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**Groups, Norms and Endogenous Membership:
Towards a Socially Inclusive Economics**

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Abstract

In Part I, we argue that Economics must outgrow the narrow confines of Neo-Classical Economics to embrace 'sociality' first championed by Herbert Simon in the mid-1950s and now by a growing number of economists under the banner of Social Economics. We contend here that Neo-Classical Economics is incomplete, rather than wrong. Firstly any alternative model must subsume the Neo-Classical model as a special case even as it embraces conceptual promontories from other social science disciplines, viz., groups, norms and sanctions. Secondly, it must be couched in a language familiar to the economics profession— maintain optimizing behavior and equilibrium analysis.

In Part II, we construct a formal model where the agent is at once a private entity and a member of a social group; his utility is inclusive combining the agent's private utility over goods (the Neo-Classical utility) and the utility he derives from being a member, viz., access to group's collective good. As a member, he commits to support the procurement of the group's collective good and submits to a system of norms and to the corresponding self-organized sanctions regime punishing violation of group norms. The agent solves a sequence of optimization problems: the first determines his optimal consumption basket given his budget constraint (net of group contribution), prices in the market location of the group; this gives his inclusive indirect utility; the second determines his optimal market hours by maximizing his indirect inclusive utility subject to time constraint and the market wage rate; this gives his doubly indirect inclusive utility; thirdly, he maximizes his inclusive doubly indirect utility with respect to the monetary contribution of the group given the sanctions for norm violation. The choice of social group follows from a rank order of groups by greatest inclusive utility an agent can attain in each competing social group. Finally, we show how the agent's relative weighting of his private and group commitment may wax and wane depending upon the stakes of the inter-group competition.

JEL Classification: D01, D11

Key words: Sociality, groups, norms, choice of groups, compliance with norms, inter-group competition

Part I

The 2008-2009 Great Recession triggered a re-examination of the tenets of Neo-Classical Economics. *Homo Economicus*, the view that the consumer is strictly rational and self-interested, is the foundation stone of Neo-Classical theory. It has its own strengths among which are parsimony, ease of formalization and a plethora of convenient algebraic summaries of perceived economic realities. This also has over the years many detractors (H. Simon 1955, 1957, 1997; Kahneman, Slovic, & Tversky, 1982; Camerer & Thaler, 1995; Stiglitz, 2001; Fehr and Fishbacher, 2004; Akerlof and Kranton, 2000; 2010) and has been assailed many times in the past as inadequate to account for many commonplace observations. On the empirical record of methodological egoism, Margaret Anderson's (2000) observation is to the point: "There is probably no other hypothesis about human behavior so thoroughly discredited on empirical grounds that still operates as a standard working assumption in any discipline." While there are a number of proposed alternatives (among them, prospect theory of Kahnemann and Tversky (1979); bounded rationality of Simon (1957); social rationality (Fehr and Fischbacher, 2004; Lindenberg, 2001), there has still to emerge a dominant rival construction, and the Neo-Classical orthodoxy's parsimony has yet to be attained. The big hurdle is that the possible alternatives are innumerable. It is our belief that this alternative must be inclusive, that is, it must nest the Neo-Classical orthodoxy as a special case even as it encompasses newer grounds in as parsimonious way possible.

In *Models of Man* (1957), Herbert Simon wanted Economics to be "...a science of man that will comfortably accommodate his dual nature as a social and a rational animal." Central to Simon's program are sociality and decision making (bounded rationality). But while the latter became absorbed by the discipline, sociality failed to prosper partly because it was not packaged in a way that the economics profession can easily relate to. The existence of the second is not denied but simply curled up into the constants of the Neo-Classical model and effectively ignored. There are reasons for this methodological snobbery. If the social influences on market relations are so small, they can be ignored. A related argument is to say that the market relations occur in time period so short as to leave no time for social influences which are assumed to shift too slowly to make their mark. The plethora of non-market influences may also cancel each other out if together they form a white noise with mean zero. A third excuse, related to the second, is that these external influences form a structureless mass of forces about which no theory can be built. Paul Wilmott (2000), financial economist and critical observer of the financial space that came to grief in the unpredicted Great Recession, blames the situation on adherence to *homo economicus*: "The Neo-classical consumer interacts with other agents only in purely market terms. Non-market relations with other agents are not denied but are considered too weak to affect observable market relations." Not the last of these reasons is the M. Friedman argument: assumptions don't make a science; predictions do, implying that Occam's razor must be applied mercilessly. But prediction has always been, and still is, precisely the soft underbelly of the Economics science. Social interactions in the digital age have become so instantaneous they are bound to impact market behavior. Other social disciplines have discovered systematic structure and order (see e.g., D. Ariely's *Predictable Irrationality*) in the spaces previously shunned as 'irrational'. This only means that the "irrational" heuristics we use must have served us well in the Darwinian jungle. Still and all, man's social tendencies continue to be marginalized because social interactions tend to be messy and intractable in the mathematical sense.

