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OF PATRIARCHY BORN: THE POLITICAL ECONOMY OF FERTILITY DECISIONS

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Of Patriarchy Born: The Political Economy of Fertility Decisions*

Ever since Malthus condemned the brutishness of a working class that mindlessly reproduced itself, social scientists have had a tendency to assume that reproductive behavior could not be readily explained by rational motives. Even those willing to concede the existence of intelligent choice in modern industrial societies have continued to assume that families in underdeveloped agrarian societies are bound by traditional and often irrational attitudes. The advent of conscious family size limitation is often pictured as the simple result of a process of modernization.

While assumptions such as these still hold sway in the field of demography, many demographers have begun to challenge them. Confronted with the empirical reality that families in many rural areas of the developing world enjoy economic advantages from large families, they have increasingly focussed their attention on the costs and benefits of children. A number of new empirical studies have substantiated the claim that children can and do provide important pecuniary contributions to family income.[1] There are rational economic motivations for high fertility.

The extent to which purely economic factors affect fertility decisions remains unclear, but it is increasingly evident that the answers to this question hinges on the answers to two other questions: What are the relevant economic factors, and how can they best be conceptualized? In the growing literature on the rationality of high fertility, two distinct theoretical perspectives are emerging. The first perspective represents an extension of conventional neoclassical models of household decision making, often

described as "the new household economics." This perspective has been specifically applied to the economic incentives to high fertility by Robert Evenson and Mark Rosenzweig.[2] The second perspective lies outside of the tradition of neoclassical economic theory. Rather than focusing on the characterisics of individual households, it underlines the importance of the institutional context in which individual households operate. It points to the importance of patriarchy, a form of social inequality based on age and sex. This perspective is best represented by the work of John Cardwell.[3]

Proponents of both these theoretical perspectives have made important contributions to our understanding of fertility decisions. But neither perspective provides a satisfactory framework for analyzing the costs and benefits of children and the ways in which these are affected by the process of economic development. Neoclassical models ignore non-market factors, such as patriarchy, which affect transfers of income and labor time between men and women, parents and children. Institutionalist approaches correctly emphasize these factors, but do not precisely explain their economic dimensions nor clearly describe their specific effects on household decisions.

In this paper, I develop a critique of both these perspectives which I hope will lay the foundation for a political economy of fertility decisions. My critical analysis of neoclassical economic assumptions represents a clarification and a formalization of the insights of institutional theories, but leads toward some significant modifications of the institutional approach. Utilizing some of the tools of both Marxist and feminist theory, I develop three related hypotheses:

(1) The economic benefits of children are determined jointly by household specific factors such as levels of wealth and education and by institutional factors such as patriarchal control over children--control which parents exercize over the labor and income of adult, as well as immature children.

(2) The economic costs of children, a large part of which consist of the opportunity cost of the mother's time, are determined jointly by household specific factors such as levels of wealth and education and by forms of patriarchal control over women which limit their bargaining power in the household and lower their real income.

(3) Both these aspects of patriarchal control are rooted in the structure of ownership of the means of production and can be expected to change in predictable ways as the class structure changes. Any theory of patriarchal control and its effects on the demographic transaction must include a detailed consideration of the class structure and its transformation through the transition to capitalism.

Neoclassical Approaches: A Critique

The hallmark of neoclassical economics is its emphasis on the importance of individual choice. The distinguishing feature of the "new household economics" is its extension of the calculus of constrained optimization to family decision making.[4] The household is pictured as a market within a market, with its own production function, its own utility function, its own supply curve, and its own demand curve. Although there are no formal prices assigned to inputs or outputs in the household, family members make decisions on the basis of implicit prices, some of which may be imputed from market prices.

Family members share a joint utility function which they seek to maximize. This joint utility function may be the outcome of agreement among all family members, or it may be imposed on the family by its own benevolent dictator. The tastes and preferences defined in this utility function determine the family's demand for goods produced within the household as well as outside it. Families choose the combination of market purchased and home produced goods, and organize home production in the most efficient way possible, given prices and incomes. The household production function is commonly assumed to be of a fixed coefficient or constant returns to scale type, and to exclude the possibility of joint production.

Own children cannot be purchased on the market, and must be produced at home. Within the neoclassical framework, the demand for children is derived from the demand for child "services". These services include the flow of utility which children provide as well as any pecuniary transfers. The quantity of services which a child provides is determined by its "quality," a term defined economically as the amount of time and money invested in the child. This distinction between quantity and quality lays the foundation for the claim that parents' demand for children may go down even if their demand for child "services" remains the same. Parents may substitute quality for quantity.[6] Traditionally, children are described as consumer durables, yielding a flow of "utility" over their lifetime. More recent formulations, such as those of Evenson and Rosenzweig, accomodate the possibility that children may also be investment goods, yielding a flow of income over their lifetime. This modification has stimulated no basic changes in the model.

As many critics have noted, the basic assumptions of the neoclassical approach are restrictive and unrealistic.[7] The joint utility function assumes away the possibility of conflict between the sexes or between the generations. The household production function is specified in terms that are empirically tractable, rather than empirically believable.[8] The quantity-quality trade off treats child services in a reductionistic way, assuming that parents get back from children in utility or income some quantity proportional to the amount of time and money that they have invested. If this were the case, children truly would be reliable consumer durables and risk free investment goods. Only mortality could curtail their benefits.

