* 1 (2):21-32 (July 1957); *idem*, *Politics of Population* 82-83; *idem*, *Malthus* 76-77 (1979).

40. Mombert, *Bevölkerungstheorie* at 226, 422-23.

41. Paul Sweezy, *The Theory of Capitalist Development: Principles of Marxian Political Economy* 89 (1968 [1942]); Bob Rowthorn, *Capitalism, Conflict and Inflation: Essays in Political Economy* 204-205 (1980).

42. Marx, *Kapital* 1:730 (quote); Marx, *Kapital* 3:253; Henryk Grossmann, *Das Akkumulations- und Zusammenbruchssystem des kapitalistischen Systems (Zugleich eine Krisentheorie)* 373-88 (1929); Paul Mattick, *Arbeitslosigkeit und Arbeitslosenbewegung in den USA 1929-1935*, at 34-41 (1969 [1936]).

43. Samuel Hollander, "Marx and Malthusianism: Marx's Secular Path of Wages," *Am. Econ. Rev.* 74 (1):139-51 at 150 (Mar. 1984).
44. Allin Cottrell & William Darity, Jr., "Marx, Malthus, and Wages," *Hist. Pol. Econ.* 20 (2):173-90 at 184-85 (Summer 1988).
45. Karl Marx, *Zur Kritik der politischen Ökonomie (Manuskript 1861-1863)*, in Karl Marx [&] Friedrich Engels, *Gesamtausgabe (MEGA)*, II/3.3:1101-1102 (1978).
46. *Ibid.* at II/3.4:1440 (1979).
47. Marx, *Kapital* 1:674; Marx, "Arbeitslohn" at 547, 552 (quote).
48. Karl Marx, "The Labor Question," in Karl Marx [&] Frederick Engels, *Collected Works*, 12:460-63 at 460, 462 (1979 [1853]) (quote); "Golden Opportunities and the Use Made of Them," *Economist* 11 (532):1238-39 (Nov. 5, 1853).
49. Heinsohn, Knieper, & Steiger, *Menschenproduktion* at 119; Wally Seccombe, "Domestic Labour and the Working-Class Household," in *Hidden in the Household: Women's Domestic Labour Under Capitalism* 25-99 at 90 n.11 (Bonnie Fox ed., 1980); Karl Marx, "The State of British Manufacturing Industry," in Karl Marx [&] Friedrich Engels, *Gesamtausgabe (MEGA)* I/18:454-60 at 455-56 (1984 [1860]).
50. Wally Seccombe, *Weathering the Storm: Working-Class Families from the Industrial Revolution to the Fertility Decline* 17, 74 (1993).
51. Marx, *Kapital* 1:670.
52. *Ibid.* at 671.
53. Marx, "Arbeitslohn" at 552; Karl Marx, "The State of British Manufactures," in Karl Marx & Frederick Engels, *Collected Works* 16:206 (1980 [1859]). In this sense it is incorrect that "[n]o wife and mother...could...be described as a self-interested 'producer of labour power'...." Diemut Bubeck, *Care, Gender, and Justice* 59 (1995).
54. Carl Roesler, *Zur Kritik der Lehre vom Arbeitslohn: Ein volkswirtschaftlicher Versuch* 245 (1861) (quote); Louise Tilly & Joan Scott, *Women, Work, and Family* 82, 107, 113, 133-34 (1989 [1978]) (39 percent of girls aged 10 to 14 worked in Roubaix, France, in 1872).
55. Karl Marx, *Value, Price and Profit*, in Karl Marx [&] Friedrich Engels, *Gesamtausgabe (MEGA)* I/20:143-86 at 168 (1992 [1865]); Michael Lebowitz, *Beyond Capital: Marx's Political Economy of the Working Class* 90 (1992).
56. Karl Marx, *Zur Kritik der politischen Ökonomie (Manuskript 1861-1863)*, in Marx [&] Engels, *Gesamtausgabe (MEGA)*, II/3.1:275-76 (1976).
57. *Ibid.* at 276.
58. Anneliese Bergmann, "Geburtenrückgang—Gebärstreik: Zur Gebärstreikdebatte 1913 in Berlin," *Archiv für die Geschichte des Widerstandes und der Arbeit* 4:7-55 at 14 (1981); Marx, *Kapital* 3:228; Karl Marx, *Ökonomische Manuskripte 1863-1867*, in Karl Marx [&] Friedrich Engels, *Gesamtausgabe (MEGA)* II/4:293 (1992) (the quoted sentence is partially in English in the manuscript).
59. Marx, *Kapital* 1:591, 596-97.
60. *Ibid.* at 597-99.
61. Karl Marx, *Resultate des unmittelbaren Produktionsprozesses* 59 (1969 [1863-1865]).
62. For an example of this short-circuited logic, see James Dickinson & Bob Russell, "Introduction: The Structure of Reproduction in Capitalist Society," in *Family, Economy and State: The Social Reproduction Process Under Capitalism* 1-20 at 8 (James Dickinson & Bob Russell eds., 1986).
63. Marx, "Arbeitslohn" at 552; Karl Marx, *Zur Kritik der politischen Ökonomie (Manuskript 1861-1863)* at 1193 (quote).

