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CLASS ANALYSIS VERSUS WORLD SYSTEM?
EPITAPH FOR A FALSE OPPOSITION

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While international solidarity and support for national self-determination have occupied the political sentiments of the left, the theory of imperialism has remained the unwanted stepchild of Marxian economic theory. To be sure, attention has been given to the economic underpinnings of the expansionary diplomatic and military policies of the advanced capitalist countries; and illuminating studies of peripheral social formations have been produced. But international economic relationships have not been integrated into the most basic Marxian concepts used to understand the accumulation process of the economies of the capitalist center. The standard texts of Marxian economic theory treat imperialism and the globalization of production as a chapter extending a basic model from which these considerations are absent, rather than as an aspect of capitalism sufficiently fundamental to be present in the most abstract consideration of concepts such as surplus value, exploitation and labor values.

Questions which might have been central to the concerns of all Marxian economists have thus been relegated to the attention of specialists. What are the mechanisms by which the international exercise of military and other forms of power affects the rate of exploitation and the profit rate in the imperialist countries? How does imperialism alter the process of investment and the standard of living of the working class in these countries? Does the working class in the advanced economies share in the spoils of global domination, or does international mobility of capital which imperialism fosters so weaken the bargaining power of workers that they derive no benefits from the exercise of imperial power? While these questions have been asked since Lenin's Imperialism: The Highest Stage of Capitalism, they

remain on the periphery of Marxian economic theory, and little progress has been made towards a coherent analytical response. Why?

Part of the answer, I think, may be found in the structure of a commonly adopted Marxian approach to production and exploitation, one which has curiously distanced the theoretical analysis of class from the study of international rivalries and imperialism. Without wishing to overdraw differences, the proponents of what may be termed the labor process or class conflict approach and the world system approach to understanding capitalism have often appeared to be in opposition.¹ In the practice if not the logic of their approach, each has insisted on the priority of their own chosen focus -- class conflict within a given nation state in the case of the labor process school and imperialism and national rivalry in the world systems approach.

But the opposition between the two approaches is only apparent: the dynamics of the world system cannot be understood without a coherent theory of class exploitation, and the theory of exploitation is incoherent without a global dimension which takes account among other things of interstate conflicts.² Accepting this view does not render the exploitation of labor

1. The opposition is suggested in the main title of this paper, taken from S. Smith, "Class Analysis vs. World System: Critique of Samir Amin's Typology of Underdevelopment," in P. Linquenco and B. McFarlane, eds., Neomarxist Theories of Development, London: Croom-Helm, 1983.

2. The insistence on the international dimension is prompted by the work of Immanuel Wallerstein, Paul Sweezy, Eric Wolf, Harry Magdoff, Samir Amin, and others who have insisted that the dynamics of the capitalist economy cannot be coherently modeled in a closed economy framework and must encompass -- at the most fundamental level of abstraction -- relations among distinct nations or social formations. See especially, Eric Wolf, Europe and the People Without History (Berkeley, University of California Press, 1982), Immanuel Wallerstein, The Modern World System: Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century, (New York, Academic

any less central to the dynamics of capitalist economies in a world system; but we are forced to represent the exploitation of labor as being determined not only by the wage bundle and the extraction of labor from labor power in the production process, but in substantial measure by the prices at which goods are exchanged between the economies which make up the world system, or between modes of production in a given economy.

Marx's insistence that surplus value could not arise from buying cheap and selling dear was an attempt to shift the focus of economic theory away from the mercantilist tradition in which surpluses arise from trade and plunder towards the study of the extraction of surpluses in the production process itself. But as we shall see, the mercantilist view was only one-sided, not wrong. In asserting that surplus value could not arise from exchange Marx referred to relations among capitalists, not between them and another class, and he presumed a closed economy. Between classes and among classes and non-class groups, not to mention between nations, buying cheap and selling dear will affect the level of the surplus product and surplus labor time.

Rectifying the unnecessary hiatus between the theory of exploitation and the theory of imperialism is a project more daunting than can be attempted here. But two tasks would seem to be worth addressing: a reformulation of the theory of exchange so as to capture the exercise of power in market relationships; and a more comprehensive model of exploitation capable of incorporating -- at the most abstract level of analysis, not merely as an empirical extension -- the global dimensions of the expropriation of surplus labor time. I will touch briefly on each. In the penultimate section I will

Press, 1974), and Samir Amin, Unequal Development: An Essay on the Social Formations of Peripheral Capitalism, (New York, Monthly Review Press, 1976.)

return to the issue raised by Lenin: the relationship between imperialism and the standard of living of workers in the imperial countries.

