

THEORIES OF REPRODUCTIVE BEHAVIOR

A Marxist Critique

martha e gimenez

This article is reproduced from the Review of Radical Political Economics. Micro-economic theories that view children as consumer goods or home produced goods which parents either purchase or produce subject to income, price, and taste constraints, are essentially voluntaristic. Sociological theories, on the other hand, stress the socially determined and coercive nature of reproductive behavior. From the standpoint of historical materialism, both theories are open to criticism. It is argued that a scientific analysis of reproduction should transcend the voluntaristic and deterministic alternatives which are the hallmark of bourgeois thought. Instead, using the method of historical materialism, reproduction should be conceptualized in structural, concrete, and historical terms; i.e., as the reflection of the reproductive strategies of classes in the context of a given mode of production. This article is reproduced from the Review of Radical Political Economics.

Economics is all about how people make choices. Sociology is all about why they don't have any choices to make. Historical Materialism is all about how and why people make historically specific choices.²

Current theories of fertility fall within voluntaristic or deterministic frameworks. Microeconomic theories are voluntaristic: they rest on the assumption that individuals are free to decide whether they want to have children and how many, and that such decisions are based upon a comparison between the utilities to be expected from children and those expected from allocating resources to other goods.³ Sociological theories, on the other hand, are deterministic. Sociologically, reproductive behavior is socially determined; it is rooted in the social and economic structure which determine the set of role alternatives, rewards, and punishments confronting individuals at a given time and, consequently, it cannot be adequately investigated if viewed in purely voluntaristic terms.⁴

The shortcomings of microeconomic and sociological theories of reproductive behavior may be traced to their ahistorical approach to the study of social reality and their conceptualization of reproduction in terms of individual behavior and its determinants. Historical materialism⁵ transcends the opposition between voluntaristic and deterministic viewpoints and offers a historical and structural approach to the study of reproduction which shifts the focus of theoretical concern to the reproductive strategies of classes and sectors of classes in historically specific contexts.

The epigraph above sums up the content of this essay. The methodological assumptions under-

lying microeconomic and sociological theories will be outlined and critically examined. Rather than exploring specific applications of these theories, I develop a critique of their theoretical foundations which is based on my interpretation of historical materialism. Several conditions for a scientific Marxist analysis of fertility are delineated.

The Economic Theory of Fertility

The dominant contemporary theoretical efforts at explaining fertility behavior stem from the use of microeconomic theory. Children are viewed as consumer durables⁷ or, in the most recent developments, as household produced goods⁸. The main assumptions common to both types of analyses is that households (like firms) behave rationally, maximizing their utility in a context of scarcity: households characterized by given tastes or preferences can choose to consume/produce children and/or commodities. The theory of fertility as consumer behavior also emphasizes income and price constraints: households with given tastes "... are viewed as maximizing utility subject to the constraints of income and prices. Thus three factors—income, tastes, and prices—are the basic building blocks of fertility behavior.⁹ The theory of fertility as productive behavior adds a fourth relevant constraint: time. The quantity and quality of children and other household goods will be thus a function of the time and resources allocated to their production.

The essence of this approach to fertility behavior lies in the importance given to choice. It is assumed that children and commodities can be described by an indifference curve whose points represent combinations of children and commodities providing the same amount of utility to the household. Households are, consequently, indifferent when confronting the

options offered by an indifference curve and, when facing a set of indifference curves they will choose that which — given their income and price limitations — maximizes their utility.

The Sociological Criticism

Sociologists emphasize social constraints on individual choice. Sociologically, reproductive behavior is socially constrained behavior; it is a key dimension of adult sex roles and, as such, it is supported by a network of social, economic, and psychological rewards and punishments that rule out the desirability of alternatives to the performance of family roles.¹⁰

Sociologists have convincingly argued that children cannot be appropriately considered as equivalent to consumer goods or home produced goods because the social context of reproduction introduces elements in their process of "consumption/production" that render untenable the main assumptions upon which the economic model rests. Essentially, this means that parents are not free to choose the quality and quantity of children. With respect to quantity, societies vary in their normatively sanctioned desired family size; advanced Western societies seem to have settled upon two as the minimum. Quantity interacts with quality as it is assumed that an only child is likely to have "problems" that could be avoided by having at least two.¹¹ With respect to quality, parents cannot raise their children at a level separate from their own or that of other siblings; i.e., they are not free to choose between possible combinations of high and low quality children.

