

A General Theory of Gender Preferences For Children¹

Sung Yong Lee, Gerald Marwell²

Cultural variation in parental preference for children of a particular gender remains a matter of great practical and theoretical concern, particularly for understanding non-Western countries. The gender preference for children has received attention from two different theoretical frameworks that seem to have little contact with each other. One is the gender discrimination approach and the other is the parental investment approaches

Most demographers (Cain, 1993; Mason 1993; Das Gupta et al., 2003), who have been interested in gender preferences, applied their gender discrimination approaches to the process that parents, especially in Asia, favor son over daughter within patriarchal (or patrilineal) family systems.

In this approach son preference may underlie at least two related and important social problems. The one problem has most clearly appeared in some son preference Asian Countries such as Korea, China, and India, when their fertility rates have reached at relatively low fertility rates. These countries now display highly distorted sex ratios at birth through the sex-selective abortion of female fetuses (Arnold et al. 1998, Attane

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² Gerald Marwell, who was Richard T. Ely Professor Emeritus of Sociology at the University of Wisconsin – Madison, died on March, 2013. As a one of the Doctoral Dissertation Community, Dr. Marwell not only advised my dissertation but also made some contributions to to improve this study before make it publishible. It had been much of my regret that no process had been made in a timely manner due to my own personal problems.

2009; Croll 2000; Chu 2001; Guilmoto 2009; Miller 2001; Murphy 2003; Park, Chai Bin and Nam-Hoon Cho 1995, Zeng et al. 1993). A substantial proportions of males born at high sex ratio periods, when they reach at marriageable ages, will have difficulty in looking for their spouses (Hudson and Boar 2004; Guilmoto 2012a; Poston and Glover, 2005). The other problem is the infanticide, neglect and consequent excessive female infant mortality in some son preference countries such as India (Croll, 2000; Das Gupta 1987, Miller 1981, Panda 2003).

Discrimination that begins before birth or in infancy has generally been considered an important indicator of the lower status of women (i.e., Cain 1993, Das Gupta et al.2003, Mason 1993), and one of the effects of a patriarchal kinship system, which is seen as a "culture against females" (Miller 1981: 15). Several authors (i.e., Cain 1993, Mason 1993) have argued that women in patriarchal societies prefer sons to daughters since sons are regarded as safeguards protecting their mother's against miserable lives.

Perhaps because of these theoretical concerns about gender inequality, most empirical and theoretical demographic studies of gender preference have tended to focus on son preference, especially in some Asian countries whose typical family systems are regarded as patriarchal (Chakraborty and Kim 2010; Chung and Das Gupta 2007; Guilmoto 2012b; Murphy et al., 2011; Rahman and Da Vanzo 1993). Because of the empirical prevalence of son preference where strong gender preference clearly exists, and its assumed linkage to sexual discrimination, son preference has generally been conflated with gender preference in the literature, and theories of son preference have been more or less identical to theories of gender preference. Thus, the cause of son/ gender preference has usually been located in the patriarchal kinship system and/or in gender discrimination (Cain 1993, Mason 1993). In this approach, the strength of son preference will vary directly with the level of patriarchy, or the extent to which women are economically dependent on men: the higher the levels of patriarchy and gender discrimination, the stronger the son/ gender preference (Cain 1993).

However, the parental investment approaches have focused on differential investment in children based on their gender, rather have given attention to gender discrimination. Especially in anthropological studies, the gender preference, especially daughter preference (Cronk, 1991, 2006; Holden, 2003; Neil, 2011; Quinlan, 2006), has been usually explained by the gender-specific parental investment models, which are based on the Trivers-Wilard hypothesis (1973). These approaches can be viewed as a parental strategy for deciding optimally about the allocation of parental investment, as a result of weighing the economic benefits and costs of sons against those of daughters. Nonetheless, parental investment (or rational actor) models usually do not specify the underlying cultural constructs, in which parents favor (or discriminate) the child of one gender over that of the other gender.

Quinlan(2006) adds the cultural constructs (or external factors), “gender-specific norms of behavior can expose boys and girls to different social environments with different hazards and opportunities for development (p. 465-6)”, to the general parental investment model. Returns from children are implicitly assumed to be maintained and governed by normative obligation such as filial piety. The patterns of parental investment and care have been determined by the cultural forces such as matrilineal (or patrilineal) family and kinship system. He links parental behaviors at individual level to cultural constructs at the societal level. In this sense, Quinlan’s extrinsic risk model is similar to the rational actor approach in this paper. However his approach may have some important theoretical problems, which cannot explain why the egoistic (at least, not always altruistic) adult children provide resources with their parents, since children are viewed as a capital good, instead of agents.

The fundamental difference between gender discrimination and parental investment approaches may be the way of explanation sought. While the former is mainly concerned with the demand side in the value of children (in my definition, children capital), the latter largely with the supply side in the value of children (in my definition, parent capital). The demand side refers to the side of parents who determined the resources in which they have interest and children control (i.e., old-age support),

whereas the supply side refers to the side of children who determined the resources in which they have interest and parents control (i.e., education, inheritance and health care). In spite of this difference, both models can be complementary, not contradictory. Because the general theory for gender preference needs to include an explanation of both the demand side and the supply side, also of the social mechanisms linking both sides together.

Our approach begins with the theoretical framework and insights developed by Coleman (1990). In Coleman's approach one major objective is to understand the emergence and persistence of norms and institutions within a society. As a rational choice theorist, however, Coleman insists that the theory spell out three kinds of linkages: (1) from macro-level institutions and structure to micro-level interests and behaviors, (2) the micro-level phenomena that lead to specific behaviors (micro to micro effects), and (3) the process of aggregating individual behaviors into macro-level change and structure.

Our basic position is that gender preference results primarily from what might be called a societally (macro-) conditioned "family survival strategy" in which individuals use their kin, including their children, to satisfy their personal interests. Contrast to the European stem family system, the individuals in the non-Western joint family systems are more likely to share one's fortune with his/her family. While the prosperity (or ruin) of the family is identified with the success (or fail) of that family's all members, one individual's success (or failure) also may result in the prosperity (or ruin) of one's family. Changes in both the economic structure and the dominant ideology of society, particularly industrialization and western individualism, may threaten the efficiency of this strategy, but its decline depends on the level of institutionalization of preferences, particularly beliefs about the role of children in one's "life after death," and rules of inheritance.