The absence of the social dimension in Economics has perennially been considered uncomfortable. Adam Smith, the father of positive economics, parlayed his version of the social man, *homo empathicus*, in a separate volume, *Theory Moral Sentiments* (1790), the call to overcome this artificial chasm between the economic man of *The Wealth of Nations* and the social man has remained an enduring challenge. It was called in the German scholarly tradition '*das Adam Smith Probleme*'. Herbert Simon made the bridging of the chasm the explicit purpose of the volume *Models of Man* (1957), viz., "...a science of man that will comfortably accommodate his dual nature as a social and a rational animal." Simon's program had two parts: sociality and decision making. On the former, he proposed 'docility' or that man takes his cue from social sources deemed authoritative. This docility feature would have made 'herding behavior', a conundrum is the current orthodoxy, simple corollary. On the latter, he introduced the idea of 'bounded rationality' which he further elaborated as owing to three important hurdles: (i) that the probability distributions over alternatives may not be known, (ii) that the complete set of alternatives are themselves not known, and (iii) that man's limited access to information and capacity for computation forces the use of heuristics and rules of thumb to deal with these various complexities so that 'satisficing' rather than 'maximizing' becomes imperative. Simon's program however failed to prosper not because it was wrong but because it (i) came before the Kahnemann-Tversky cognitive bias experimental results; (ii) was alien to the model of man that supported the grand Arrow-Debreu edifice being erected at that time, (iii) did not rest easy with the implicitly binding norm of 'Physics envy' preached in Samuelson's *Foundations*, and (iv) was never packaged in a way that the economics profession could easily relate to (Lindenberg, 2001). O. Williamson observed (1985) that his (Simon's) project became identified perhaps wrongly with 'satisficing', which failed to engage the profession. Our basic contention is not that Neo-Classical Economics is wrong but that as it is incomplete.

The Economics before the 1950s that did not shun sociality struck the young mathematically-inclined Niels Bohr, who started in Economics and shifted to Physics, as too messy and unstructured. Developments after the 1950s would have made Niels Bohr feel at home. The economic profession then warmed up to the allure of the formally beautiful Arrow-Debreu edifice. Formalizability came to define the economic reality that mattered. The same can be said of Game Theory. Parsimony as a virtue was maintained at the expense of explanatory power. Where to start?

Sociality, however, did not and will not go away. Vast modern evidence has emerged, from evolutionary biology to brain imaging studies (see, e.g., Jeremy Rifkin's *The Empathic Civilization*, 2009) that establish the biological basis of 'the need to belong'. Man, the social animal, cannot be forever exiled from the discourse of Economics.

In the last decade, Akerlof and Kranton's economics of identity (2000; 2010) represented the most interesting attempt to transcend orthodox theory. They posit an additional argument 'identity' (I) in the utility function to which utility responds positively. Identity, in turn, is a function of actions, social categories and prescriptions by the group. Every individual as a member of a group is assigned a category and a set of prescriptions (norms) of proper behavior. Deviations of actual behavior from norms is personally costly to the individual who has internalized the goals implied in these norms. Actions which advance one's private well-being (such as speaking proper English which can land you

higher paying jobs outside the group) may be seen as eroding your identity and thus may be avoided. They used this to explain phenomena in the workplace such as discrimination that are puzzles for orthodox theory. This reflects an increasing recognition that social forces outside of the market are much more than just white noise. Social forces shape market outcomes and vice-versa.