Furthermore, parents cannot raise children according to arbitrary rules: there are general socially established minimum standards of child quality as well as specific standards linked to class, socioeconomic status, ethnicity, religion, culture, etc. Finally, parents lack control over the initial quality of their children so that they lack a basis for balancing their potential utility with that of other goods; they cannot reject them if they do not conform to expectations nor can they exchange them or abuse them as they could any other good at their disposal.¹²

The substance of the sociological approach to productive behavior is the following:

People make their "voluntary" reproductive choices in an institutional context that severely constrains them not to choose non-marriage, not to choose childlessness, not to choose only one child, and even not to limit themselves solely to two children.¹³

Like economists, sociologists begin "post festum" with the results of the process of historical development (e.g., norms, sex roles, desired family size, parental roles, etc.) having acquired the stability of coercive and constraining "social facts." Neither economists nor sociologists deal with the historical specificity of the fettered facts they study and this is why, from the standpoint of historical materialism, their scientific contributions are inherently ideological.

The Marxist Critique

The ideological nature of economic and sociological theories does not stem from deliberate distortions nor from errors that could be eventually corrected. Under capitalist conditions, ideology becomes an inextricable aspect of the social sciences to the extent that those sciences are limited to the partial investigation of social reality thus overlooking aspects of it which while less obvious and apparent are just as important and as real. The material basis of this phenomenon is rooted in the peculiar nature of the social reality treated by capitalist production whose defining feature is the "fetishism of commodities".¹⁴

Capitalism, as a mode of production presupposes the universalization of commodity production; i.e. the transformation of labour-power into a commodity and the satisfaction of all needs through market exchanges. It presupposes, therefore, the existence of two classes; the capitalist class which owns the means of production and the working class which owns nothing but its labor-power and must sell it in the market for wages which it must subsequently exchange for goods and services needed for survival. The reality of the market is only one aspect of the totality of capitalist relations. This is the sphere of exchange and circulation of commodities which Marx describes as follows:

... (it) is ... a very Eden of the innate rights of man. There alone rule Freedom, Equality, Property, and Bentham, because both buyer and seller of a commodity, say of labor-power, are constrained only by their own free will . . . Equality because each enters into relation with the other as with a simple owner of commodities, and they exchange equivalent for equivalent. Property, because each disposes only of what is his own. And Bentham, because each looks only to himself. The only force that brings them together and puts them in relation with each other, is the selfishness, the gain, and the private interests of each.¹⁵

At the level of production there is neither freedom nor equality. Property relations assert themselves as

relations of domination : workers are actually ' free' to choose between starving -or working under the sway of capital and the contradiction between their interests and those of the capitalist class results in protracted class struggles whose outcome determine the working conditions found at a given time.

In the capitalist mode of production, the market mystifies the appropriation of unpaid surplus-value by the capitalist class because, at the level of market exchange it appears as if capitalists and workers exchanged equivalent for equivalent; as if the wage were equivalent to the workers' output. Actually, the value of wages is equivalent only to the value of the goods and services needed to reproduce the labor force on a daily and generational basis.¹⁵ The value of the workers' total output, on the other hand, is greater than the value of wages in a proportion determined, ultimately, by the class struggle; the difference is surplus-value, the product of surplus labor time, which capitalists appropriate at the level of production and realize at the level of market exchange.

The market exchange of commodities, through the tyranny of the laws of supply and demand, obscures not only the relations of production between capitalists and workers but also the relations among capitalists themselves which, in their eyes appear as relations among things — their products — which they are unable to control. This is the fetishism of commodities which results in the perception of things and relations among things while class relations and relations of production remain outside the purview of the members of capitalist societies, including social scientists.