Contested Exchange: Markets and Exploitation

While debate thrives on many fundamental propositions in Marxian economics, an unusual unanimity greets the notion that the class expropriation of the surplus product and surplus labor time is central to the structure and dynamics of the capitalist economy. Few voices are raised against the importance attributed to these concepts in a celebrated passage from Volume III of Capital:³

The specific economic form, in which unpaid surplus labor is pumped out of direct producers determines the relationship of rulers and ruled as it grows directly out of production itself and in turn reacts upon it as a determining element. Upon this, however, is founded the entire formation of the economic community which grows out of the production relations themselves, thereby simultaneously its specific political form. It is always the direct relations of the owners of the conditions of production to the direct producers ... which reveals the innermost secret, the hidden basis of the entire social structure, and with it the political form of the relation of sovereignty and dependence, in short, the corresponding specific form of the state.

The importance of surplus labor time -- and in a capitalist mode of production, of profits -- is generally accepted among Marxist economists or all camps. That the centrality of exploitation is not an issue dividing the class conflict and world system approaches is suggested by the evocative closing lines of Wallerstein's The Modern World-System:⁴

3. Though the hint of a class reductionist theory of the state in this passage might evoke some criticism. Capital, Volume III (New York: International Publishers, 1967.) p.791 (chapter XLVII).

4. p.357.

The mark of the modern world is the imagination of its profiteers and the counter-assertiveness of the oppressed. Exploitation and the refusal to accept exploitation as either inevitable or just constitute the continuing antinomy of the modern era...

The precise formulation of the concept of exploitation is considerably more controversial, however. Among the many possible points of contention, one of the most pressing issues is the part played by markets and international economic relations in the determination of the surplus product and surplus labor time.

According to Marx, "the secret of profit making" may be "laid bare" not in the sphere of circulation, but in the "hidden abode of production."⁵ Later Marxists have interpreted this to mean that capitalist exploitation "takes place at the point of production rather than in markets."⁶ Correspondingly, labor values derived from the conditions of production are often represented as conceptually or even causally prior to prices or exchange values. Thus Dobb writes:⁷

a principle of value is not adequate which merely expresses value in terms of some one or other particular value: the determining constants must express a relationship with some quantity which is not itself a value.

What is the basis for this insistence on the privileged theoretical status of production over exchange?

5. Capital, Volume I (New York, Vintage, 1977), pp.279-280 (closing passage of chapter 6).

6. But note at the close of chapter 5 of Capital, Volume I Marx wrote:

Capital therefore cannot arise from circulation, and it is equally impossible for it to arise apart from circulation. It must have its origin both in circulation and not in circulation.

7. Maurice Dobb, Political Economy and Capitalism, London, George Routledge, & Sons, 1937, pp. 9-10.

The capitalist class, Marx insisted, cannot make profits by exploiting itself: no matter how much buying cheap and selling dear takes place among the members of a particular capitalist class, surplus value will never result, for market exchange is a zero sum activity for all buyers and sellers taken as a whole. The key to understanding profits therefore is the relationship between the capitalist class and another class: labor. And while the labor market is clearly central to this relationship, other markets may be considered of less importance.

Thus if neoclassical economics is a theory of markets which produces, as one of its many results, a theory of income distribution, Marxian economics might be considered a theory of exploitation and accumulation which makes use -- though generally only peripherally -- of a theory of goods markets. Indeed, most Marxists have regarded the analysis of exchange relationships as of rather secondary importance except for the labor market, instead focusing their attention on the labor process or more generally the process of production.

In part this emphasis reflects the Marxian sense of "where the action is": because labor values are derived from the conditions of production and are therefore considered to be analytically prior to exchange values, prices and other market values are mistakenly considered to be the secondary symptoms of more essential relationships occurring outside the market. Even Marxists who would question this representation of exchange values as epiphenomenal "reflections" of more fundamental conditions of production have shown little interest in the study of markets. Some apparently regard Marx's analysis of the determination of prices of production through the competitive establishment of a uniform profit rate as a pioneering but now superseded

contribution to a shared body of microeconomic theory. Indeed, many would be ready to accept Oskar Lange's assessment of Marx's analysis of the prices of production and labor values as "nothing but a static theory of general economic equilibrium."⁸

The relegation of exchange to the farflung suburbs of Marxian economic theory is closely associated with two unfortunate characteristics of contemporary Marxian economics.