The significance of these specific criticisms should not be underestimated. Neither should they be used as an excuse for premature rejection of neoclassical models. Any economic analysis of the household requires some simplifying assumptions. Sensitive to the weaknesses of their models, most practitioners of the new home economics argue that they nonetheless generate useful and testable hypotheses. Even those who reject their conclusions may have something to learn from their empirically oriented research.

The real weakness of the neoclassicists lies not in the way they analyze what they analyze, but in the way certain factors are systematically neglected.[8] Individuals and families do make choices in response to prices which are determined through markets. But these choices are made in a specific economic context. They are constrained by the resources or endowments which define the domain of choice, and these constraints are determined by non-market economic factors.

From a neoclassical perspective, the only non-market factors relevant to choices are tastes and preferences. Any market outcome which appears inconsistent with the theory of optimization or rational choice is explained by reference to tastes and preferences. Thus, discrimination, a practice which is inefficient from a purely economic point of view, is explained as the result of a "taste" for discrimination. The fact that increases in income tend to lead to decreases in desired family size is anomalous, since increases in income are normally assumed to increase demand for goods. This anomaly is reconciled by the assumption that high income increases the demand for child quality rather than quantity.

Tastes and preferences certainly do exist, and do affect the process of market choice. But people do not exchange tastes and preferences on the market. They exchange goods and services. They cannot exchange what they do not own or control. The starting point of any process of exchange is the distribution of endowments.

Initial endowments could theoretically be distributed by a market mechanism. In reality, they are not. On the historical level they are determined by political forces and political conflict, which include forms of physical coercion. On the individual level, they are determined by the family into which one is born, and the skills and capital which are transferred by the previous generation.

Intergenerational transfer does not take place through a market process. Parents may choose the number of children they will have and the quantity of capital they will transfer to them. They cannot

and do not choose the children themselves, and if they are dissatisfied with their own children they cannot and do not trade them. Children, it must also be noted, do not choose their parents, and the endowments of capital which they receive are seldom related to any of their intrinsic characteristics.

Parents transfer resources to their own children simply because they are their own children. Such transfers are often reciprocal in nature. Children also transfer resources to their parents, especially when they become old and infirm. But there is no market process that ensures that these transfers will be equal or reciprocal. Parents may transfer less to children than they receive, and vice versa. Parents may transfer more to boys than to girls, and vice versa.

These aspects of intergenerational transfer affect market outcomes, because they determine what females in particular and children in general bring to the market. Children, as they mature, may make certain choices which are perfectly rational, but quite distinct from the choices they would have made if they had different endowments. This simple, even self-evident point is aptly illustrated by a consideration of the factors which affect the costs and benefits of children.

One of the major determinants of the cost of children is the cost of a mother's time. Time which women devote to childcare is time they could have utilized to perform some other type of work. The opportunity cost of children is clearly affected by women's production in the home and her earnings in the market. Neoclassical economists assume that this opportunity cost, or "shadow wage" is determined through a market. Women are willing to supply a certain amount of labor at a certain price and both the formal labor market and the individual household demand a certain amount of labor at a certain price. The price of a woman's time should be determined by the intersection of supply and demand.

The neoclassical approach focuses on household specific factors, such as levels of education and household capital that should explain differences in time allocation between households in terms of a market-like process of choice. It avoids consideration of the way in which non-market factors affect the supply and the demand for female labor. If employers have a "taste for discrimination" their demand for women's labor is lowered. If parents and schools make different types of transfers to sons and daughters, the supply of female labor is different than the supply of male labor.

Suppose that the skills and other "endowments" which women receive are different from men's, but equivalent in value. One would expect to find women specializing in certain tasks, but receiving the same hourly wage as men. If they don't receive equal pay for their work despite the fact that they are supplying the same level of skill, employers are discriminating against them. Discrimination in the market artifically lowers women's earnings, leading them to devote more hours to household production than would otherwise be the case. Women's marginal product in the home is artifically lowered.

Women may also be discriminated against in the home, either in their parent's home (if they receive less in the form of endowments such as education) or in their husband's home (if their share of total family income is less than commensurate with their work). As members of a household men and women pool their resources and consume a certain share of what the family as a whole produces. There is no necessary relationship between the value of work performed and the share of household income received. Both men and women could, of course, choose to leave the household if they did not receive their rightful share. Both would have to

face certain restrictions on mobility, such as marriage, divorce and child custody laws, which may or may not affect them equally. But discrimination in the market places women in the weaker position. Even if they are dominated and exploited in the household, they are likely to be far better off there than they would be on their own.

If all women were equally discriminated against, both in the relative value of their endowments and in the market wage rate, discrimination per se would not affect cross-sectional differences between households, and neoclassical predictions regarding the effects of differences in wealth and education between households might be borne out If levels of discrimination and distributions of endowments change over time, however, as they almost certainly do, cross-sectional differences will not necessarily be reflected in historical trends.