The universalization of commodity production ensures the pervasiveness of commodity fetishism which is, from the standpoint of historical materialism, the material basis for determining the boundaries between science and ideology¹⁷ as well as their inextricable combination to the extent that scientific practice remains limited to investigating the level of exchange and circulation of commodities while overlooking the level of production. Marx states the point as follows:

Man's reflections on the forms of social life and, consequently, also his scientific analysis of those forms, take a course directly opposite to that of their actual historical development. He begins, post festum, with the results of the process of development ready to hand before him. The characters that stamp products as commodities, and whose establishment is a necessary preliminary to the circulation of

commodities, have already acquired the stability of natural, self-understood forms of social life, before man seeks to decipher, not their historical character, for in his eyes they are immutable, but their meaning.. The categories of bourgeois economy consists of such like forms. They are forms of thought expressing with social validity the conditions and relations of a definite, historically determined mode of production.¹⁸

The economic theory of fertility is an object lesson on the meaning of commodity fetishism and, as such, it shares the basic ideological flaws of economic theory in particular and social science in general criticized by Godelier.¹⁷ An application of Godelier's major critical insights to current theorizing about fertility can be summarized in four major points.

1. The microeconomic approach to fertility takes as a point of departure the obvious and visible maximizing behavior of individuals and overlooks the structures that render possible such forms of individual reproductive behavior. It bypasses structures which are "... part of reality but not of visible relationships"²⁰ and limits the scientific analysis of fertility to its fetishized dimensions. It does not inquire, in other words, into the historically specific conditions under which it becomes possible for scientists to conceptualize fertility behavior in those terms and for people to ask themselves whether they can "afford" a child; instead, it justifies its analysis on the basis of a formal theory of rational choice.²¹

2. It defines fertility behavior in terms of a formal theory of rational action: as optimizing behavior in a context of scarcity. Such a formal theory of rationality is a poor basis for a scientific analysis of reproductive behavior because it explains nothing about its content, its origin, and its change. The use of formal rationality is ideological. Whether it is conceived as a universal feature of human nature or as a product of capitalist development, formal rationality functions as an apologia of capitalism. In its light capitalism can be pseudo-deduced from human nature (and consequently endowed with ahistorical immutability) or it can be considered as the source of rationality thus relegating everything else to the realm of tradition, religion, custom, and other substitutes for reasoned analysis.²²

3. The reliance on formal rationality and individual behavior necessarily leads to neglect of the social nature of the criteria by which individuals

maximize their utility. The subjective utility of children for individuals or households is taken as the basis for explaining how reproductive behavior operates. It is assumed that those utilities, as well as their hierarchical ordering in a map of indifference curves responds solely to individual subjective preferences which can be collected and statistically analyzed, thus providing a pseudoscientific analysis of social needs. It is obvious that such statistical analyses are insufficient to scientifically explain not only the needs and hierarchy of needs dominant in a given social formation at a given time but also, what is more important, the reason why the satisfaction of some needs as well as the form in which such needs are satisfied are deemed more "rational" than others.

4. The theory of choice is based upon a conceptualization of income as an individual attribute. Income is viewed in purely quantitative terms: the amount of income accruing to individuals thus determines, given tastes and market prices, the combination of goods and children that best maximizes their utility. The exclusive concern with the quantity of income reflects the narrow basis of the analysis which remains at the level of market relations and unavoidably overlooks the relevance, for the explanation of fertility behavior, of the relations of production and class relations in which all individuals participate. It obscures the existence of qualitative differences in the sources of individuals' income, differences that stem from their specific location in the mode of production.

The scientific kernel of the economic theory of fertility lies in the identification of the economic constraints that shape fertility behavior under capitalist conditions, and the articulation of those constraints with individuals' tastes into a theory potentially useful for the study of reproductive behavior. The universalization of commodity production, which implies the satisfaction of all needs through the market, does incorporate child-bearing and rearing into market relations both symbolically and practically to the extent that such activities presuppose monetary outlays. Market considerations and relations do invade the household forcing its individual members to behave in an optimizing manner in order to maintain or improve their standard of living and that optimizing behavior necessarily affects reproduction.

On the other hand, the economists' insights on the nature of fertility behavior are scientific for they express "...with social validity the conditions and relations of a definite historically determined mode

of production;"²³ but they are also ideological because they do not acknowledge the historical nature of those conditions: i.e., their basis on the capitalist mode of production which not only makes possible the theory and the practice of fertility behavior as consumer/producer behavior but also gives it a historically specific content. Their analysis is limited to the subjective, individual, and formal aspects of fertility behavior; i.e. to its fetishized form.

The Marxist Alternative

These criticisms suggest three specific conditions for a scientific Marxist analysis of reproductive decisions.

