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A NOTE ON BIOLOGY, TIME AND THE GOLDEN RULE

by

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ON NONSYMMETRY

One of the central axioms of Hobbes, Hume, and Smith in The Theory of Moral Sentiments and other writings is the Golden Rule. This is usually phrased as "Do not unto others as you would not have them do unto you." This rule is a manifestation of the important role of symmetry in normative arguments in the social sciences.

Symmetry plays a key role in many of the arguments in game theory concerning fair division and value. Tied in with the assumption of symmetry, unless otherwise specified explicitly is the assumption of equal information, perception, and ability to grasp information.

There is an aesthetic attractiveness to the Golden Rule and the exercise of seeing how far we can proceed within an extremely parsimonious set of axioms is attractive to both the philosopher and to the mathematical social scientists. But although this exercise is attractive, it can be dangerously misleading in the development of the social sciences and even ethics. The reasons are simple and based upon simple features of biology and time.

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The Golden Rule is not an abstract verity but an inadequate approximation in transactions between the sexes. This also holds true in transactions between individuals of sufficiently different ages.

We need to consider two sexes and possibly eight or nine age groups in order to modify the Golden Rule in applications. The age categories might be: (1) baby, (2) child, (3) adolescent, (4) young middle ages, (5) old middle ages, (6) old, (7) senile, (8) dead, (9) fetus, and (10) generations unborn.

What is being suggested is not just an added complication that can be taken care of by easy modification of the initial model. New problems are posed. In particular, if we regard men and women as related but different "finite machines," we cannot expect M to be able to simulate W and W to simulate M simultaneously.

When we consider a male adolescent and his father the "machines" may be approximately the same, but the amount of programming and historical inputs are different. In particular, the middle-aged father may be able to "put himself in the son's place" because he has been there. But the reverse does not hold. Machine M who differs from M1 primarily by having more programs can simulate M1 over a broader range than M1 can simulate M.

The categories "senile" and "dead" noted in the age breakdown are not strictly chronological with the others, but in carrying out the machine analogy they appear to be worth noting. In particular, biological degeneration may destroy the ability of the senile individual to "put herself in a younger woman's shoes."

The final category "dead" was included to raise questions concerning the usefulness of counterfactuals such as "If Jefferson were President now rather than Reagan what would he have done about Lebanon?" and also to argue that the dead, although not relevant to direct Golden Rule considerations, do figure

indirectly in the inputs that accrue in cultural history. Thus honor to ancestors and responsibility to generations unborn are not based upon a one-to-one introspection between two actors but are phenomena involving one individual with a coding of history and a volitional projection of the future.

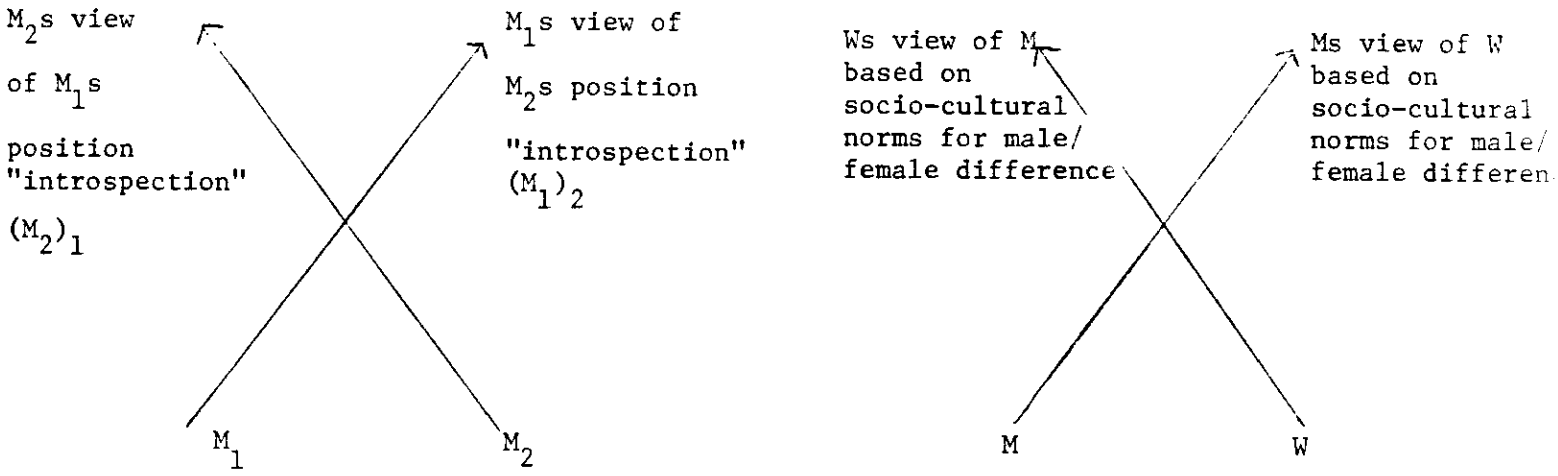
A different set of criteria might involve race and species. If our drive for symmetry is so large, should we put ourselves in the other dog or dolphin's place? Although this question is not pursued further, it is raised nevertheless to remind us that even in the purest form of the Golden Rule has some form of empirical assumptions which rules out dogs, dolphins, the dead, and the unborn and inanimate objects.