First is the tendency for the more abstract of the economic models within the Marxian tradition to ignore international flows of goods, finance and labor.⁹ Not surprisingly, most insights of Marxian economic theory as it is currently written, can be expressed as if the economy reproduced labor power and produced a single commodity, thus abstracting from the exchange among owners of distinct commodities. By implication, imports, exports and international movements of capital play no essential theoretical role -- however important they may be in any given concrete situation.

The second aspect of Marxian economic theory implicated in the downplaying of exchange is the tendency to regard market power as something which arises only when competition is superceded by monopoly or oligopoly. Within the

8. Oskar Lange, "Marx and Modern Economic Theory," in David Horowitz, Marx and Modern Economics, (New York, Monthly Review Press, 1968) p. 76.

9. Concrete studies in a more global framework abound, of course, but these generally adapt the standard closed economy model upon which the classical labor theory of value is based or proceed in an atheoretical manner. There are welcome exceptions to this rule, however. See William Gibson "Unequal Exchange: Theoretical Issues and Empirical Findings," Review of Radical Political Economics, 12:3 (Fall, 1980), pp. 15-35, the works cited there, the writings of Paul Sweezy, Harry Magdoff and the Monthly Review School, and the various publications of the Fernand Braudel Center for the Study of Economics, Historical Systems, and Civilizations at the State University of New York at Binghamton.

standard textbook model of the competitive market, exchanges are the exercise not of domination but of choice: the only power which economic agents exercise in this model is purchasing power. Because the Marxian analysis of income distribution -- the expropriation of surplus labor time or surplus value -- is a theory of class domination and conflict, the buying and selling of commodities (other than labor power itself), it is thought, may be regarded as of secondary importance. In contrast to exchange on goods markets, the labor process is clearly a locus of class conflict, and the labor market alone -- due to its perpetually non-clearing nature -- is an arena of class conflict in exchange.

But perhaps economists of this persuasion have missed Marx's irony when he referred to the sphere of circulation as the "very Eden of the innate rights of man." A Marxian (or Schumpeterian) conception of market exchanges need not bear the apologetic overtones of the classical and neoclassical models: markets are no less an arena of class conflict than is the shop floor or the office.

The theory of what Herbert Gintis and I term contested exchange is based on the conflictual nature of exchange relationships and the fact that the enforcement of contracts or other claims is not provided costlessly by the state but rather is a cost born by the parties to any exchange and a part of each economic agent's strategic problem. The theory of contested exchange combines the central role for enforcement costs with more commonplace results of contemporary economic theory, such as the non-uniqueness of market equilibria, to produce the following propositions: first, the critical markets in a capitalist economy -- labor markets and credit markets -- do not clear even in competitive equilibrium but are rather characterized by

perpetual excess supply in the first case (unemployment) and excess demand in the second (credit rationing); second there are generally a multiplicity of equilibria in a system of markets and hence a complex and indeterminate relationship between underlying economic conditions and market results; third, because markets do not clear, quantity constraints are the ubiquitous feature of even highly competitive markets -- in the markets that matter agents can rarely buy as much or sell as much as they would like at the going price;¹⁰ and fourth, as a consequence, economic agents do not act as the legendary "price takers" of introductory economics -- regarding prices as given by the market, but rather pursue a more active role as price setters and rent seekers.¹¹ In this framework, the textbook Walrasian model of exchange is a highly special limiting case in which enforcement costs are negligible and a unique equilibrium is assured.

The theory of contested exchange -- still in its infancy -- does not yet offer much guidance about how markets work. But it does perform an essential negative function, for it demonstrates clearly that a theory of the politics of markets does not have to presume state interventions or monopolistic or oligopolistic market structures in order to be coherent. Thus the theory of

10. A quantity constraint exists when a buyer or seller cannot buy or sell any quantity desired at the going price; the absence of quantity constraints is an essential ingredient to the neoclassical model of exchange

11. On non-clearing markets, see Jean Pascal Benassy, The Economics of Market Disequilibrium (Orlando: Academic, 1982), on the labor market see Samuel Bowles, "The Production Process in a Competitive Economy: Walrasian, Marxian, and NeoHobbesian Models," American Economic Review, 75,1 (March 1985), and Bowles and Robert Boyer, "Labor Discipline and Aggregate Demand: A Macroeconomic Model," American Economic Review, May, 1988, on credit markets see Herbert Gintis, "On the Political Economy of Finance," mimeo, University of Massachusetts, 1987 and on the relationship to neoclassical economic theory Bowles and Gintis, "Contested Exchange: Political Economy and Modern Economic Theory," American Economic Review, May, 1988.

contested exchange demonstrates that a number of essential ingredients of an integrated political economy of exploitation and international conflict -- price making rather than price taking on markets, other forms of the exercise of power on and through markets, enforcement costs, rent seeking strategies and quantity constraints -- are all consistent with highly competitive markets.¹² They are not the special cases requiring special institutional assumptions; they are the general model of exchange.