1. It should define reproduction in structural rather than individual terms.

Instead of investigating reproductive behavior primarily as the behavior of individuals who, given certain individual attributes (income and tastes) and market prices, choose to consume/produce children, Marxist analysis would investigate the reproductive structures characterizing a given social formation at a given time. As Engels pointed out,

... according to the materialistic conception, the determining factor in history is, in the final instance, the production and reproduction of immediate life. This, again, is of a twofold character: on the one side, the production of the means of existence ... on the other side, the production of human beings themselves, the propagation of the species.²⁴

Under capitalist conditions, given the twofold nature of production, it becomes necessary to investigate the relationship between the capitalist mode of production and the capitalist mode of reproduction (in the biological and social sense) it presupposes. The capitalist mode of reproduction is the complex structured totality formed by the combination of the material and social elements that enter into the biological and social reproduction of human beings through historically specific (i.e., capitalist) relations of reproduction (relations between the sexes, independent from their will, mediated through their relationship to the material and social conditions of production and reproduction)²⁵ Consequently, the study of the relationship between capitalist modes of production and reproduction is not equivalent to studying the "interaction" between "family" and the "economy". At the market level, economy and family appear as things in themselves that "interact" with each other in ways that reproduce market relations thus obscuring the relations of production

and the relations of reproduction which underlie market behavior. Under capitalist conditions (as well as in all modes of production based on the private ownership of the means of production) the social relations of reproduction are sexist relations. A structural and historical analysis of the relationship between the capitalist modes of production and reproduction entails, therefore, the investigation of the relationship between capitalist contradictions and sexism both at the levels of public production and at the level of the modes of reproduction that characterize specific classes and sectors of classes. From the standpoint of historical materialism, this investigation is a necessary preliminary step for the sound study of reproductive patterns for it would disclose the historically specific constraints determining individual reproductive behavior at the market level.

2. It should define reproduction in real, concrete terms, rather than formal terms.²⁶

In the *Grundrisse*, in the section on "The Method of Political Economy,"²⁷ Marx makes an important distinction between three kinds of concepts: imaginary concretes, abstractions of simple definitions, and concrete concepts. The substance of his argument is the following:

It seems correct to begin with the real and the concrete, with the real precondition, thus to begin, in Economics, with e.g., the population, which is the foundation and the subject of the entire social act of production. However, on closer examination this proves false. The population is an abstraction if I leave out, for example, the classes of which it is composed. These classes in turn are an empty phrase if I am not familiar with the elements on which they rest If I were to begin with the population, this would be a chaotic conception (*Vorstellung*) of the whole, and would then by means of further determination, move analytically towards ever more simple concepts (*begriff*), from the imagined concrete towards ever thinner abstractions until I have arrived at the simplest determinations. From there the journey would have to be retraced until I had finally arrived at population again but this time not as the chaotic conception of the whole, but as a rich totality of many determinations and relations. The concrete is concrete because it is the concentration of many determinations, hence the unity of the diverse.²⁸

The economic theory of fertility is a "thin abstraction" a formal analytical construct that distills the essence of the reproductive experience of the vast majority of the people living under capitalist condi-

tions and reifies it into an ahistorical, formal theory of rational choice. The development of a real and concrete concept of reproduction as a "totality of many determinations and relations" involves "retracing the journey" in order to elucidate its historically specific structural foundations. This calls for the investigation of the content given to formally rational individual behavior by the location of individuals and households in the mode of production. In the context of capitalist social formations, the apparently homogeneous population of individuals who, at the market level of analysis appear engaged in formally similar optimizing behavior as consumers/producers of children, disappears at the level of production where it is replaced by a heterogeneous population divided in classes whose rational behavior has qualitatively different contents.

At the level of production, the rational behavior of the capitalist class is dominated by the problem of investments; how to invest to maximize profits. The rationality of the working class, on the other hand, is dominated by the problem of survival: to sell labor-power for the highest possible wages. Survival is ensured by compliance with the goals of the capitalist class and, in that sense, the rationality of the working class is "... complementary, derivative, and dependent" upon the rationality of the capitalist class.²⁹