The neoclassical analysis of the pecuniary benefits of children also overlooks the non-market factors that define the context of parent's choices, despite the fact that these factors are also likely to change over time. Neoclassical models explain childrens remittances to parents in the same way that they explain the opportunity cost of women's time, as a function of variables which affect schooling productivity and labor force participation. They do not explore the relationship between the child's earnings (which certainly are significantly affected by the variables which they single out) and what the child actually contributes to the household. All but one of the models specified by Evenson and Rosenzweig implicitly assume that there is a constant relationship between potential and actual gains from children's work.[9] In the remaining formulation, this relationship is modified by exogenous depreciation over time due to migration.[10]

The neoclassicists' lack of consideration of the gap between potential and actual gains stems from their assumption that parents and children share a common utility function. The common utility function obscures the possibility

that parents and children may have different and conflicting interests and may bargain over the extent and timing of transfers of income. Young children may share a common utility function--they exercise no independent choice over the distribution of the family's product. Adolescent and adult children, however, do exercise some control over the disposition of their earnings. They may choose to hand over far less than their parents anticipated.

Neoclassical models tend to overlook relations between parents and children once children leave the household. Yet Rosenzweig himself notes that the pecuniary contributions of absent children may be particularly important in less developed countries.[11] Families which are "nuclear" in terms of household structure may be quite "extended" in terms of flows of income between the generations. It is adult children, not young children, that parents rely on as a source of support in old age. Since women are seldom capable of childbearing after age 40, their youngest children are usually at least 20 years old by the time they reach age 60.

This aspect of the family life cycle clearly affects the context of parental "investments" in children. If parents have any pecuniary interest in children, they are interested not only in what their children earn, but in what percentage of their children's earnings they will receive. Some factors, notably education, decrease children's contribution when young, but increase their <u>potential</u> contribution by providing them with access to better jobs. Parents must take into account the possibility that education (or other factors) may directly affect the percentage transferred as well as the amount earned.

The way in which parents provide their children with their original

endowments is quite crucial. A dowry, which is often a conditional transfer, differs significantly from a bequest, the timing of which is determined by external events. An endowment such as an education, which parents cannot reclaim once it is provided, differs significantly from a right to work family land, which they can easily revoke. The choices which adult children make regarding transfers to their parents are affected by past and anticipated non-market transfers from their parents to them.

If it could be demonstrated that the percentage of income which children contribute to their parents were relatively uniform across families and stable over time, then analysis of children's productivity and earnings would provide important insights into the pecuniary benefits of children. But there is no a priori reason to assume that this is the case. There are important differences between families in parental control over wealth, and important historical changes have occurred in the timing and extent of intergenerational transfers.

In sum, institutional factors which influence the balance of power between men and women and parents and children clearly affect the costs and benefits of children. Any theory which proposes to explain fertility decline as a rational response to increases in the cost of children must consider the factors which define the context in which individual choices are made. To consider these factors requires some theory of the way in which non-market institutions themselves evoke.

Institutional Approaches

Sociological and anthropological approaches to the family are antithetical to neoclassical economic theory because they deemphasize

the role of individual choice. They focus either on the importance of cultural attitudes--(labeled as "tastes and preferences" in neoclassical models), or on the role of social institutions in imposing constraints on individual decisions. There is tremendous heterogeneity in the way in which the logic of human behavior is explored, but it almost always includes a conceptualization of rational choices that is distinct from individualistic optimization.

Individuals live and work in a social context. But they do not mindlessly conform to the received wisdom of traditional ways. They play an active role in processes of social change which modify and transform both attitudes and institutions. They choose to cooperate with others in promoting or resisting change, and this form of choice is quite distinct from their individual decisions to buy and sell, invest or divest. The logic of group behavior can seldom be summarized in the language of constrained optimization, because it often requires a complicated strategy: the outcome of a market exchange can be predicted, but the response of one group's behavior to another groups actions is always uncertain.[12]

One of the central issues in social science--perhaps the most central--is the definition of relevant groups. Traditional sociological approaches tend to emphasize the importance of groups defined by status and occupation; anthropological approaches tend to look for cultural dividing lines; Marxist theory focuses on the roles of social classes defined by their relation to the means of production. All social scientists, including demographers, have tended to treat the family itself as a group with a clear community of interest which was merely a constituent part of a larger group, such as class. The first serious critique of this conceptualization grew out of

feminist theory. Though conflict between men and women has always been noticed, described, and joked about, it has only recently been recognized as a form of conflict with far-reaching social implications.

The feminist insight has important implications for the analysis of the family. It raises important questions about the way in which family decisions are made, and the way in which the context of family decisions is modified by historical change. Many different theoretical approaches to this question have been developed. One emerging paradigm explores the structure of relationships between the sexes in terms of the concept of patriarchy.[13]

In its common usage, patriarchy connotes male domination. Its etymological meaning, however, is "rule of the fathers." A growing body of literature examines relations between the generations in terms similar to those used to describe relations between the sexes. Both these aspects of patriarchy are commonly analyzed within the larger context of the class structure of a given mode of production.