64. Marx, *Kapital* 3:266; Marx, *Kapital* 1:673-74. Marx did not argue that the overproduced means of production were excessive in relation to the task of employing the able-bodied population, but merely qua means of exploitation designed to yield a certain rate of profit; in fact, capitalism failed to produce enough means of production for the entire able-bodied population to work under the most productive circumstances, which would permit a shortening of the workday. *Kapital* 3:268.

65. Marx, *Kapital* 1:669.

66. Daly, "A Marxian-Malthusian View of Poverty and Development" at 27; Nathan Keyfitz, *Population Change and Social Policy* 18 (1982); William Petersen, "Malthus: The Reactionary Reformer," *Am. Scholar* 59 (2):275-82 at 279 (Spr. 1990); Karl Marx, "Randglossen zum Programm der deutschen Arbeiterpartei," in Karl Marx [&] Friedrich Engels, *Werke* 19:25 (1962 [1875]).

67. Letter from Marx to Wilhelm Bracke, May 5, 1875, in Marx [&] Engels, *Werke* 19:13, 14; Marx, "Randglossen" at 25 (quote).

68. Marx, "Randglossen" at 25; Edwin Cannan, *A History of the Theories of Production and Distribution in English Political Economy from 1776 to 1848*, at 384 (2d ed. 1903). According to Franz Mehring, *Geschichte der deutschen Sozialdemokratie* 45-46 (1960 [1897-98]), Marx exaggerated Lassalle's reliance on Malthus.

69. Albert Südekum, "Über das Malthus'sche Gesetz und das Bevölkerungsproblem der kommunistischen Gesellschaft" 30 (Ph.D. diss., Christian-Albrechts University Kiel, 1894); Letter from Friedrich Engels to Karl Kautsky, Feb. 1, 1881, in Karl Marx [&] Friedrich Engels, *Werke* 35:150-51 (1967) (quote); Günter Manz, "Lebensstandard und Wirtschaftswachstum," in *Zu Grundfragen der sozialistischen Wachstumstheorie* 254-69 (Harry Maier et al. eds., 1968).

70. James Bonar, *Malthus and His Work* 391 (1885); Perot, "Malthusianism" at 262, claims that Marx stated that "[t]o advocate birth control is...a dangerous illusion."

71. See, e.g., Jean Quataert, "Unequal Partners in an Uneasy Alliance: Women and the Working Class in Imperial Germany," in *Socialist Women: European Socialist Feminism in the Nineteenth and Early Twentieth Centuries* 112, 127 (Marilyn Boxer & Jean Quataert eds., 1978). On the birth-strike debate, see below ch. 7.

72. Marx stated that the first edition of Malthus's *Essay* was "nothing but a schoolboy-like superficial and priest-like declaimed plagiarism from Defoe, Sir James Steuart, Townsend, Franklin, Wallace etc. and contains not a single self-thought sentence." Marx, *Kapital* 1:644 n.75. For non-Marxist confirmation of Malthus's lack of originality, see Kenneth Smith, *The Malthusian Controversy* 3-33 (1951).

73. Michael Perelman, *Marx's Crises Theory: Scarcity, Labor and Finance* 28-29 (1987).

74. Letter of Friedrich Engels to Friedrich Lange, Mar. 29, 1865, in Karl Marx [&] Friedrich Engels, *Werke* 31:465-68 at 466-67 (1965).

75. Letter from Engels to Kautsky, Feb. 1, 1881, in Marx [&] Engels, *Werke* 35:150-51; Richard Soloway, *Birth Control and the Population Question in England, 1877-1930*, at 83 (1982). Karl Pearson, a British eugenicist socialist, expected that "[u]nder Socialism alone will it be possible to reap the advantages of any limit of population, because one class will not be interested in the over-production of another." Karl Pearson, "The Moral Basis of Socialism," in *idem, The Ethic of Freethought* 301-29 at 322, 323 (2d ed. 1901 [1887]).

76. Letter from Engels to Kautsky, Feb. 10, 1883, in Marx [&] Engels *Werke* 35:431-32.