The relationship between these classes is contradictory and complementary at the same time. The contradiction between capital and labor is obvious: the higher the wages, the lower the profits and vice versa; hence the presence of class struggles as a permanent feature of capitalism. They are complementary in terms of their role in the production process; the ongoing smooth functioning of capitalism depends both on the rational behavior of the capitalist class (e.g., making adequate investment decisions, and the rational behavior of the working class (e.g., adapting its needs and work patterns of the conditions set by the capitalist organization of production). The rational behavior of the capitalist class can be fully effective to the extent it counts with a subordinate, malleable, and controllable labor force. It follows that, while the rationality of the capitalist class is unitary (i.e., its class interests and its goals as defined in the production process coincide), the rationality of the working class has contradictory dimensions rooted in the context from which it is defined. From the standpoint of the working class, the rational pursuit of its class interests is in the contradiction with capitalist interests both in the short (e.g., struggle for higher

wages/salaries) and the long run (e.g., struggle to abolish capitalism). On the other hand, from the standpoint of the capitalist class, the working class behaves rationally to the extent it overlooks its own interests and, instead, conforms and adapts its behavior to capitalist demands inside and outside the production process.

At the level of reproduction, it becomes necessary to investigate the ways in which capitalist and working class rationality (i.e., the pursuit of their class interests) affect the reproductive behavior of both classes. To define reproduction in real, concrete terms means, therefore, to inquire into the conditions surrounding the reproduction of classes rather than merely the reproduction of "individuals" or the "human species."

With respect to the reproduction of the rational pursuit of class interest, rational profit-seeking behavior and reproductive patterns are, in principle, functionally related. Reproduction is an integral part of the overall rational behavior of the capitalist class aimed at preserving its economic and political power. Capitalist class families seek to ensure that their children will also be members of the capitalist class, and this inevitably affects their family-size decisions.

The analysis of the reproductive patterns of the working class is more complex because the rational pursuit of class interest and the content of formally rational reproductive behavior are relatively independent. Workers cannot directly affect the outcome of the class struggle, nor further their class interests through changes in their reproductive patterns. This assessment of the relationship between reproduction and working-class interests rests upon the crucial distinction between *labour-power*, the capacity for physical and intellectual activity, and *laborers* or workers, the owners of labor-power. While the production of labor-power presupposes the existence and reproduction of the workers, the demand for labor and the level of wages are determined not by the existent number of workers, but by economic and political considerations establishing the quantity and quality of labor-power needed at a given time. Under capitalist conditions, whatever their rate of natural increase might be, workers are constantly in excess of the demand for labor-power. Reproductive decisions in other words, do not affect, directly, the size of the reserve army of labor.

Workers do, however, respond to the uncertainties of the labor market by attempting to improve

their own individual situation and this has important implications for their reproductive behavior. They may attempt to improve their children's "life chances" in the market by restricting their family size so that each child has larger claim on the family's scarce resources. On the other hand, they may find that a large family is beneficial because it increases the size of a family network which affords protection against the insecurities of the labor market. The specific ways in which different sectors of the working class adapt to changing demands for labor power and the relationship between those adaptive patterns and changes in the status of women in the context of unchanging sexist relations of reproduction are, consequently, of key importance for understanding their reproductive behavior. Rational working-class reproductive behavior is, therefore, another manifestation of the dependent, complementary, derivative rationality that suits the needs of the capitalist class. What appears at the level of the market as the rational optimizing behavior of individuals is a structural effect of the processes through which different sectors of the working class adapt their behavior to the productive and reproductive demands of the capitalist class. The changing content of that formally rational reproductive behavior reflects those changing demands and this topic will be considered in the section that follows.

3. It should analyze "taste" on an objective rather than subjective basis.

It is important to investigate the relationship between the requirements of the capitalist mode of production and the historically specific hierarchy of socially structured alternative and needs confronting different classes at a given time. Marx's analysis of the needs of the working class is pertinent at this point and applicable to all classes:

... the number and extent of ... necessary wants, as also the modes of satisfying them, are themselves the products of historical development, and depend, therefore to a great extent on the degree of civilization of a country, more particularly on the conditions under which, and consequently on the habits and degree of comfort in which, the class of free laborers has been formed. In contradistinction, therefore to the case of other commodities, there enters into the determination of the value of labor-power a historical and moral element.