The most significant effort to relate the concept of patriarchy to the analysis of fertility decisions is John Caldwell's essay, "A Theory of Fertility: From High Plateau to Destabilization".[14] In describing the traditional rural family Caldwell points to the importance of non-market factors which affect decision making in the household. "Familial modes of production", he writes "are characterized by relations of production between kin that give the more powerful or the decision makers material advantage".[15] In an explicit criticism of neoclassical assumptions, he observes that the household decision makers are likely to be the old and the male.

He correctly explains that there are many reasons why this may be

the case. Elders have greater knowledge and experience than youths, and males have greater physical strength than females. Patriarchal ideologies and religions reinforce elder males' claim to authority. These authority relations are further reinforced by strict sex role socialization within the family. But Caldwell also notes the importance of a specific set of non-market economic factors : elder male ownership and control of the means of production.

Caldwell does not provide a comprehensive review of the evidence, but his claims are consistent with a growing body of research on the social history of the family. One of the first modernization theorists to explore the family, William Goode, emphasized the mechanisms of parental authority.

> Until industrialization parents in the West could control their children's choice of spouse largely through control over inheritance, for land was almost the only potential source of income. The farm youth could not marry without his father's permission, because by his own effort, he could not gain enough money with which to buy land. Throughout most of the West, a dowry system was followed, so that the girls' chances of marrying were negligible unless her family was willing to present her with a sufficient marriage gift.[16]

Berkner argues that adult sons in Austria often grew impatient waiting to come into their inheritance. Their dependence on their fathers as a source of wealth reinforced their willingness to devote labor or income to the care of their elderly parents. Braun describes the contributions which Swiss children made to their parents upkeep before the advent of industrialization.[18] Scott and Tilly, describing France in the 18th century, write that "In some cases parents formalized a working daughter's responsibility to the family wage economy by arranging to receive her wages from her employer". Greven and Smith, among others, have

traced the evolution of parental control over children in early New England.[20]

Patriarchs in many developing countries use their control over land in a similar fashion. There are several classic studies of patriarchal control over children in Asia. Wolf describes the strength of direct control over children in Taiwan.[21] Cheung writes that, "until only a few decades ago, parents in China held property rights in children."[22] Cain's analysis of the household life cycle in Bangladesh suggests that adult children are economically bound to their parents.[23] In a volume of essays on the persistence of high fertility, Jones points out, "in a patriarchal social structure (e.g. much of West Africa and the Moslem World), the father can (and often does) keep sons unmarried until quite a mature age, and even after they have married and perhaps taken up residence separately the fruits of the son's labour continue to flow to the father in the sense that he maintains control over the land they work."[24] Janet Salaff documents the flow of income from adult daughters to their parents in Hong Kong.[25]

Both parents may benefit from patriarchal control over children. Indeed, mothers who undertake the physical risks of childbearing and incessant demands of childcare have a much greater vested interest in their children than do fathers. But herein lies an essential difference between the sexes. Both parents may enjoy the fruits of their children's labor, but mothers pay the most direct and the most personal costs. This assymmetry has important implications for relations between the sexes.

There are a number of obvious motives for male domination. Men who wield greater economic and political power than women may directly benefit from unequal exchange, demanding more goods and services than they would

otherwise receive. But women's capacity for childbearing provides an additional motive for male domination--men's potential benefit from their children. And women's biological potential provides an additional mechanism for male domination. Mothering makes women more physically vulnerable and more economically dependent. It enforces specialization in a form of production that requires a certain biological capacity and specific type of socialization but utilizes relatively little skill or capital. Mothering tends to limit women's participation in the types of exchange and interaction that are crucial to most forms of political activity.

Many aspects of patriarchal control over women are related to their social role as mothers, and all forms of patriarchal control affect women as mothers. Any woman's decision to marry is affected by the viability of alternatives to marriage. Any woman's choice to bear a child is circumscribed by her freedom or lack of freedom to make an independent choice.

Motivated in large part by feminist concerns, a growing literature documents both historical and contemporary forms of inequality between the sexes.[26] This research firmly establishes that, whatever its origins, this inequality is strongly rooted in inequality in control and ownership of wealth. In preindustrial England and the United States, the wife and mother of the family unit exercized no legal or formal control over land. A woman sometimes gained legal control of land after her husband's death, but women often held land only in trust for their children. Unmarried women who inherited property often received a guaranteed income from property held in trust, or received money rather than land.

Similarly clearcut inequalities typify many areas of the developing world. There is tremendous variation in legal institutions regarding

female property rights, but the only area of the world with a strong tradition of female land ownership is Africa.[27] Today, legislation in many areas of the developing world is far more equitable than it was in the now developed countries at a comparable level of development. This may be attributed at least in part to the fact that the developed capitalist countries have sought to impose their norms upon client regimes.[28] Despite this variation, however, few women in many developing countries own or control a means of production comparable to that which men of the same class own or control. As can be seen from Table 1, women are more underrepresented in the employer/own account worker category than in the labor force as a whole. They outnumber men only in the unpaid family worker category.

In addition to differences in wealth ownership, patriarchal societies are characterized by strong sanctions against female participation in certain types of economic activity. The most extreme example is the Moslem practice of purdah, which makes it difficult for women to work at all outside the home.[29] Even sanctions which take the relatively benign form of disapproval or protective legislation tend to reinforce women's specialization in certain sex segregated tasks. These tasks are almost always less productive and less remunerative than men's.