Following Coleman's mode of analysis, a central role in our theory is played by various forms of "capital"; "social capital," by which Coleman means resources that accrue to individuals because of their placement within the system of structured social

relations; "child capital," which we define as the resources in which parents have interests but which their children ultimately control; "parent capital," comprised of resources parents control in which their children have interests; and, perhaps most importantly for our theory, "parents' power," which connects the actions of parents and children.

THE VALUE OF CHILDREN

Perhaps the simplest way of conceptualizing gender preference within a rational choice paradigm is by defining it as the difference between the value of sons and the value of daughters. Thus, it is no surprise that the value of children (VOC) construct frequently appears either explicitly or implicitly in discussions of gender preferences as well as fertility. In these discussions, VOC is typically defined as a property of individuals, rather than at the societal level. Friedman, Hechter and Kanazawa (1994) begin their theory of fertility by defining values (including VOC) as "internal states that enable people to evaluate ... consequences as more or less desirable" (p.377, emphasis ours). A typical definition of VOC in the research literature is "a hypothetical net worth of children, with positive values (satisfactions) balanced against negative values (costs)" (Arnold et al. 1975:2). In this research VOC was assessed through parental perceptions of the economic, social, and psychological satisfaction and costs of children. Similarly, psychologists view VOC as "the functions they (children) serve or the needs they fulfill for parents" (Hoffman and Hoffman 1973:20). In all of these views, VOC is conceived primarily as an array of goods that parents receive from having children or expend because they have children (Espenshade 1977). However, these individualistic VOCs (or psychological factors consisting of VOC) affecting the fertility behaviors varies by society and culture (Klaus, Suckow and Nauck 2007; Nauck 2007). It seems that the definitions of VOC at the individual level have some limitations.

This highly individualistic conceptualization of value departs significantly from Coleman's approach. To Coleman, "value is a property of the resource in the system as a whole" (1990:133, emphasis ours). The parent's cost-benefit calculation regarding a specific child or prospective child might more usefully be called the parent's "interest." By neglecting the distinction between the interests of actors and the total value of a child, the common definitions of VOC ignore the internal functions of children in the extended family, kinship systems, communities and society at large (Klaus 2010; Klaus, Suckow and Nauck 2007; Nauck 2007; Nauck and Klaus 2007). This neglect is particularly problematic in nonwestern countries, where the value of a child is rarely based on a simple relation between that child and his or her parents.

Conceptualizing VOC at the system level does not mean that all children within a system are valued equally. Comparing the children of the married and the unmarried is one illustration. Differences in attitudes towards fetuses with and without diagnosed birth defects would be second. Idiosyncratic and psychological variables might be important: Mother A might feel her dyspeptic child a burden, and her negative interest contributes to a less positive total value for her child than for Mother B's child, who is the light of B's life.

For the system as a whole, then, VOC might be defined as the average value of all children in the system. In sum, the value of a given child would be the sum of the interests of all actors who are members of the system in that specific child. The key issue for this paper, of course, is whether or not there is a systematic difference in the average values of male and female children within each society, and why that difference varies between societies.

PARENTS' INTEREST IN THE CHILD

Since actions by persons are what Coleman calls "an inalienable resource," (p.79) the behaviors required to have a child are under the ultimate control of the mother, and to some extent the father, and their interests obviously play a crucial role in determining fertility. In fact, when it comes to fertility, the interests of all other actors in a given child are still generally represented through their effects on the interests of the parents. Potential parents may wish to avoid censure from their own parents for childlessness. Or avoid losing their jobs in China for having a second child.

If potential parents are rational actors, their interests in a child might be calculated as the difference between their life-long costs of and their life-long benefits from parenthood (Nauck 2007). These costs and benefits vary widely among people in most societies. Married and unmarried couples, rich and poor couples, rural and urban couples, old and young couples, couples with "traditional" and "modern" parents, etc. might all make different calculations.

Among theorists and researchers taking a demographic approach to gender preference, the key concerns have been economic interests and the key issue has been the old-age security of women in patriarchal society. In most nonwestern countries, the family is still the social institution with primary, almost total, responsibility for the welfare of elderly persons. Despite rapid economic development, social security systems remain at best rudimentary and frequently non-existent in these societies. Especially in South Asia, where the typical family system is regarded as patriarchal, it has been assumed that children are highly desirable for parents, especially for elderly widows, as old-age security (Cain 1981). The greater value of sons has been treated as an economic good linked to women's economic inactivity through gender discrimination in the patriarchal system.

In Coleman's terms, the ability of a child to support his or her mother in her old age is a form of "child capital" -- the resources over which the child has control, and in which others, including in this case the mother, may have an interest. But Coleman also points out that if the child ultimately controls this capital, in the sense that the child controls his or her own work effort and possibly his or her contribution to parental

support, then it requires "power" for any other actor, including the parents, to extract these resources from the child. Not every child in any society supports his or her needy mother in her old age. Furthermore, the availability of this power is at least partially dependent on the resources that the parents possess -- or "parent capital." To understand the value of children we must understand the way societies construct and constrain all three of these factors in parent's interests; how history and institutions define the resources available to children and parents, and their power to extract resources from one another. To understand gender preferences we particularly need to see how these relations are conditioned on the gender of the child.

Child Capital

Parents and other actors want a variety of things from children. Many of these are behaviors by the child, and are thus under the child's ultimate control. Others, such as the belongingness of woman in her husband's family and an income tax deduction, are not under the child's control. In this section, I review some of the factors that have generally been considered among the most important aspects of child capital.

Child capital can consist of three dimension utilities: comfort, social esteem and affect (Nauck and Klaus 2007). Comfort is related to the economic aspects, social esteem to the socio-cultural aspects, and affect to the psychological aspects of child capital.

Comfort. Comfort utility among child capital refers to the extent to which parents are able to obtain material benefits from children, which contribute to improve the family welfare. Some western authors have assumed that "this is especially necessary in the case of poverty and when alternatives for insurance against life risks are lacking (Klaus, Suckow and Nauck 2007, p. 530)." Unlike this assumption, familism assumes that since parents and children are a common fortune, they have to share both good lucks and bad lucks together. Therefore, children provide their parents with comfort, even when parents attain their economic self-sufficiency, or affluent. Comfort may include child labor and old-age security.