A given number of children can thus be viewed as an integral part of the "historical and moral elements" that enter in the determination of the value of labor-power which includes the means of

subsistence necessary for the reproduction of the labor-power of the workers and their future substitutes: their children.³¹ Different kinds of labor-power have different values and are reproduced in contexts requiring a variable number of children. This is a matter that can be empirically determined for different classes and sectors of classes. While that number is subject to a variety of historically specific social constraints (e.g., pronatalist sex roles, norms about family size, tax advantages for families, etc.) and fluctuates in tune to changes in wage levels and market prices, there is at any given time a family size which appears rational within a framework defined by the power of the capitalist class. The extent to which that family size is overtly or tacitly used by social scientists to evaluate the rationality of the fertility behavior characterizing specific countries and/or sectors within a given country is a matter to be empirically established.

In so far as economic theories of fertility overlook the three conditions discussed above, they will retain ideological and apologetic implications for they will conceptualize capitalist reproductive behavior either ahistorically (i.e., as rooted in an utilitarian "human nature") or as the abstract result of "modernization" and "rationalization" processes. The concrete consequences of such approaches are: a) the misunderstanding of reproductive behavior and its determinants; b) the tacit acceptance of capitalist structures, processes, and contradictions which remain outside the scope of scientific concern; and c) the use of the empirical effects of capitalism as a variety of "factors" (e.g., cultural, technological, educational, etc.) that could "explain" variations in reproductive behavior.

Conclusion

As Marx pointed out in this famous passage:

Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under circumstances directly encountered, given, and transmitted from the past.³²

The deterministic and voluntaristic theoretical assumptions underlying sociology and economics respectively are transcended by historical materialism which, while allowing for the importance of individuals active intervention in social life, it also acknowledges the historical boundaries that give meaning to that intervention and make it possible. From the standpoint of historical materialism it is as abstract and one-sided to argue that individuals are free to choose their family size given income and

price limitations as it is to argue that they have no choice whatsoever because their behavior is socially determined. The economists' individualistic/utilitarian assumptions are as misleading as a basis for developing a scientific analysis of reproduction as the sociologists' oversocialized conception of man. Both capture partial or fetishized aspects of social behavior without dealing at the same time with the structures that produce and reproduce those "social facts" on an ever expanding scale. A scientific analysis of fertility cannot be limited to mapping the reified consciousness emergent in the context or universalized commodity production nor to describing the various forms in which coercive "social facts" impinge upon reproductive behavior. A scientific analysis must specify the structural mechanisms that make possible those forms of objectivity and consciousness at a given time. The identification of those mechanisms rests upon a structural concrete, and objective definition of reproduction as the reproduction of classes and relations of production in the context of a historically specific mode of production.

Notes and References

2. J. Duesenberry in *Demographic and Economic Change in Developed Countries*. Universities — National Bureau Conferences Series No.11 (Princeton: Princeton University Press 1960), p. 233. I have added the statement about historical materialism.

3. See: Gary S. Becker. "An Economic Analysis of Fertility," in *Demographic and Economic Change in Developed Countries*, op. cit., p. 209.231; R.A. Easterlin, "Toward a Theory of Fertility," in S. J. Behrman et al., eds. *Fertility and Family Planning: A World View* (Ann Arbor: U. of Michigan Press, 1969), pp. 127-155; and T.W. Schultz, (ed), *Economics of the Family* (Chicago: University of Chicago Press, 1974).

4. The concept of reproduction can be used to indicate three different levels of analysis: human reproduction, reproduction of the labor force, and social reproduction (Edholm, et. al. 1977). This essay has methodological critique of the economic and sociological approaches to the study of human reproduction. By theories of reproduction it is meant, consequently, theories of fertility and reproductive behavior will be used as interchangeable terms. On the other hand, the critique suggests that human reproduction cannot be adequately studied in isolation from social reproduction and the reproduction of the agents of production. Such shifts in levels of analysis will be made explicit in the text and should not pose difficulties for the reader.

5. See, for example, K Davis. "Population Policy Will Current Programs Succeed?" *Science* 158 (1976), PP. 730-739; J. Blake, "Are Babies Consumer Durables?" *Population Studies* 22 (1968). PP. 5-25; Coercive Pronatalism and American Population Policy," in Ellen Peck and J. Senderowitz, eds., *Pronatalism: The Myth of Mom and Apple Pie* (New York; T. Y. Crowell, 1974). PP. 29-67.