In equality in wealth, occupational segregation and direct discrimination have the combined effect of lowering women's wages relative to men's. Almost everywhere in the world women tend to earn between 60% and 90% of what men earn. Table 2 uses what scanty International Labor Office data is available to substantiate this point. The consequences which this wage differential holds for household time allocation and fertility decisions have only begun to be explored.

Table 1

Female Workers as a Percentage of Male Workers
in the Labor Force
(Female Workers ÷ Male Workers x 100)

	Total Labor Force	Employers, Own Account Workers	Employers, Own Account Workers in Agriculture	Unpaid Family Workers
Countries in which Female Workers are Between 20% and 40% of the Male labor Force				
Argentina, 1970	34	19.6	13.3	36.9
Bolivia, 1976	29.5	26.8	3.4	-
Chile, 1970	29.6	24.8	3.4	20.
Ecuador, 1974	20.4	14.5	3.4	14.8
El Salvador,1971	27.6	19.4	.6	28.2
Mexico, 1977	29.6	24.4	7.	33.3
Paraguay, 1972	27.4	21.1	3.3	18.0
Venezuela, 1977	37.7	23.9	4.4	53.1
India, 1971	21.	10.1	10.8	27.
Philippines, 1976	31.8	30.6	8.4	234.6
Malta, 1977	35.2	22.3	15.9	-
Netherlands, 1971	35.	9.4	2.1	-
Fiji, 1976	20.1	9.8	8.7	25.9
Countries in which Female Workers are between 40% and 60% of the Male Labor Force				
Puerto Rico, 1978	49.	16.1	-	-
Cyprus, 1976	42.2	16.1	18.3	-
Hong Kong, 1976	53.9	19.7	27.5	172.9
Indonesia, 1971	49.6	32.2	21.9	108.8
Israel, 1977	51.7	-	14.2	-
Republic of Korea, 1977	57.8	-	19.2	234.6
Singapre, 1977	47.5	17.3	15.5	126.8
Belgique, 1977	55.3	32.8	13.6	-
France, 1975	59.6	30.9	19.5	-
Italy 1977	47.3	43.6	-	-
New Zealand, 1976	47.	18.5	-	478.4

Table 1 Continued

	Total Labor Force	Employers, Own Account Workers	Employers, Own Account Workers in Agriculture	Unpaid Family Worker
Countries in which Female Workers are over 60% of Male Labor Force				
U.S. 1977	67.4	30.7	8.	412.9
Japan, 1977	61.2	-	29.	-
Canada, 1978	63.	35.2	6.5	354.5
Thailand, 1976	62.4	31.8	19.8	193.6
Austria, 1977	62.1	81.8	101.3	-
Bulgaria, 1975	88.	41.7	54.1	
Denmark, 1977	73.1	11.3	3.3	263.3
Finland, 1976	79.9	26.7	22.4	-
Federal Republic of Germany	60.3	25.2	14.4	-
Hungary, 1975	78.3	43.	31.5	-
Norway, 1977	65.4	19.3	7.9	376.9
Sweden, 1977	77.6	28.7	15.6	257.7
United Kingdom, 1976	60.9	24.6	-	-

*International Labour Office, Yearbook of Labour Statistics, 1972

Table 2

Women's Wages as a Percentage of Men's Wages

World Manufacturing Employment*

Denmark	86.5
Burma (1976)	82.4
El Salvador	80.5
Netherlands	80.3
Norway	79.8
France	75.8
Finland	74.2
Germany	72.6
United Kingdom	70.9
Greece	68.8
Syria	68.7
Egypt	64.4
Luxembourg	62.4
Ireland	62.5

World Agricultural Employment**

Austria	103.7
Malaysia	99.2
Norway (casual day laborers)	98.2
France (1976, permanent laborers)	94.8
Ghana (1973, all agricultural workers)	93.8
Finland (general farmhands)	89.5
Sweden (all agricultural workers)	86.2
El Salvador (permanent laborers)	84.
Morocco (1973, permanent and seasonal workers)	80.
United Kingdom (1976, regular workers)	80
Sri Lanka	78.9
Grenada (1974, permanent laborers)	75.
Republic of Korea	72.1
Portugal	69.5
Belgium	62.9

*Yearbook of Labor Statistics, International Labour Offices, Geneva, 1978. Figures for 1977 unless otherwise noted.

**Figures for agricultural workers, 1977 unless otherwise noted.

The Costs and Benefits of Children: A Synthesis

Neoclassical economic approaches and those based upon a critical analysis of patriarchy grow out of two distinct paradigms of social thought. It would be incorrect, however, to assume that they merely represent two different answers to the same question. Each approach asks a different set of questions, and both sets are relevant. Neoclassical models single out household specific factors which affect the productivity and earnings of women and children. Institutional approaches, such as Caldwell's, explore factors which affect the bargaining power of women and children--their capacity to fully capture and control the product of their labor.