Child labor. Children often contribute direct labor to the economy of the household. They help with chores and caring for younger children. They work for wages which are appropriated by their parents. They might be sold into prostitution for cash. It has long been thought that the high birth rates of agricultural societies were related to the value of child labor in such production processes (e.g., Nag, et al 1978).

Old-age security. As I have suggested above, however, the most commonly identified problem for applying these economic analyses to nonwestern countries is that they neglect "the value of children as insurance against the risk of income insufficiency in parents' old age and a variety of other circumstances" (Cain 1983:688-9) It is on the basis of this insurance that most researchers and theorists have argued for the importance of the effects of child capital on fertility (see Cain 1981, 1983, 1986; Klaus, Suckow and Nauck 2007; Nauck and Klaus 2007; Nugent 1985). Given the eventual decline in the capacity of old persons to fend for, much less support, themselves, the issue of old-age security is important under almost any institutional arrangements. The logic that gives such responsibility to children who were supported during their dependency seems extremely common among human societies.

Social Esteem. Its utility among child capital refers to the extent to which parents receive indirectly and directly through the birth and existence of a child. In some countries, woman can obtain a social status as an adult through having babies, rather than marriage. Females may be more likely to be called and identified by 'who's mother' (or whose family's daughter or daughter-in-law), than her name and/or who's wife. In addition, in societies where the continuance of the lineage is highly emphasized, the birth of a child (especially a male child) upgrades and secures the position and reputation of one's mother within family and kinship.

Family lineage. In societies where families play crucial institutional roles, maintenance of a family line is often constructed as a crucial psychological and practical issue. As Arnold and Kuo (1984) found, maintenance of the family name is mentioned almost as frequently as economic security as an interest of parents. The importance of heirs to various thrones in European history (leading to the beheading of

some wives, at the extreme) speaks to the fact that these issues are not only important in nonwestern societies.

Security after death. Often related to lineage maintenance is the importance of children for the "security" of their parents in the afterlife. In traditional Chinese societies, a dead person without sons to provide ancestor worship was more likely to be a hungry ghost (Goody 1990). In some traditional religions of tropical Africa, the dead can reincarnate "only in so far as their descendants remember them, carry out services for them and indeed try to contact them. Without such descendants the spirits fade away and death is complete." (Caldwell 1982:26).

Affect. It is the last dimension in child capital. Some sociologists (Klaus, Suckow and Nauck 2007; Nauck and Klaus 2007) argued that whereas both comfort and social esteem are largely determined at societal level, affect is mainly determined at individual level, and an universal, not a context-specific phenomenon.

In medieval England, young couples had desired to have babies because of needs for "someone who they love and provide them with love" (Macfarlane, 1986). Similarly, the desire for companionship appears important in promoting an interest in daughters. But such interests need not be in daughters alone. However, the affect difference between son and daughter results from the difference of the family strategies. In some son preference countries, "emotional security and personal fulfillment (which are clearly related to co-residence with sons), are at least as important as economic security. (Vlassoff 1991, p. 529-530)."

Parent Capital

Parent capital consists of resources in which children have interests but which parents control. In the early part of a child's life these resources (i.e., health care) are obviously overwhelming (Quinlan et al. 2003). Except under very unusual societal conditions, newborns depend for their very lives on the sustaining activities of their parents. Most societies are organized so that the economic capacity of parents

practically determines their children's standards of living, both while they are children and even after they become adults. In contemporary societies this is frequently because parents' investments in children's educations are the key to the children's own economic success. Further, children may have both economic and social interests in a variety of goods that accrue from the parents' social positions within the community.

The interests of the children also extend dramatically into issues of emotional support. It is common for psychologists to argue today that parental time is the most important resource children get (Bugental et al., 2010). Lifetime support, love, counsel and a variety of other considerations make parents uniquely "resourceful" for their children under most known institutional arrangements.

In the literature that focuses on traditional societies, the resource in which children have the most interest, but which parents control, is the property of the parents, or the right to control the property. A focus on this particular resource is partly related to the focus in the literature on the support of parents in old age. It is when the parents are old that the right to property may become the crucial issue for adult children. In the popular exchange theory analysis of parent-child relations, parents obtain some benefits from their children (especially the designated heir or heirs), such as old age security, power and status, as the reward for their property (Anderson 1976, Kennedy 1991).

Parental power

One of Coleman's most important insights is that the value of a certain good to specific individuals rests not only in the interest each of those individuals has in the good but in their capacity to extract or get access to those goods. Socially speaking, this capacity can be referred to as power. You and I might be equally lost and hungry, but the value of a deer that appears in the woods is much greater for you than for me, because you have a rifle and I do not. To me, the deer is worth nothing.

The same logic applies to children. It is not a rule of nature that children support their parents in their old age. It is possible that they do not run away and refuse to work on the farm, or neglect to pray for their dead parents. These are rules of society and of social arrangements. In most previous studies, especially those using the functional approach, all children are assumed to practice filial piety toward their parents, and no parent worries about obtaining filial piety from his or her children. All of us know that such is not the case. Parental power may be seen as based upon two major sources, the resources they control in which their children have interest and social institutions which give them rights to their children's behavior or product and support those rights with sanctions and socialization. In Coleman's analysis these rights are frequently the crucial aspect of social institutions. We note that in all known societies children also have rights to parents' resources and actions. For example, parents in the United States are by law forbidden from abusing children or from letting them starve. They are required to give children the time to go to school, up to a certain age. And beyond children's legal rights, various norms also require at least some parents to support their children in college or to give them big weddings, or to help them out as adults if they need help. Children have the right to call on these resources.

The rights of children, however, are not the key factor in an analysis of the value of children (although they do affect the costs of children). The rights of parents have generally received more attention. Here societies differ widely, from giving the parents little support in obtaining those rights to giving parents support for complete rule over anything the child might wish to do. In many societies parents have had the right to sell their children. In others, their right to even discipline their children is limited and contested.

The rights of parents need not apply to all children equally. Single mothers might have socially supported "rights" to more childcare help from older children than do mothers in two-adult families. Most importantly for this analysis, parents may have quite different rights regarding daughters and sons. If daughters are to become members of another family upon marriage, they may have fewer obligations to their own parents and

more to their in-laws, while sons' only obligations are to their parents. In some periods of American history, parents had the right to household chores by their daughters, while their sons could escape by going off to school.