International Exchange and the Exploitation of Labor

Nowhere is the political dimension of market exchanges more evident than in international markets, and as we will see, the price at which goods exchange on world markets is an essential determinant of the rate of exploitation of labor and the size of the surplus product.

A systematic explication of this view will require clarification of how I intend to use some critical terms before turning to the question of international exchange. Throughout I will adopt the national economy as the unit of analysis, in contradistinction to the world-system approach. What distinguishes my approach from the closed economy model is the assumption of significant international flows of goods, a high degree of mobility of capital among national economies, and the integration of the international terms of trade into the definition and determination of the surplus

12. Herbert Gintis and I address some of the implications of this conception of exchange for political theory in chapter 3 and chapter 5 of Democracy and Capitalism: Property, Community, and the Contradictions of Modern Social Thought, (New York, Basic Books, 1986).

product.¹³

The surplus product is output above and beyond the outputs used to reproduce the means of production and the producers. Surplus labor time is the time it takes to produce the surplus product. Surplus labor time is a scalar, measured in units of time; the surplus product is a vector, measured in units of physical units of the various goods which make it up.

The concept of reproduction is central to the definition of the surplus.¹⁴ Reproduction implies continuity of the productive apparatus of a society. Thus the reproduction of the means of production refers to the replacement of the wear and tear on the equipment used in production as well as the intermediate goods used up so that the stocks of productive equipment and intermediate goods available for production at the end of the time period are the same as those existing at the beginning. Analogously, the reproduction of the producers is the perpetuation of the producers (seen collectively, not as individuals, of course) such that the number of workers, their health, physical strength, skills and other capacities are the same at the end of the

13. The alternative approach -- to develop the analysis of the surplus product and surplus labor time at the level of the world system taken as a whole -- is analogous to a closed (entire world-system) model with heterogeneous and largely immobile (national) labor and with a common world profit rate. As this approach has been extensively developed elsewhere (e.g. in Herbert Gintis and my "Heterogeneous Labour and the Marxian Theory of Value: A Critique and a Reformulation," Cambridge Journal of Economics, 1, 2, (1977)) and because it obscures the crucial contestation of nation states in determining the terms of trade, I have adopted the national economy framework here. Both approaches are illuminating and are in no sense competitive or mutually exclusive.

14. We set aside here a number of difficult issues (concerning who are the producers, how we may distinguish their reproduction from the reproduction of the social relations of production, how we can distinguish the coercive transfers which warrant the designation of exploitation from transfers which represent collective forms of consumption, and what are the means of production.

period as at the beginning. Simple reproduction describes a situation in which each of these two forms of reproduction is achieved but no further growth of productive capacities occurs; thus simple reproduction implies that net investment is zero as is the growth of the labor force (taking account of its productive capacities as well as its numbers).

The amount of goods needed to reproduce the productive apparatus is socially determined. The reproduction of the producers is assumed to take place when they receive a level of consumption (individual or collective) equal to some customary norm which changes over time. The amount of replacement necessary to restore the means of production to their status quo ante depends on technical choices which are socially determined. Equally important, the amount of time it takes to produce a unit of gross output depends on a socially determined technology and a socially determined intensity of labor.

Where a group controls the surplus and enjoys a relationship of domination over those who produce the surplus product exploitation exists.¹⁵

The price at which goods exchange on international markets is a determinant of the level of exploitation in a given national economy simply because the price influences the cost -- in labor hours -- of reproducing the means of production and the labor force.

Consider a society producing a single good (grain).¹⁶ To produce of bushel

15. Relationships among the terms class, exploitation and domination are explored in Bowles and Gintis, Democracy and Capitalism and "State and Class in European Feudalism," in Charles Bright and Susan Harding, eds. Statemaking and Social Movements: Essays in History and Theory (Ann Arbor: University of Michigan Press, 1984) pp. 19-51.