WOMEN AND MEN: TWO-WAY NONSYMMETRY

The empirical questions at the biological level include differences in sexual role, brain function, maturation, longevity, health, and what they imply in terms of preferences and decision structure.

Suppose that we knew precisely how to characterize the biological differences between machine W and M and what they imply in terms of preferences and choice. If W and M each know these differences, how does W use her knowledge to put herself in the position of M and vice-versa? This may be the point at which culture, history, and society come into play on the individual. In the game of man with man in many situations, we can factor out culture, history, and society more or less. When M1 puts himself in M2's position, he can conceptualize within an equivalence class of machines. When M tries to put himself in the position of W, a filter function of some variety probably based upon historically developed cultural norms is used as a proxy procedure to try to conceptualize a point of view he himself can never experience. Figure 1 indicates the distinction:

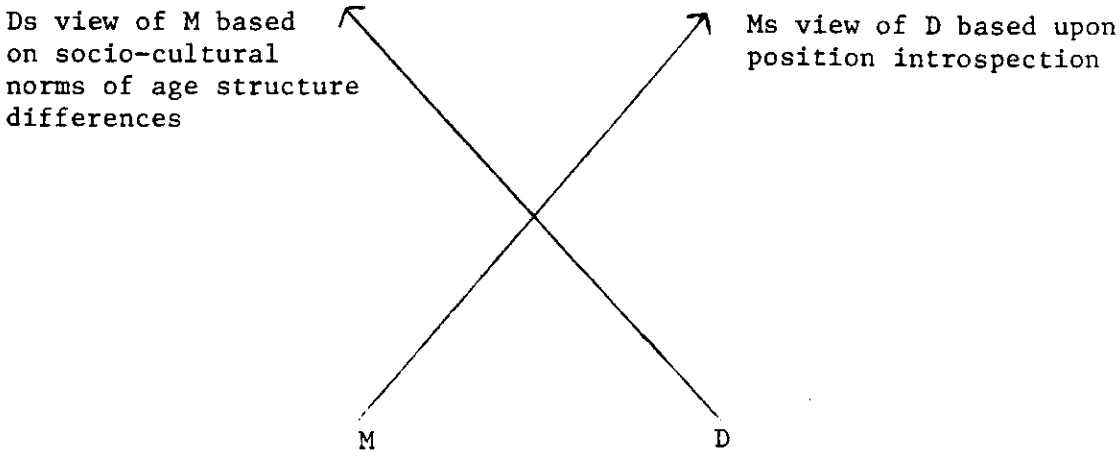
Figure 1



MOTHERS AND DAUGHTERS: ONE WAY NONSYMMETRY

As a first order approximation we may assume that a mother "who has been there" can simulate, or put herself in the position of her teen-aged daughter. But her daughter without the experience that she will have obtained in 25 years time must use a socio-cultural norm as is shown in Figure 2.

Figure 2



SOME QUESTIONS AND IMPLICATIONS

At the level of application the above comments suggest, for example, that unless socio-cultural norms are appropriate, a society supplying social services has a better chance of success if the social workers and managers are roughly of the same age structure and are of the same sex as their clients. For example, a requirement that the personal attendants and managers at an old age home be older than 50 might help.

At a different level we need to consider age requirements for officials and legislators. How much of a bureaucratic age structure can or should be dependent on the biology of aging as contrasted with the socio-cultural norms concerning the links between age and honor, seniority and status?

The questions raised here call for several different investigations. One in particular is the interpreting and sorting out of biological and socio-cultural sexual differences.

Gaming experiments may be worthwhile. It might be feasible to control for socio-cultural factors utilizing experimental games.

The problems with the development of formal game theoretical and ethical models which reflect the essential nonsymmetries noted are not theoretical but empirical and conceptual. If all players could be regarded as intrinsically tangible or symmetric then a symmetric fair division will emerge. If all are not equal, the fair division theory will provide a nonsymmetric answer, but the problem we are faced with is how does the nonsymmetry depend upon the intrinsic inequalities in the players.

A philosopher's solution might be to argue original position and say, for example, that each individual has an equal chance of being born male or female and that the game should be played among the unborn. I believe that it is more reasonable to start with what is, rather than with such a counterfactual.

The argument is not with abstract equity theory. Full symmetry as an axiom based upon a Golden Rule to be applied to a counterfactual unisex population of the same age appears to be a perfectly reasonable research assumption for logical development. What bothers me is what I perceive to be a *non sequitur* in reasoning or an extra normative counterfactual that "people should be born equal or should play an impossible original-position game devoid of historical or societal context."

I believe that the abstract fair division theories in ethics and in formal development of game theory has been of great value. But I suggest that the going from unisex, ageless, *in vitro*, normative theory to application or to inferences about society or the political economy requires an explicit understanding of sex and age differences.

The modification calls for not merely biological knowledge, but how unlike individuals form Golden Rule inferences about each other in the absence of introspective similarity.