The relationship between parents' resources and parents' power is particularly important in those societies which are not strongly committed to norms of family obligation. In those societies, parents who can spend time with their children, who can provide them with desired resources such as the latest in sneaker fashions, and who can provide adult children with assistance of one kind or another, have the power to withhold these goods if children do not cede rights in which parents are interested. This may be one reason why parents who do not have these resources so frequently use the physical power to punish as their major method of control.

THE INSTITUTIONAL BASES OF GENDER PREFERENCE

Widespread agreement on a specific gender preference within a society is a component of what most sociologists would call the "institution of the family." This component is embedded in a myriad of other components of the institution, some of which facilitate the emergence and maintenance of gender preferences while others work against its emergence or for its decline. Furthermore, the family is embedded in a social structure of many institutions which may support or weaken gender preferences. Identifying the relevant aspects of that social structure is the task of this analysis.

Since rational choice models view individuals as purposive and responsible actors, the causes of action proposed in such theories imply persons' goals or wills. These goals or wills represent both the freedom of individuals to act as they will and constraints from the specific form of social organization within which those individuals

must act. In Coleman's view, therefore, common social practices must satisfy the interests of individuals in the long run if they are to survive. When they do not, the degree to which the individual actor is constrained by the social practice is weak, and the practice itself will ultimately be changed. Thus, rational choice models are concerned with the interaction between individual actors and social institutions, rather than just with individual actions that are confined by given social institutions.

Unfortunately, neither Coleman, nor any other sociologist we know, directly discusses the kind of institutional component that would describe widely held gender preferences. Coleman and others do discuss "norms," which is the term used by Arnold and Kuo to refer to the preference for children of one gender or another. But gender preference does not seem to us to meet Coleman's definition of a norm, nor the more common uses of the term in the discipline as a whole. Coleman states that "a norm concerning a specific action exists when the socially defined right to control that action is held not by the actor but by others" (p. 243). "A norm is a property of a social system, and not of an actor within it"(p.242), and norms are "ordinarily enforced by sanctions"(p.242). Gender preferences do not generally fit this description. In China, grandparents may sanction parents for having daughters rather than sons but society as a whole does not agree that they should be sanctioned, and does not generally attempt to see that all parents have sons. People who have daughters are not "deviants." People who have sons in such societies are probably grateful that there are others who have daughters. Similarly, we may strongly prefer that we be rich, but probably do not disapprove of people who are merely middle class (of course, one might argue, and it has been argued, that people who are actually poor are violating norms and are therefore despised and punished). In fact, we may feel that being rich is not very satisfactory if everyone else is equally rich -- in which case we may not think of ourselves as rich at all.

Coleman does not reflect on the nature of preferences or goals or "tastes". As is common in economic theory, preferences (tastes), are treated as exogenous (Casterlin 1999). We might simply use the term "preferences" to denote the phenomenon which is our central explanandum, but this individualizes what is in fact a socially constructed

and institutionalized phenomenon common to most members of the society, and thus more cultural than individual in character.

Moreover, it is precisely the issue of variation in the strength of institutionalization that is the central concern of this analysis. Perhaps the way to think about gender preference is as a "belief." People in Korea "believe" that having a son will be better for them than having a daughter. This belief may be incorrect in specific cases, where a son will turn out to be a costly wastrel and lead the family to dishonor, while a daughter would have been dutiful and cheap. Most of our beliefs are culturally specified, instead of based upon experience. For the belief to be sustained, however, it probably has to be more or less statistically correct, or at least untestable. In that sense, beliefs are like norms which, according to Coleman, must be "efficient" in the long run.

Obligations and Expectations: The Normative Bases of Social Capital

For the purposes of this paper it is important to see that variation across societies in social institutions leads to differences in the social capital of parents and children; i.e., resources that accrue to parents and children because of their placement within the system of structured social relations. Coleman argues that the advantage of using the concept of social capital "lies primarily in the fact that it identifies certain aspects of the social structure by their function" (p. 305). By identifying how social capital comes to be "embodied in the relations among persons" (p.304), we can account for different outcomes at the individual or system level.

Among the mechanisms for the development of social capital that he identifies, Coleman begins with, and gives the most space to, "obligations and expectations." Nothing could be more apt for a discussion of the value of children. "Two elements are critical to this form of social capital: the level of trustworthiness of the social

environment, which means that obligations will be repaid, and the actual extent of obligations held. Social structures differ in both of these dimensions, and actors within a particular structure differ in the second" (p. 306). "Differences in social structures with respect to the extent of outstanding obligations arise for a variety of reasons. These include, the actual needs that persons have for help, the existence of other sources of aid (such as government welfare services), the degree of affluence (which reduces the amount of aid needed from others)" (p.307).

Coleman emphasizes that individuals embedded in a system of extensive "credits and debts" (i.e., obligations) have more social capital than those who are not. He illustrates this difference by comparing legislators who are members of an "insiders" group -- in the U.S. Senate it is called "the Club" --and those who are not. Club members are more powerful because their obligations to one another allow them to call in debts when needed.

Disjoint Norms and Social Efficiency

If culturally shared gender preferences are not themselves norms, we argue that their efficiency, and hence stability, depend heavily on being embedded in a normative structure, key elements of which are strongly institutionalized. It is this structure that provides the "obligations" and "expectations" of "trustworthiness" of which Coleman speaks. Specifically for our analysis, the value of children (or of children of a specific gender) depends on the extent to which society assures the trustworthiness of children in repaying, or supporting parents, and to make the obligations of children to parents strong and apparent. As Coleman would certainly note, this is hardly a universal or necessary set of norms for a society.

Coleman devotes extensive attention to the difference between what he calls "conjoint" and "disjoint" norms. For conjoint norms, the targets and the beneficiaries of norms are the same persons; that is, each person can simultaneously be a beneficiary

and a target of the norm. For example, "thou shalt not kill" both "controls" my pursuit of my interests through murder and protects me from similar actions by others. The persons whose interests are primarily served by the norm are also mostly the same people whose behavior is being controlled by the norm. In contrast, the beneficiaries of disjoint norms do not coincide with the targets, which means that the beneficiaries have an interest in favoring observance of the norm and the targets have an interest in opposing its observance.