16. The formal economic model underlying this example is presented in an appendix, along with some comments on labor values, and unequal exchange.

of grain requires some fraction of a bushel of seeds and a given amount of labor (which given the means at the disposition of the exploiting class requires the employment of a given number of hours of labor power.) The labor power required is paid in grain, some fraction of a bushel per hour. Plows are also used to cultivate grain. However, they are not produced in the economy in question, but must be obtained from another economy. To obtain plows, grain must be exchanged with the plow owners in the plow producing country.

The terms of trade between the two countries -- bushels of grain per plow -- will determine the size of the surplus product and the rate of exploitation of labor. The expression "terms of trade" is a considerable misnomer: what is intended is the amount of grain necessary to acquire a plow; the means of acquisition may be exchange, in which case the terms of trade is a price ratio and the expression is entirely apt, but the means of acquisition may also be plunder or tribute in which case the cost refers to the enforcement cost of the necessary relationship of domination and the "terms of trade" has an apologetic ring reminiscent of the representation of feudal exactions as an "exchange" of serf labor time for feudal protection and justice.¹⁷ However, lacking a convenient alternative to "the terms of trade" its use seems unavoidable.

Let us consider the effect of the real cost of imports or "the terms of trade" on the surplus product. Imagine an economy in which 10 hours of labor

17. To cite a more modern example: a nation which can import more (in value) than it exports over a long period of time (due to its role as the nation of the world currency, or inward capital flows) is acquiring imports at a lesser terms of trade than the price ratio of imports to exports would indicate. Again, the expression "terms of trade" obacures the non exchange (and non price) aspects of the real cost of the imported good.

are required to produce a bushel, the wage rate is .06 bushels per hour of labor, .1 bushel of seeds is required per bushel of grain produced in the next harvest, one plow is used up per ten bushels (or .1 plow used up per bushel) and the terms of trade is 3 (3 bushels buys one plow). In this economy each bushel of gross output produced requires exactly one bushel of grain inputs (.6 bushels for wages, .1 bushels for seeds, and .3 to replace the used up plows). As a result there is no surplus product, no surplus labor time, and by definition, no exploitation.

It is perfectly clear, however, that if the terms of trade fell to 1 bushel per plow, a surplus would be produced, entailing the performance of surplus labor time by the producers of grain, and assuming that the surplus product were controlled by a dominant class, exploitation would be said to exist.¹⁸

The appearance of surplus labor time as a result of the improvement (for the grain growing country) in the terms of trade results from the fact that the real cost of plows is the grain necessary to exchange to acquire them or more fundamentally, the labor required to produce that grain. Because the plows are a necessary input into the production of the workers' wage good and hence part of the cost of reproducing labor power, the availability of cheaper plows lowers the cost (in grain) of reproducing labor power and makes possible a surplus.¹⁹ Or to express the same point in terms of labor values,

18. A considerably more elaborate discussion and a formal economic model of the relationship between the terms of trade, the surplus product, and the profit rate in a capitalist economy is presented in Samuel Bowles, "Profits and Wages in an Open Economy," in G. Mangum and P. Phillips, eds., Three Worlds of Labor Economics, (Armonk, N.Y.: M. E. Sharpe, 1988.)

19. This is hardly a new point: it is to be found in David Ricardo's analysis of the relationship of the corn laws to the profit rate, in Marx and Engels' treatment of the counter tendencies to the tendency of the profit rate to fall in volume III of Capital, and to modern treatments of such as Claude

the improvement in the terms of trade lowers the value of labor power (in hours of labor time) and hence gives rise to surplus labor time.²⁰

Imperialism and the Standard of Living of the Working Class

The open economy approach to the theory of exploitation may cast light not only on the accumulation process, but on the politics of the working class as well. Lenin and many other Marxists have asserted that at least some workers in the advanced countries have an economic interest in imperialism. Noting the reformist and non-revolutionary nature of most European labor movements at the time of the First World War, he sought to discover "the economic basis of this historically important world phenomenon."²¹ The answer, he thought, was to be found in the superprofits made possible by imperial domination:

Meillassoux who refers to imperialism as "a mode of reproduction of cheap labor power." Maidens, Meal, and Money (Cambridge: Cambridge University Press, 1981), p. 89.