It is useful to reformulate the insights of the institutional approach in such a way as to clarify their role in a theory of the costs and benefits of children. One of the distinctive points of the patriarchal control hypothesis is that parents must anticipate how much their children will transfer to them as well as how much they will produce. The timing of intergenerational transfers places children in a very strong position. They receive transfers when they are young, transfers that are unrelated to their historical contribution. If these transfers are completed by the time they reach adulthood, children have no material incentive to repay them.

This point is stated quite clearly by Charles Tilly: "Children will be more likely to satisfy their parents' childbearing motives during their parents' lifetimes if the children themselves receive contingent guarantees of return from the family property or the household enterprise."[30] This hypothesis does not imply that children would refuse to provide their parents

with some pecuniary transfers in the absence of such "contingent guarantees." There are a number of reasons why they might do so. Family members do represent a relative community of interest in which a certain sense of reciprocity often prevails. Particularly in contexts where family members are engaged in direct struggles for subsistence and survival they are likely to recognize the advantages of collectivity and cooperation.[31] In the second place, children obviously recognize that they will some day become parents, and are unlikely to pursue strategies which might ultimately weaken their position vis a vis their own children.

The conflict of interest between parents and children over the disposition of family income is muted by the fact that they are interdependent. Parents must take into account both their children's future productivity and their loyalty and obedience. The fact that they receive economic benefits from children does not necessarily motivate them to rear as many children as possible. They may be better off, given the quantity of land, capital, or resources that they could own, to reduce family size so that their children's endowments are not diluted.[32] If mortality falls, parents are likely to recognize that the increase in surviving children will affect the family's economic lifecycle, and to respond accordingly.

The patriarchal control hypothesis is perfectly consistent with the neoclassical economic claim that parents take into account the "quality" of children as well as the quantity. It merely introduces an additional dimension: An increase in a childs' education will improve the economic welfare of the entire family only if the child actually transfers some of its own gains back to the family.

Similarly, analysis of forms of patriarchal control over women does not preclude the importance of household specific factors, such as education and wealth. Rather, it looks beyond these household specific factors to society-wide institutions which enforce sexual inequality. Neoclassical economists underestimate the importance of sex-based discrimination and exploitation not only because they conflict with the vision of free choice within the market, but also because they deem them "irrational"--inconsistent with social optimality.

From the point of view of society as a whole, patriarchal domination of women is inefficient. It limits women's potential contribution to society and impedes efficient allocation of resources. But a set of institutions which appears irrational from a social point of view may quite effectively serve the interests of one group. The individual male head of household may be adversely affected by those forms of patriarchal control that lower women's wages and restrict them to certain forms of work. But if these same forms of patriarchal control lead to a lengthening of women's working day, the losses can easily be outweighed by the gains.

One way of summarizing the joint effect of household specific and institutional factors upon the costs and benefits of children is to formulate a simple mathematical model. The patriarchal control variables are symbolized by Greek letters.

The net cost of a child can be expressed as the difference between the total costs of rearing a child and the total economic benefits of a child.

Let C_T = total lifetime costs

B_T = total lifetime benefits

C_N = net costs

(1) $C_N = C_T - B_T$

Let us examine the determinants of C_T, total lifetime costs, and B_T, total lifetime benefits, in turn.

Total lifetime benefits, B_T, are primarily determined by three factors: the expectancy of the child, the income that he or she earns (or, in non market production, the total value of the product), and the percentage of that income which is remitted to parents.

Let R = child's lifetime earnings (or product)

γ = percentage remitted to parents

(2) $B_T = \gamma R$

Any consideration of the benefits of children must take γ into account. The specific hypothesis which is suggested by the institutional approach is that γ is a positive and increasing function of patriarchal control over wealth.

The total costs of children may be expressed as the sum of direct costs or purchased inputs such as food and clothing, and the opportunity cost of time devoted to childcare.

Let C_D = direct costs

C_O = opportunity cost

(3) $C_T = C_D + C_O$

The total opportunity cost C_O is the sum of the opportunity cost for mothers and the opportunity cost for fathers, weighted by the number of hours which each spends in childcare. Assume that the opportunity cost is equal to the wage and/or the value of marginal product in home production.

Let W_F = female wage or value of marginal product

W_M = male wage or value of marginal product

N_F = number of hours female spends in childcare

N_M = number of hours male spends in childcare

(4) $C_O = N_M(W_M) + N_F(W_F)$

The wage rate which women receive is affected by discrimination and occupational segregation. The value of women's home production may be equal to or greater than the value of men's home production. But if they work longer hours than men in the home, which is likely to be the case if there is sex discrimination in the market, the marginal product is lower than men's. The ratio of the female wage or marginal product to the male wage or marginal product is likely to be less one.

Let $\frac{W_F}{W_M} = < 1 = \delta$

(5) $W_F = \delta W_M$

The δ coefficient is analogous to the γ coefficient. It represents a measure of patriarchal restrictions on women's economic and political power which is likely to be inversely related to men's ownership and control of means of production. The smaller δ the more women's time is undervalued as a result of patriarchally enforced inequality! As the value of women's time increases relative to men's δ approaches 1, the opportunity cost of mother's time increases, and the overall cost of children increases. An increase in the amount of time which men devote to childcare would have a similar effect, increasing the total opportunity cost of time.