A norm which demands that children support their aged parents is a clear example of a disjoint norm. Nevertheless, most theories of gender preference depend on the idea that the overwhelming majority of the children in a given society will abide by this norm -- which does not benefit them directly -- and that societies will maintain a norm where most of its targets lose out by obeying. Wherein lies the rationality of children who obey the norm? To answer this question we will follow Coleman's example and regard the interests of parents and/or of children as given, and then attempt to explain the ways in which such norms can emerge and be maintained among a set of rational individuals.

One way of approaching the rationality of targets who accede to disjoint norms is to conceptualize the norm is not purely disjoint but as serially conjoint. Children who are the target actors for a norm of supporting one's parents in old age, or of childhood obedience in general, eventually become, or expect to become, beneficiary parents themselves. But such an explanation can only be partial, since it does not specify the conditions under which such a norm is socially efficient. For the norm to be socially efficient, we have to account for its social functions, as compared with alternative arrangements. For example, a norm can be socially efficient if social institutions support the belief that the norm is serially conjoint, as opposed to its essentially disjoint nature, but not if children have little reason to believe the norm will still be powerful once they become old.

In traditional societies, children may believe in the stability of these norms because of what Coleman calls both prospective and retrospective effects. Prospectively, norms

of child obedience are supported because of the children's understanding of their own future interests. Retrospectively, children's memories of the relations between their parents and their grandparents can provide the basis for placing trust in a norm governing the actions of children. In contrast, such confidence may not be common in modern societies rife with social change. For example, many Koreans think that the once general norm in the Korea, the filial piety has been threatened by the widespread belief that the morality will be broken by the "younger generations," and that younger and middle-aged persons will never receive the benefits.

A disjoint norm targeting children's behavior will be socially efficient if the weighted costs to children and others in the society due to the constraints of that norm is smaller than the weighted benefits experienced by parents and others. As we have noted, the benefits of parenthood and the costs of childhood are not equally weighted in this calculation, but are weighted by the actor's relative power. If the parents have much more power than children in the family system, then the interests of parents (the benefits obtained from parenthood) count for much more than the interests of children (the cost from childhood), and the value of children should be highest. This is one important point that economic studies (Mueller 1976; Lindert 1980) evaluating the value of children have ignored. A highly unequal power distribution may be necessary for disjoint norms governing the actions of children to be effective, i.e. to result in a social optimum.

Security After Death

A particularly striking and important example of a disjoint norm, common to a number of religions, is that one or more of an individual's children should pray for his or her dead parent. Among the more widespread religions, the belief in the importance of such behavior is central to Confucianism, and is also strong in a variety of related forms of Buddhism. Judaism contains a less stringent, but still meaningful version of these ideas, and a number of African religions are committed to similar positions.

It can readily be seen that parents who require prayers after their deaths will not be able to themselves punish or otherwise sanction children who do not perform these prayers. They must rely on the ability and desire of other family and community members to enforce these norms, and on the belief on the part of the children that they are part of a serial exchange, so that by praying now they can expect their own children to continue the practice on their behalf.

The need for security after death increases child capital enormously. Thus, it tends to increase the value of children, and investments in children, because it increases the need to control children's behavior. Perhaps this is why it is not usual for all children in the family to be able to perform this role. In a society with generally large families this would either give children as a whole an enormous amount of capital, or it would dilute the capital of any one child to the point where the gain in capital would be negligible.

Once institutionalized through consensus, norms based on beliefs may be more resistant to change than are institutionalized economic arrangements within families. Changes in agriculture that make small plots of land unable to support farmers may quickly undermine any norm supporting children's "right" to the land as an inheritance, by making sale for the land and a move to the urban labor force necessary. But there is no immediate threat to the possibility of children praying. Thus, it would probably require a move to small families, or many childless families, before the relevant norms become very difficult to practice, and hence too costly for maintenance.

FAMILY STRATEGIES AND THE POWER OF PARENTS IN TRADITIONAL SOCIETIES

In many, perhaps most traditional societies there are stringent and effective norms governing the behavior of children, but few and perhaps weak norms governing the

behavior of their parents. In contrast, immigrants to the United States from peasant societies have almost universally complained about state intervention in punishment for children, and the lack of support for parental authority in school and among their children's peers. Research by Alwin (1988) indicates that whereas in the 1920s the characteristic of children most valued by American parents was "obedience," "independence" dominates parental wishes in 1970s

The power of parents in traditional societies is a direct measure of the social capital available to them within the social system in which they live. In most early economies human capital did not much vary over individuals, and was difficult to improve through education or related processes. Few individuals could accumulate much in the way of wealth for investment. The route to increased power or capacity to improve one's life chances therefore lay mostly in the development of social capital. In agricultural communities with low geographic mobility, requirements for initial close interaction, and a variety of analogies about "blood" and "breeding," the family was an obvious first basis for organization. It worked very well for building the dense ties of trust and dependence that comprise social capital. In short, "familism" was an efficient strategy of survival for most individuals (the case is less clear for warrior societies). Thus, the strategy often became insitutionalized in the culture and therefore supported by a variety of norms and beliefs. Important among these is the idea that families are corporate units of long standing while individuals are to be seen as agents of this whole more than as independent actors.

The Family as a Corporate Actor

Since norms which are relevant to differences among societies are rooted in communities, not in individual families, it is important that norms regarding the obligations of children and the power of parents be supported by other members of the community (village, clan, etc.) with whom the child interacts. If the family is chosen as a particularly important basis upon which social capital will be built, it also tends to

become the fundamental economic and social unit in the society. In rural societies it serves as the basic unit of production and the site of social welfare. In Coleman's terms the family also tends to become defined in the culture as a corporate actor.

We think that families vary in their degree of "corporateness," and that they specifically vary across societies and across eras. It is difficult to imagine a contemporary fourth or fifth generation American appealing to "family honor" as a reason for action. But, perhaps stereotypically, we readily assume that such appeals are common and meaningful in non-Western societies. Extremely, we think of honor killing in Isam family. And even a cursory reading of literature indicates that Ninteeth-Century America, and most of Europe, were at least somewhat committed to the reality of family honor as motive.

When the corporate family is normative in a society, the extended (joint) family system tends to take precedence over the nuclear (conjugal) family. The important principles of the conjugal family system are egalitarianism among family members and the emphasis on love between husband and wife, rather than the obedience of children to their parents. Thus, the interests of the individual (or couple) are likely to take precedence over the interest of the extended family as a group.