20. The above analysis -- though emphasizing exchange relations -- is unrelated to the unequal exchange model developed by Arghiri Emmanuel (Unequal Exchange, New York, Monthly Review, 1972.) In the latter, exchange is represented in terms of the unequal amounts of socially necessary abstract labor time embodied in nominally equivalent bundles of exports and imports. In the analysis above, by contrast, the amount of labor time directly and indirectly required to produce the import good in its country of origin is not taken into account, for it has no bearing on either the standard of living of the working class or the level of the surplus in the country under investigation. What matters, instead, is the labor time embodied in the export goods necessary to procure the import, which is quite a different quantity. The unequal exchange model represents a compelling Lockean critique of distributive injustice on a world scale, but it adds little to the analysis of the accumulation process in either core or periphery economies.

21. Lenin, Imperialism: The Highest Stage of Capitalism, (New York: International Publishers, 1939) p.13.

Obviously, out of such enormous superprofits (since they are obtained over and above the profits which capitalists squeeze out of the workers of their "home" country) it is quite possible to bribe the labor leaders and the upper stratum of the labor aristocracy. And the capitalists of the "advanced" countries are bribing them; they bribe them in a thousand different ways, direct and indirect, overt and covert.

The result, Lenin thought, was a divided and reformist working class:

This stratum of bourgeoisified workers, or the labor aristocracy ... are the real agents of the bourgeoisie in the labor movement, the labor lieutenants of the capitalist class... In the civil war between the proletariat and the bourgeoisie they inevitably, and in no small numbers, stand side by side with the bourgeoisie. (pp 13-14)

Lenin's theory of the imperialist origins of the labor aristocracy is deservedly admired as the starting point within the Marxian tradition of the analysis of the material bases of divisions among workers. But there is a glaring lacuna in his analysis: Lenin explained why profits would be higher, but did not explain why workers would be able to gain a share of these super profits. As we shall see the effect of imperialism may as well be to weaken as to strengthen the effective claim of the working class on these super profits.

Marx and later Marxists have argued that the standard of living of the working class is determined through class struggle over the real wage. While limits to the possible reproducible outcomes of this struggle are set by subsistence and by the level of net output per hour of labor worked in the economy, the real wage will be determined well within these limits by the balance of class forces. To address the issue raised by Lenin's Imperialism, then, we need to understand how imperialism might affect the bargaining power of the working class.

Let us assume that imperialism has two relevant economic effects: the

exercise of world power by a dominant nation allows it to secure a more favorable terms of trade, and at the same time facilitates the worldwide mobility of capital, in part by reducing the uncertainty and risk associated with direct foreign investment in peripheral economies.²² How will these two effects alter the real wage?

If, in contradistinction to Marx's approach, it were assumed that the domestic class struggle determines the nominal (money) wage, and that prices and hence the real wage are determined independently in some other manner, then an improvement in the terms of trade would unambiguously raise the real wage, for the relative cheapening of imported wage goods (or goods indirectly used in the production of wage goods) would result in a reduction in the relevant consumer price index.²³ But if nominal wages and consumer prices are determined as part of a unified process of class conflict, no such simple story can be told.

If the real wage bundle were constant, the proximate effect of an improvement in the terms of trade would simply be an increase in the rate of exploitation, and with it the rate of profit (assuming that the utilization of the capital stock remains constant or increases).²⁴ But this analysis,

22. Thomas Riddell, in an illuminating paper ("Testing Hypotheses on Military Spending," mimeo, Smith College, 1985), has demonstrated a strong relationship between U.S. military power and the U.S. terms of trade. Arghiri Emmanuel and the unequal exchange school root the analysis of the terms of trade in wage differences; these in turn may be explained in part by imperialist country support for authoritarian anti labor social institutions in the peripheral countries.

23. I am excluding the case in which imports are strictly luxuries which do not enter directly or indirectly into the workers' wage bundle.

24. The relationship between the terms of trade and the profit rate is analysed econometrically in Samuel Bowles, David Gordon, and Thomas Weisskopf, "Power and Profits: The Social Structure of Accumulation and the

like that above, is too simple for it ignores the other side of imperialism, its effect on international capital flows. Capital flows play an essential role in the argument because the bargaining power of labor will depend on the demand for labor relative to its supply and this in turn will depend on the global location of investment.