The net cost of children can now be stated in terms consistent with an institutional approach

$$(6) \quad C_N = C_D + N_M W_M + N_F \delta W_M - \gamma R$$

Patriarchal control variables δ and γ are not mere abstractions; they directly affect women's perceptions of the costs and benefits of children. This model is clearly consistent with standard neoclassical approaches in that it can explain an increase in the net costs of a child even if the patriarchal control variables are held constant. Any increase in parents' wage rates and/or productivity W_M and W_F increases the costs of children, as does any increase in expenditures on food, clothing, and education, C_D. It is by no means clear, however, that changes in technically determined factors such as direct costs and increased productivity will modify the net costs of children. If increases in parents' wages also signify increases in children's wages, and if increased expenditures on children (such as increased education) lead to higher productivity or child wages, R, the benefits should change along with the costs.

The net costs of a child can increase even if direct costs, productivity of child labor, and the average adult wage remain the same. A decrease in γ, the percentage of child earnings remitted to parents or an increase in δ,

women's wage or marginal product relative to men's, increases the net costs of children. Such changes could countervail changes in prices and wages. Even if increases in education and life expectancy increase children's potential contribution to parental income, changes in patriarchal control may decrease their actual contribution.

Towards a Theory of Patriarchy

By refusing to concede the importance of institutions and practices which enforce social inequality, neoclassical economists have greatly limited the scope of the new household economics. But, by the same token, institutionalists have failed to provide a satisfactory theory of the motives and mechanisms of patriarchal control. Caldwell and others have fallen prey to a tendency to describe patriarchy in diffuse terms which include ideology, attitudes, and religion, without asking why individual men and or certain social classes may benefit. Nor have they fully explained why and how patriarchal ideologies and institutions change over time.

Patriarchy takes many forms. But it is embedded in and reinforced by political institutions and patterns of ownership and control of the means of production. Changes in political institutions and class structure do not necessarily modify or eliminate patriarchy, but they do transform the conditions of struggle between the generations, the sexes, and the economic classes to which families belong.

One of the most striking and least explored findings of the International Value of Children Study is the fact that many respondents agreed that children nowadays are less willing to support their parents in old age and were less willing to give part of their wages to their parents when children start working. In Thailand, 63% of respondents felt this way; in Hawaii, 41%, in Japan, 64%.[33] In all cases, a majority of respondents disapproved of these changes.

One suspects that this finding has been summarily dismissed by most researchers as a manifestation of the inevitable petulance of the elderly.

It deserves rather more careful consideration. Charles Hohm has shown that the government implemented social security programs are associated with lower levels of fertility.[34] Yet Hohm and others tend to treat the advent of such programs as exogenous to the process of economic development. The patriarchal control hypothesis suggests that social security provisions may be a response to the breakdown of intergenerational transfers from young to old. The young may seek to legitimate their new independence by transferring their traditional burden to the state.

What are the factors that create this new independence? One obvious institutional factor is the expansion of public education. School attendance prolongs the period of time in which children are receiving a net transfer from their parents and provides them with an endowment (of new skills) early in the lifecycle. It also tends to increase the child's mobility, making it more likely that he will find employment in an area away from home. Children's potential to contribute to parental income is increased, but their actual contribution increasingly becomes a voluntary charitable one rather than an automatic, regular one.

One conspicuous change in the class structure is the gradual proletarianization of the labor force which occurs in the course of economic development. When male heads of household lose control over their independent means of production and become wage laborers, the value of the tangible property which they can convey to their children is reduced. Wage labor provides sons (and to a more limited extent, daughters), with access to employment independent of their fathers.

The effect of economic development upon class structure, and, in particular, on family farms and businesses, has been studiously ignored

Table 3

Employers and Own Account Workers, and Unpaid Family Workers* as a Percentage of the Total Labor Force

Country	(1) Employers and Own Account Workers As % of Total	(2) Unpaid Family Workers as % of total	(3) Combined Percentage
Bulgaria, 1975	.5		
Hungary, 1975	2.1		
Norway, 1977	2.5	3.3	5.8
Sweden, 1977	7.1	.8	7.9
United States, 1977	7.7	5.	12.7
Canada, 1978	8.5	3.2	11.7
Federal Republic of Germany, 1976	9.3		
Austria, 1977	9.5		
India, 1971	10.4	30.	40.4
Seychilles, 1977	11.9		
Belgium, 1977	12.		
Denmark, 1977	12.4		
Netherlands, 1971	12.4		
France, 1975	14.		
Singapore, 1977	14.1	3.	17.1
Israel, 1977	15.3		
Japan, 1977	15.9	11.4	27.3
Malta, 1977	18.6		
Chile, 1970	20.4	2.2	22.6
Argentina, 1970	21.9	3.2	25.1
Libyan Arab Jamahiriya	23.7	4.2	27.9
Tunisia, 1975	25.	6.9	31.9
El Salvador, 1971	26.	13.	39.
Venezuela, 1977	26.2	53.1	79.3
Cyprus, 1976	27.3		
Mexico, 1977	31.1	6.5	37.6
Republic of Korea, 1977	31.9	21.4	53.3
Fiji, 1976	33.4	7.8	41.2
Ecuador, 1974	37.8	8.7	46.5
Honduras, 1974	39.6	14.4	54.0
Indonesia, 1971	39.7	25.3	65.0
Thailand, 1976	45.2		
Paraguay, 1972	46.1	11.7	57.8
Bolivia, 1976	54.2		
Philippines, 1976	66.6	21.5	88.1