Even though child obedience is desired, the social capital to reward or command children's filial duties, especially when they are older, tends to be weaker in the conjugal family system. The ideology that dominates in the conjugal family system is more likely to be individualism, not collectivism (or familism).

In contrast, the extended family system generally emphasizes as normative hierarchal relationships and distinct roles among family members. In order to maintain the extended family system, individuals emphasize the parents' authority and power and the interests of the whole family. The power of parents and familism can be regarded as a necessary condition for the survival strategy of the extended family, especially in nonwestern societies.

There are, of course, several types of extended family systems in the world. For example, it is common to differentiate among patrilineal, matrilineal, and bilinear family systems. This may refer just to a formalized process of "naming" children, but in many societies reflects a definition of who remains a life-long member of the family and who does not. In traditional Korea, women became members of their husband's family when they marry, so that "permanent" family members were determined completely by the husband's lineage. In contrast, in the formally matrilineal (to be exact, matrifocal) Jamaican society, extended families are generally organized around and by women. A large proportion of Jamaican women begin their sexual unions as "visiting" unions in their parents houses, usually their mother's houses. Children of these unions generally become part of their mother's family, and the men who remain in these unions often become part of the woman's more permanent extended family. In Thailand, the situation is also complicated. The youngest daughter often brings her husband into the family, and they inherit land from the wife's parents' family. All of these family strategies are patterned and have survived for long periods of time.

Even within the patrilineal and patriarchal and corporate family type we can see important differences between cultures. In China parents prefer to live with all their sons, while in Korea parents prefer to live with their eldest son. This seeming small difference in family strategy has important implications for the organization of both societies although not, perhaps, for the gender preferences of the two cultures -- both strongly prefer sons to daughters.

"Principals," "Lieutenants" and "Agents" in the Family System.

Coleman identifies the authority relations between "principals" and "agents" as crucial to understanding the working of any corporate actor, including the family as corporate actor. At least at some ages, parents in all societies have authority over their children, by which Coleman means they have the right to control the actions of their children, at least within the limits set by their society. But familism implies a more

complex structure than this simple two-level, principal-agent authority relation. Most societies with strong corporate families contain families with what Coleman calls a complex authority structure consisting, at minimum, of three levels: the superordinate, the lieutenant, and the subordinate. Describing a single relation in a complex authority structure, Coleman says: "The subordinate vests authority in the superordinate, who transfers it to the lieutenant, who in turn exercises it towards the subordinate. The relation is not complete without any one of these three actors" (p. 166). The important distinction between an authority relation and an authority structure is that the superordinate transfers authority over the subordinate to the lieutenant in the authority structure.

Analyzing the power of parents in the context of the family system (which represents the authority structure) means that the conception of a family structure composed of family members must be displaced by the conception of a family structure composed of positions, with persons as temporary occupants of the positions. A norm governing the action of children is maintained and arises on the basis of the relation between the position of parents and the position of children, rather than the simple relation between parents and children.

Here, the concept of position is not based on the micro level, but on the macro level, since the positions of individuals represent elements of the social structure.

Families as corporate actors may take a variety of forms. For example, in some societies it is traditional for the eldest living male to be the principal of the family, while the eldest female and/or some child or children, perhaps determined by age and/or gender, perhaps by ability, act as lieutenants (or agents), and the other family members as the subordinates. The authority and power of the superordinate (and the lieutenant) are not maintained so much by personal qualities, as by the positions that the individuals occupy in terms of the norms supported by the community. Upon death of the principal, the next oldest male would become the principal.

Children who identify with their corporate families will tend to be better off -- i.e., achieve their interests more fully -- than children who do not, even in recent Mexican-

origin families in USA (Taylor et al, 2012). The actions of a child that benefit his or her family are both self-rewarding and rewarded by their parents, other members of the family, and other persons in the community (or village, or clan) who value the corporate family. Thus, there is a system with positive feedback, in which the children's obligation brings forth more pressure, both internally and externally. As a result, a child who changes his interests by identifying with a parent who is the principal or lieutenant in a corporate family is subjectively better off than one who does not, giving parents a high degree of power over their children. It is difficult to imagine such a high level of parental power in modern Western societies, which are characterized by a low degree of trustworthiness of the family - or, in other words, by a lack of social capital.

In societies in which a high degree of trustworthiness of the family is maintained and continued by children of one gender, and the actions of these children are encouraged by the other people in the community, parents have more power over these children than over children of the other gender.

An important aspect of social capital is that it is based on goods that are somewhat "public;" it is not the private property of persons who are beneficiary actors. Thus, a norm governing the actions of children does not only benefit the parents, whose efforts are necessary to bring the norms and sanctions into existence, but all members of the family in a traditional society. In order to maintain the interests of the family, parents can enforce a norm governing the actions of children, since they are not the adults as children's natal parents but as the principals (or head) of the family.

In all, we see that both the power of parents and a norm governing the actions of children are constituted by the social structure in the society in which they live, not by a simple relation between parent and children. In this theory, therefore, we distinguish the concept of authority relations between parents and children from the concept of authority structure in the corporate family system. Since the corporate actor specifies the rights that the occupant in each position holds, a great deal of the power of parents resides in their roles within corporate actors, rather than as natural persons. In other words, in traditional societies, one parent can hold the power and authority within his

family, since he represents a single corporate actor in relation to the outside world (i.e., the other families in the village), and that corporate actor is seen as having a set of resources and interests.

Since it is the individual as a natural person who determines his or her actions and choices, the interests of children as natural persons must be generally satisfied by the family system. Concentrated authority and power can exist only if there is a consensus in the family system as a whole, rather a simple agreement between parents and children. The rights of parents to control the actions of their children do not exist until they have been determined in consensus.

What determines the origin of rights in consensus is not individuals, but the corporate actor, here the family. As representatives of a corporate actor, parents are ordinarily interested in the interests of the family as a whole, rather than in their own interests, in order to maximize their realization of interests of all family members.

Therefore, children must forgo self-interest to act in the interests of their family, often their parents in particular, since children and parents should have the same interests to maximize the interests of their family as a whole; or the children are satisfied when the parents' interests (or the interests of the family) are satisfied. As a result, children vest authority and power in the parents, since parents are part of the corporate actor and try to maximize the interests of the family as a whole, not their own interests.