Let us assume that wealth holders throughout the world seek to invest their money at the highest expected return regardless of location. The worldwide location of production will therefore respond more or less rapidly to the expected profit rate at each location. The expected profit rate may plausibly be represented as dependent on the present profit rate and the degree of risk or uncertainty associated with it.²⁵

We can see at once that imperialism may be expected to have two opposing effects on the structure of world wide expected profit rates. On the one hand by making the entire world safer for private investment, it will reduce the degree of risk associated with investment and hence raise the expected profit rate in the peripheral countries of the world system. On the other, by improving the terms of trade for the advanced capitalist countries (and still assuming no change in the real wage and the rate of utilization of the capital stock) it will raise profit rates in the advanced countries and lower them in the periphery.

The effect on the world location of production is ambiguous. If the

Profitability of the Post-War U.S. Economy," Review of Radical Political Economics, 18, 1 & 2, summer, 1986.

25. This profit led theory of the location of direct international investment receives strong support in the econometric studies of Timothy Koechlin, "The Location of U.S. Direct Foreign Investment," mimeo, University of Massachusetts, 1987, and Edwin Melendez, "The Social Structure of Accumulation and the Postwar Boom in Puerto Rico," unpub. doc. diss. University of Massachusetts, 1985.

predominant tendency is to raise the expected profit rate in the periphery relative to that in the center, the effect of imperialism will be to promote the outflow of capital from the advanced countries. This in turn will reduce the demand for labor in the advanced countries, swell the ranks of the unemployed, and most likely weaken the bargaining power of the working class.²⁶ In this case the favorable price effects associated with the improvement in the terms of trade for the advanced country -- the "cheap banana effect" -- is more than offset by the erosion of working class power associated with capital mobility -- "the runaway shop effect."²⁷

However, it need not work out this way. If the net effect of imperialism is to support an inflow of capital to the advanced countries -- attracted by the higher profit rates made possible by the more favorable terms of trade -- the demand for labor and hence the bargaining power of the working class will predictably increase.

Let us explore the logic of this counter case. If capital is highly mobile internationally, the amount of investment in any given country may be a highly elastic function of the expected profit rate in that country relative to the analogous profit rates elsewhere in the world. Even if this mobility

26. The outward mobility of capital -- in a simple two country world -- obviously implies that the capital exporting country run an export surplus to effect the capital transfer. This will increase demand for labor in the capital exporting country. But in a highly open world economy the level of employment in each country will be determined in the long run by world demand and the country's competitive position in the world. The demand for labor in each country will thus be dominated by the worldwide relocation of production in response to differential expected profits rates at various locations.

27. The more open economy may weaken the bargaining power of workers in other ways as well. It seems likely that the threat of losing ones job is considerably more ominous if the reason for job loss is market penetration by external producers than the normal and presumably temporary cyclical movements of demand.

does not generate a common profit rate throughout the world, it will present each national economy with a very narrow range of feasible profit rates (or more precisely, profit rate expectations). In the limiting case of an infinitely elastic supply of funds there will be only one such profit rate which is reproducible in the long term.²⁸

The improvement of the terms of trade made possible by the international exercise of power will initially raise the profit rate in the imperial country, placing its profit rate (and by implication its expected profit rate) above the long term rate necessary to attract additional investment funds. The relocation of world production towards this nation will continue until the profit rate is lowered or until some other aspect of the situation changes. One quite plausible process of adjustment is that the relocation of production will increase the demand for labor in the imperial country, thus either bidding up the real wage, or allowing workers to bargain for or otherwise gain a lower level of work intensity. In this case the real wage and the standard of living of the working class will be augmented by the effects of imperialism.

But notice that for the scenario which Lenin described to obtain -- a working class bribed by the spoils of imperialism -- the flow of capital must be from the periphery to the center rather than the reverse case which Lenin thought to be the very essence of imperialism.

28. Of course the rates may differ from country to country depending on wealth holder's perceptions of the relative riskiness of investment in each country.

Conclusion

The above analysis of the effect of imperialism on the standard of living of the working class in the imperial country is intended as no more than an illustrative example of the use to which an integrated model of global exchange and exploitation might be put. A more adequate treatment -- and one more consistent with the theory of contested exchange -- would include both the enforcement costs of attempts to alter a nation's international advantage and the effects of imperialism on the level of aggregate demand for goods and services in the imperial country. Equally essential would be the parallel treatment of the effects of imperialism on the dependent nation's working class, and the relationships between the capitalist class of the imperial center and that of the periphery.²⁹

But the example, and the theoretical model underlying it may be sufficient to dramatize the utility of an integration of themes often pursued separately by the world systems school and those following the class conflict approach.