* International Labour Organization, Statistical Yearbook, 1978

by development theorists as well as by demographers.[35] Maulden's and Berelson's review of twenty-four recent studies of conditions of fertility decline in developing countries reveals only one which mentions class as a significant variable.[36] Yet employers, own account workers, and unpaid family workers tend to comprise a large portion of the labor force in countries with high levels of fertility, as can be seen from Table 3. Furthermore, changes in class structure are closely correlated with increases in Gross National Product, education, and percent urban, all structural variables which are correlated with fertility decline.

The effects of institutional change and transformation of the class structure upon women are more difficult to ascertain. Male/female wage differentials persist even in the most developed countries. This is only one of the reasons why some scholars argue that patriarchal control over women is essentially unaffected by capitalist development.[37] Some argue, in fact that the advent of capitalism worsens women's position.[38]

This argument overlooks the tremendous impact which fertility decline has on the content of women's work. When women invest a great deal of time in childrearing, part of the productivity of their work lies in the expected returns from their adult children's labor. As these returns diminish, a sexual division of labor which channels women into childbearing and childrearing becomes quite costly to individual families. While men actively resist changes which reduce the direct services which women provide them with in the home, they cannot support wives who are neither producing much nor "investing" time in productive children. Women are increasingly forced to seek forms of employment which are more <u>directly</u> productive.

This does not automatically increase their bargaining power, since the way in which they are integrated into wage labor is influenced by patriarchy. Women are willing to work in less productive jobs for lower wages than men because the sexual division of labor traditionally assigned them menial tasks. Male dominated trade unions tend to restrict women's access to more lucrative forms of employment. Capitalists are eager to maintain that sexual division of labor in its new form because it serves their larger goal of profit maximization.[39]

Despite the persistence of inequality, however, the expansion of wage labor reduces women's traditional economic dependence upon individual men and provides individual women with more bargaining power within the household. Economic opportunities can provide women with new freedoms, and women can use those freedoms to support individual and collective political struggles which in turn create new opportunities. As women become wage workers, the conditions of class struggle are themselves modified.

It is possible to trace the ways in which this transformation occurred in some areas of the now developed world.[40] There is, however, little reason to believe that it will occur in the same way in areas of the developing world today. Dependent capitalist development is often characterized by extreme polarization between modern and traditional sectors. Most women place their families' struggle for subsistence over their own personal needs. Countries with governments that deny their citizens the most basic political rights are unlikely to accede to feminist demands--especially those which might improve the position of working women.

It would be facile to suggest that economic development automatically improves the position of women and children. But economic development does modify those forms of patriarchal control which directly affect the costs and benefits of children. Caldwell correctly locates the institutional factors which affect fertility decisions in the "familial mode of production" and explains that this familial mode is transformed by the transition to capitalism. His argument points to the need for detailed historical and empirical analyses of changes in class structure and state involvement in the education of the young and the care of the elderly. Changes in the social relations of family life do not result from changes in wages and prices or new, "modern" tastes and preferences. They are the product of a process of struggle between generations, sexes, and classes, struggles which both affect and are affected by the transition to capitalism.

Footnotes

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[4]See T. W. Schultz, ed. Economics of the Family: Marriage, Children, and Human Capital (Chicago: University of Chicago Press) 1974.

[5]Joint production means simply that one production process generates two separate products.

[6]Gary S. Becker, H. Gregg Lewis, "Interaction Between Quantity and Quality of Children" in T. W. Schultz, cited in Footnote 1.

[7]Many of the "Comments" in T. W. Schultz, cited in Footnote 1, speak to this issue. See also

[8]For a more complete discussion of this issue, See Nancy Folbre, "Discrimination Comes Home: A Critique of the New Household Economies" unpublished paper, Spring 1980.

[9]Robert A. Pollak, Michael L. Wachter, "The Relevance of the Household Production Function and Its Implications for the Allocation of Time." Journal of Political Economy (April, 1975) 83:2.

[10]Rosenzweig, "The Demand for Children in Farm Households," cited in Footnote 2, p. 125.

[11]Same as above.

[12]John Von Neumann, Osker Morgenstern, The Theory of Games and Economic Behavior Princeton, New Jersey, Princeton University Press, 1954, p. 11.

[13]The large and growing literature on this topic includes essays in Capitalist Patriarchy and the Case for Socialist Feminism, ed. Zillah Eisenstein (New York: Monthly Review Press) 1979; Toward an Anthropology of Women, ed. Rayna Reites (New York: Monthly Review Press), 1975.

[14]See footnote 3.

[15]See footnote 3, p. 554.

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[25]Janet Salaff, "Working Daughters in the Hong Kong Chinese Family: Female Filial Piety or a Transformation in the Family Power Structure", Journal of Social History, 9:4, June, 1976.

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