In societies in which the interests of children of a particular gender coincide with the interest of the family and of their parents, these children are more likely to vest sovereignty and power in parents than are children of the other gender; therefore, parents have more power over these children. In addition, since these children are more likely to become or be lieutenants, they are more likely to have the same interests as their parents, the superordinates. Eventually, these children and their parents are more likely to be a single corporate actor in relation to the outside world.

THE RIGHTS OF CHILDREN TO PARENT'S CAPITAL

Our discussion so far has concentrated on explicating the processes by which social capital is generated and supports the power of parents over children. At this point we return to what appears, at least at first, to be a simpler element of the analysis -- that parents also use their personal capital to control their children. Especially at the individual (micro) level, parents must often be able to provide their children with some resources in which the children have interests.

Regardless of institutional arrangements, it is probable that at some point or points in the child's life course parent and child interests will not coincide, or that parents will not have sufficient power from social capital to fully control their children. At these points the parent's personal capital is very important.

Parental resources often provide the basic materials necessary for children to develop their own (child) capital. For example, children need land or educations or religious training so that they can provide their parents with old age security and/or ancestor rites. If only child capital is regarded as the important determinant of the value of children, and the power of parents is viewed as the only mechanism for obtaining child capital, then we can not account for the conditions under which the parents' interests correspond with the interests of children. That is, if we disregard genetic explanations, we cannot present a persuasive, or empirically general explanation of why adult children as rational actors provide parents with child capital at what appears to be a substantial cost to their own interests unless we see that parent's personal capital is an important ingredient in determining the value of children.

This is not to imply that parents' social and personal capital are mutually exclusive sources of parental power. In fact, within a given society the two forms of capital tend to be positively associated. For example, parents with more personal resources such

as land or wealth are also more likely to be supported by their neighbors etc. as good parents deserving of respect from their children, and to be part of stable family structures which reinforce their authority. Furthermore, parent capital tends to be positively related to child capital, in that parents with money and educations tend to have children who are also successful. Thus, we see that the value of children is composed not out of three separate, discrete dimensions, but is jointly determined by these dimensions: child capital, the parents capacity to extract that capital because of social capital, and the parent's own personal capital.

The Coporate Family, Succession and Inheritance: Property as an Example

The resources in which children have interests but which parents control, especially while children are old enough to contribute substantial amount of their own capital to support their parent's well-being, obviously vary widely over societies and over families within societies. In most discussions of traditional societies attention has been focussed on property, particularly land, as the resource that parents control, and in which children have an interest. For example, in exchange theory analyses parents obtain some benefits from their children (especially the designated heir or heirs), such as old age security, power and status, as rewards for their property (Anderson 1976, Kennedy 1991). Thus, through exchange, parents and children ultimately have "the same" interests. A deeper analysis of property inheritance may therefore serve as a particularly relevant example.

In our terms, the "exchange" of property for child capital is only part of the institutional arrangements necessary to increase VOC. After all, property owners could make similar "deals" with any younger person (and often do in traditional societies through processes such as nominal "adoption") or with a chosen laborer, or even with the government -- through some form of "social security." To affect VOC, institutional

arrangements must somehow privilege the children as parties to this exchange. Children must have special "rights" to parental property.

It is important to remember that in a corporate family parents control property primarily as occupants of positions in the family. In a normative sense (regardless of legal fictions), they do not "own" the property at all, but only retain title on behalf of the collective. When they can no longer control the property, someone else from the family must control it -- not someone from outside the family. Culturally institutionalized rules of succession specify the devlovement of control.

In other words, as Scheffler (1986) has noted, there is an important difference between "succession" and "inheritance." The concept of inheritance refers to property rights obtained through private or personal property; the concept of succession refers to rights of control obtained through the social system, rather than at the individual level. Anyone can inherit property, even from comparative strangers. But if a child is responsible for the succession of his family, then he has a specific position in his family as the designated heir (or the descent), and obtains the right of property through his position in the family system.

Since only the descent can obtain the right of property through succession, we need to be clear with ourselves about the difference between "kinship" and "descent." While the former is the condition of a person representing a member "of kin (or family)," it is the later relation that is regulated by norms that specify a genealogical condition for acquisition of a status (Scheffler 1986). If a child is simply a member of kin (or temporary family member), he does not necessarily have the right of property. Rules of descent are often much more restrictive than rules rules of kinship.

DIFFERENTIATION AMONG CHILDREN

The specification of a single child as the descent almost brings us back to the problem with which we began this paper -- the sources of differences in the value and treatment of children (such as males and females) within the same family. Any theory that seeks to understand patterns of inheritance (including especially theories that rely on genetic explanations) must explain why parents frequently bequeath their property to a specific offspring or subset of offspring, instead of to them all. For our purposes, the theory should explain this "exchange" in the context of the family and kinship system.

Continuing with the example of property, parents are likely to have greater power over children who expect to inherit than over children who do not. For example, in a society in which primogeniture is the inheritance system, parents should have more power over the eldest son than over other children, and they are more likely to expect to obtain child capital from him than from the others; as a result, the value of the eldest son should be -- and generally is -- higher than that of any other child. If at least part of the land (and the house) will be inherited by a youngest daughter and her husband, as in Thailand, this daughter will be both highly valued and likely to give child capital to her parents. Indeed, Thais expect this daughter to stay at home and take care of her parents.

Our underlying point is that within families the children who are the most valuable to parents are the ones whom they can expect to provide the most "child capital" to the parents, or to the family as a whole. Family strategies and the normative systems of those societies are generally set up to provide parents with the most power over those children, so that their capital may be extracted. The social arrangements that work often give those children rights to parent capital, which the children protect by acceding to cultural norms or to parental wishes. To survive as culturally normative or common, specific family strategies must ultimately be tailored to both the material conditions of the society and to other institutional arrangements and beliefs within the society. And within societies, class, urban location, and other factors of differentiation may make different strategies comparatively effective and hence different children more or less valuable.

Gender Preferences

Using a behavioral measure of gender preference (likelihood of having an additional birth given the gender composition of already-born children), a research on selected non-European societies by Lee (1995) argues that most non-Western societies either prefer male children, or have no strong preference between males and females. We presume that most Western societies would also have no strong gender preferences since spousal relationships are regarded as the more important family relationship than the parent-children relationship and their family strategies are based on the individualism, not on the familism. A few mildly female-preference societies were also identified. An important finding was some seemingly self-contradictory societies, such as Pakistan, tend to be regarded as son preference countries, but parents usually want to have at least one daughter, together with sons.