29. This latter task has been insightfully studied by Manuel Pastor, The IMF and Latin America: Economic Stabilization and Class Conflict (Boulder: Westview Press, 1987) Jeanne Henn, "Peasants, Workers, and Capital: The Political Economy of Labor and Incomes in Cameroon," unpub. doc. diss. Harvard University, 1978, Peter Evans, Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil (Princeton: Princeton University Press, 1979), and a considerable number of other works.

Appendix:
The Surplus Product, Labor Values and Exploitation
in an Open National Economy

The objective of this appendix is modest: to clarify for the curious the formal relationships between the surplus product, labor values and exploitation implied by the model in the text. The hypothetical economy is one which produces grain using grain and plows as inputs. The plows are drawn by oxen which are (collectively) self reproducing. Plows are imported. Workers consume grain (and perhaps its derivatives). Analogous results would follow if we had assumed that the imported good were part of the wage bundle.

The following notation is used (the subscripts H and F refer to home production and foreign production, respectively; upper case letters are economy wide aggregates.)

- Total hours worked growing grain = L
- Gross bushels of grain produced per hour = z
- Amount grain used (as seeds) to produce one bushel of gross output = a_H
- Amount of plows used up in the process of producing one bushel of gross output = a_F
- Amount of bushels of grain necessary to acquire one plow (the "terms of trade") = p
- Net output per unit of gross output = y^*
- Net output per hour of labor = $y = zy^*$
- Surplus product (in bushels) per hour of labor = s
- Wages per hour (in bushels of grain) = w
- Surplus product (in bushels) = $S = sL$

The net output per unit of gross output is simply the output minus the direct grain inputs and the grain necessary to acquire the plows used up in producing a bushel of gross output or

$$y^* = 1 - a_H - pa_F$$

and net output per hour of labor is thus

$$y = zy^* = z(1 - a_H - pa_F)$$

The surplus per hour is by definition net output minus wages or

$$s = y - w$$

and

$$S = aL = (y - w)L$$

or, writing the above expression explicitly

$$S = L(z(1 - a_H - pa_F) - w)$$

The amount of the surplus product clearly depends not only on the productivity and intensity of labor, the other input-output relationships, the wage, and the amount of labor employed, but on the terms of trade as well. An increase in p -- that is, an adverse change in the terms of trade -- reduces the surplus.

As we will see, the labor value of a bushel of grain -- the direct and indirect amount of socially necessary abstract labor time embodied in a bushel -- will also depend on the terms of trade.

The value of a bushel of grain, v_H , is the amount (hours) of labor directly required to produce a bushel ($1/z$), plus the amount of labor time embodied in the seeds and plows used in the process. Thus

$$v_H = 1/z + v_H a_H + v_F a_F$$

How is v_F , the labor value of a plow, determined? The value of plows is not the time it takes to produce them in their country of origin but rather

the time it takes to produce the goods necessary to obtain them. From the standpoint of the accumulation process and class division of income in the national economy in question, the labor time embodied in the production of the plows in the "other country" is irrelevant except insofar as it affects the terms of trade. Of course if plows are produced with labor paid little relative to its productivity, the terms of trade may be favorable to the importing country; but what is crucial is the terms of trade and the labor time embodied in the export good.³⁰ Thus the value of the plows used up can be expressed as the value of the grain required to obtain the plows:

$$\begin{aligned} &v_F = pv_H, \\ \text{or} & \\ &v_H = 1/z + v_H(a_H + pa_F) \\ &v_H = \frac{1/z}{(1 - (a_H + pa_F))} \end{aligned}$$

thus showing that the value of a bushel grain (or indeed any value) is in no sense analytically prior to international exchange values represented by p.

The value of (an hour of) labor power is

$$v_L = wv_H$$

and the rate of exploitation is

$$s' = (1 - v_L)/v_L$$

30. This is of course not the approach of the unequal exchange school, which would measure the value of plows by the labor time embodied in their production in the country of origin. It is easily seen that this method implies that a change in production techniques in the "other country" would alter the level of the surplus product, surplus value and the rate of exploitation in the importing country even if it had no effect on the terms of trade. In this case these basic concepts of value theory would have no coherent relationship to the rate of profit or the rate of accumulation in the importing country, thereby severing Marxian economic theory from the analysis of the accumulation process.

from which it is obvious that both the value of labor power and the rate of exploitation depend on the terms of trade: an adverse shift in the terms of trade (an increase in p) will raise the value of labor power and lower the rate of exploitation.