6. Historical materialism is the science of history originally developed by Karl Marx and F. Engels. For a historical analysis of its emergence and an enlightening and systematic discussion of its main concepts see Goran Therborn, *Science, Class and Society* (Atlantic Highlands: Humanities Press, 1976, especially ch. 8, "Working-class Struggles and Theoretical Breaks. The Social and Theoretical Formation of Historical Materialism"). Marxist theory is a more general concept which has been used to indicate a wide range of theoretical standpoint, from idealist to mechanical materialist reading of historical materialism. Throughout the essay and for reasons of style, both terms will be used as if they were synonymous.

7. *Op. cit.* in footnote 3; also Easterlin, *loc cit.*, in footnote 3.

8. Schultz, *op. cit.* in footnote 3.

9. Easterlin, *op. cit.*, in footnote 3, p. 128.

10. Davis, *op. cit.* in footnote 4; Blake, *op. cit.*, in footnote 5.

11. For recent research and discussion of the advantages and disadvantages of the one child family in comparison to the family sizes see Sharryl Hawke and David Knox, *One Child by Choice* (Englewood Cliffs N.J. Prentice Hall, 1977).

12. Blake (1968), *op. cit.* in footnote 5, pp. 15-19

13. Blake (1974), *op. cit.* in footnote 5, p. 30.

14. Karl Marx. *Capital* Vol. I (New York International Publishers 1907). pp 71-83.

15. *Ibid.* p. 176.

16. *Ibid.* pp. 170-172.

17. For further elaboration of this perspective, see: Therborn, *Science, Class and Society op. cit.* in footnote 6. pp. 367-8 and Alfred. Sohn-Rethel, *Intellectual and Manual Labor* (Atlantic Highlands: Humanities Press, 1978).

18. Marx, *op. cit.* in footnote 14, pp. 75-76.

19. Maurice Godelier, *Rationality and Irrationality in Economics* (New York: Monthly Review Press) 1973, p. 7-49.

20. Maurice Godelier, "Structure and Contradiction in Das Kapital" in Michael Lane ed., *Introduction to Structuralism* (Boston: Basic Books, 1970). p. 347.

21. Economic rationality is equivalent to formally defined rational behavior (i.e. optimizing behavior or selection of means and ends in terms of marginal

utility) and, as such, it can be understood in terms of the formal theory of rational choice which underlies much of the theoretical development of modern social science, including economics. For a detailed analysis of this point see M Godelier, *Rationality and Irrationality in Economics* (New York: Monthly Review Press, 1972) and Anthony Heath. *Rational Choice and Social Exchange, a Critique of Exchange Theory* (New York: Cambridge University Press, 1976).

22. Godelier, *op. cit.* in footnote 1 . pp. 15-21.

23. Marx. *op. cit.* foot note 14, p. 76.

24. F. Engels, *The origin of the family, Private Property and the State* (New York : International Publishers, 1972) p. 71.

25 The methodological argument developed in this essay presupposes knowledge of concepts such as mode of production, social formations, relations of production mode of reproduction, relations of reproductions, and so on. It is true that the theoretical elaboration of historically specific modes of reproduction (biological and social) is still in its early stages and widespread knowledge, let alone agreement, about their adequacy cannot be expected. On the other hand, a detailed presentation of my own understanding of these issues, which I have stated in a recent article (see M. E. Gimenez, "Structuralist Marxism on 'The Woman Question,'" *Science & Society*, Fall, 1978, pp. 301-323), would necessarily break the continuity of the argument. I think, though, that readers familiar with Marxist and feminist theories should have no difficulties in understanding my usage of the concepts mode of reproduction and relation of reproduction.

26. Marx's distinction between imaginary concrete, formal, and concrete or real concepts is one of his most important, albeit cryptically stated methodological insights. The significance of these distinctions is the following ; unlike empiricist and idealist epistemologies which seek an understanding of social reality through the discovery of universally valid categories of analysis, Marx's methodology shows that such categories are themselves the product of specific historical relations ; they are valid in all modes of production but on the other hand, they possess their "full validity" only for and within the historic relations that produced them (K. Marx, *Grundrise* London: Penguin, 1973), p. 105.

27. *Ibid.*, pp. 107-8.

28. *Ibid.*, pp., 100-1,

29. Godelier, *op. cit.* in footnote 19. p. 37.

30. Marx. *op. cit.* in footnote 14. p. 171.

31. Marx, *op. cit.* in footnote 14, p. 172.

32. Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte* (New York; International Publishers, 1969), p. 15.