The most pronounced son preference countries in East and South Asia (i.e., Korea, China and India) are patrilineal and patriarchal societies, in which, as is often the case, only male children can be the descent. Because they expect to eventually fill this role in the family by right, their interests and the interests of their parents are likely to coincide, in that they are both directed towards the interests of the family. These sons are likely to assume the role of lieutenant relatively early in their lives and generally are likely to provide child capital to their parents. In such societies, female children may be kin who can be expected to leave the family and provide most of their child capital to their husband's parents, family and/or village. In this case they are less valuable to their parents.

A family strategy suggests that one of the functions performed by males in patrilineal societies is to provide grandsons and a generally fertile line of descent. For example, when the son is also dead, the father may need a grandson to take up prayers on his behalf. Sons are generally "safer" providers of grandchildren than daughters. Daughters have more limited childbearing lives, and may be infertile for a variety of

reasons, including death during childbirth -- a common occurrence when most of these preferences were established in the relevant cultures.

If there is high mortality among children, as was often the case because of disease and war, it is not only the first son who is valued by parents. Even with primogeniture, later sons may be needed as descents and lieutenants. As the probability of death for the eldest male increases the value of other sons should increase and so should the likelihood that they will provide child capital. However, control over these sons may be minimal, since their rights are so conditional.

The case of India, however, also contains a puzzle for our theory. Indian village culture does not reflect the strong corporate familism found in China and Korea. The Hindu religion does not require sons to provide "security after death." For us, the puzzle arises over why Indian institutions are so unusually stacked against female children

The countries in which Lee has found daughter preference are most notably Jamaica and to some extent Thailand. We have discussed Thailand above. Since men in Jamaica have long been likely to leave home to earn their livings, emigrate to the cities or foreign countries, daughters are regarded as more reliable family members. They often have children while young and still living in their maternal home. Thus, they often rely on their mothers, for help in caring for the children they are also more likely to provide child capital to their mothers or parents. When Jamaican women work in the city they frequently leave their children with their mothers and send their earnings to their family. Thus, Jamaican women are generally more reliable members of the family and family strategies are based on matrifocal assumptions.

PREDICTIONS

We have assumed that the value of children results from three functions: (1) child capital, (2) parent capital, and (3) the power of parents. If this assumption is correct,

then what general principles can be specified for the study of gender preference? The following propositions are intended to supplement and refine existing accounts of the value of children as the cause of gender preference, not to supplant them. The study of the supply (children) side can help resolve the ongoing debates about the effects of the value of children of a particular gender on gender preference.

The first and simplest proposition follows from the major premise that parents tend to prefer to have children of a particular gender who have higher value of children.

PROPOSITION 1: The higher the value of child of a particular gender, the stronger the parental gender preference for that child.

This proposition provides only the beginning of the explanation of the relationship between high value of children of a particular gender and gender preference. It is necessary to specify what kinds of functions affect the value of children. The value of children is determined by three functions.

PROPOSITION 2: The stronger the need of parents to obtain child capital from a child of a particular gender, the higher the value of a child of a particular gender, and the stronger the parental gender preference for that child.

The child capital can be represented as three kinds of resources: comfort, social esteem, and affect. In many nonwestern countries, providing child capital to their parents is viewed as the duty of children of a particular gender. For example, only sons can provide the security after life for their parents (or their ancestors) in China, whereas in Thailand, providing old age security to parents is the duty of daughters, rather than sons. Therefore, there are two different gender preferences in these two countries. Also, different amounts of child capital may be requested, depending on the parental

needs in the context of the family and kinship structure. It is possible to assume that parents will show a stronger gender preference when they want a larger amount of child capital.

PROPOSITION 3: The greater the investment of parents in children of a particular gender, the higher the value of a child of a particular gender, and the stronger the parental gender preference for that child.

In traditional societies, the most important parental investment in children may be property. In some nonwestern countries, the property or the right of property is more likely to transmit in the descent line. The descent line usually consists of either male or female offspring, even though the descent line is sometimes composed of children of both sex. However, the descents have the right of property only if the family and kinship system is patrilineal or matrilineal, that is, where the descent line continues with the line of children of one gender (Scheffer 1986). Since children as descents have positions in their family and kinship structure, they have the right to their principal, the head of their family. As descents, children of one gender are more likely to have the right to obtain the inherited property from their family and kinship. As a result, children who are included in the descent group are more likely to have the same interests as the head of family, the family and kinship serving as the whole entity. Thus, children as the descent group and parents as the principals are more likely to be a single corporate actor in relation to the other family members. Here, we argue that the inheritance strategy, one of the ways of showing differential parental investments in their children according to gender, provides the basis for parental sex preference, like child capital, since the resources in which children have interests but which parents control provide the basic material whereby children are able to provide their parents with child capital, and the basis for parents to have more power over the children of one gender who are the descent group, than over the other children.

PROPOSITION 4: The greater the power of parents over children of one gender, the higher the value of a child of a particular gender, and the stronger the parental gender preference for that child.

At societal level, the power of parents over children can be obtained from the social norms governing the actions of children. In societies in which the family and kinship systems shows a strong corporate bond and strong familism exists, parents have strong power over children. In these societies, the interests of each family member are more likely to coincide with the interests of parents who are the principals of the family, through the high level of trustworthiness of the family. It is possible to assume that the actions of parents governing the actions of children are necessary for the benefit of the family as a whole. Nevertheless, among all members of the family, parents as the superordinates and the descent group as lieutenants are more likely to have the same interests than are other family members as subordinates. As a descent group, children of one gender have the right to obtain the resources in which children have interests but which parent control, and they are more likely to vest the sovereignty in parents as principals of their family. However, which gender of children is more likely to be included in the decent group as lieutenants is determined by the family strategy.

PROPOSITION 5: The stronger the interrelation of three functions of the value of children, the higher the value of children.

This means that the three dimensions of the value of children must be strongly intercorrelated in order to obtain the high value of children. For instance, where parents have no power over children, there are no social capital to obtain child capital even when parents transmit all their property to their children. Therefore, when one of the three functions in the value of children does not exist, the value of children also does

not exist, and parents do not have gender preference. These five propositions represent a provisional attempt to use a general rational choice model to formulate some testable hypotheses about the relationship between the value of children and gender preference.

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