The problem is that groups and norms take innumerable forms and corresponding sanctions for violations are just as numerous. Some norms like 'conventions' (such as 'drive right' traffic norm) are self-enforcing; others have to be accompanied by sanctions either implicit (hardwired) or explicit (such as 'no littering ordinances'). Postlewaite (2010) has gone furthest in formally marrying social norms and preferences. He posits that agents possess a 'deep preference', something that is hardwired either culturally or genetically and change only slowly (the Neo-classical utility function), but operates by a 'reduced form preference' which also takes into account of the social environment or how others will respond to the agent's behavior. Reduced form preferences vary across groups and societies and can be endogenous to economic policies or advertisements. For example, if the agent is the married couple, the reduced form preference is $U(c_0) + \beta(u(c_1) + j)$ where $U(c_0)$ is its deep preference and c_0 and c_1 denote respectively the parents' and their son's consumption and j , the endowment of the son's mate depends on the actions of others in the community. Bequest affects both the offspring's c_1 and the prospect of a good match in the next period. He shows that at population equilibrium, concern for relative position and matching prospect of offspring increases the bequest and thus savings of households. Burke and Young (2010) and Burke and Heiland (2010) consider a preference that includes a penalty for deviation from the obesity norm and reveal a 'conformity warp', a tendency at dynamic equilibrium to move towards the average population standard and away from personal idiosyncratic configuration. The norm developed in this way are self-enforcing: you lose if you don't do what others do. The *Juku* review system in Japan and the *Hagwon* review system in S Korea are examples of such norms.

The purpose of this paper following the lead of Akerlof and Kranton (2000, 2010), Postlewaite (2010) and Burke and Young (2010) is to explicitly imbed the social dimension into the consumer model that the economics profession readily recognizes and routinely employs but without resorting to altruistic preference. This avoids the drawback which Williamson saw of Herbert Simon's satisficing paradigm which went too far afield of current paradigm. Akerlof and Kranton added an argument 'Identity' into the deep preference of the agent, i.e., $U(x, I)$; Postlewaite in turn tacked on the utility of a third agent (offspring) which made the reduced form preference altruistic. Furthermore, in Postlewaite, the bequest norm is an emergent convention is deemed effectively enforced by bequest decision of others.

In this paper, the agent values certain collective goods (local public/club) which cannot be bought in the market (missing markets) and which can be accessed only through collective action within the group. To provide for and maintain these collective goods, groups have norms and penalty regimes to align behavior and discourage transgress. In this paper, the norms are behavioral thresholds and the penalty regime is explicitly modelled rather than enforced by the network externality character of the collective good. Group and location memberships become endogenous. In Part II, we invest the issues with a formal garb.

Part II: Formal Structure

Current consumer theory consists of two basic allocation models: (1) the budget allocation model which generates the market demand equations and from these the indirect utility function, and (2) the time allocation model which generates the labor supply equation and the income of the consumer. The indirect utility function, usually written as $U^*(B, p, l)$, is a function of budget B and prices p and some nonmarket good, say leisure l . Maximizing U^* with respect to $B = wm$ and $L = m + l$, we get $m^*(w, L)$, $B^* = wm^*(w, L)$ and $l^*(w, L)$ and by substitution we get the doubly indirect $U^{**}(p, w, L)$.

Since every market location is mapped against a combination (w, p) , market locations can be ordered by agent A using U^{**} , that guides choice of market location. That is, if i and j are market locations, Choose i if $U^{**}(p_i, w_i, L) \geq U^{**}(p_j, w_j, L)$.

Market location j 's attraction to potential resident A rises with:

- a) A rise in w_j (since V_j^* rises with w *ceteris paribus*),
- b) a fall in p_j (since V_j^* rises with a fall in p_j),
- c) rises with a rise in G_j (since V_j is non-decreasing in G_j), and
- d) rises with a fall in c_j for given G_j : a fall in c_j raises the amount of market goods that can be afforded by H in j .

Local Collective Goods

But market characteristics are only one consideration for choosing a market location. Each location j , $j = 1, 2, \dots, J$, is also associated with a vector of public goods G_j , both soft and hard, and a level of mandatory contribution c_j from residents to support these public goods. This contribution (local tax) is subtracted from the total budget to get the budget for market goods. A metric V_j defined over U^{**} and G_j can be constructed for each location j , $j = 1, 2, \dots, J$, that is,

$$V_j = U^{**}(p_j, w_j, B_j^* - c_j) + vG_j(c_j, \Sigma c_j)$$

where Σc_j is contribution by other members of the community j . We call V_j the *inclusive utility* of A in location j . Using Postlewaite's terminology, V_j is A 's reduced form preference in j . The set of metrics $\{V_j\}$ can be used to rank-order the choices in physical coordinates (market locations). It is now obvious that how other member behave in respect to the mandatory contribution affects A 's inclusive utility; in other words, V is a social preference. We now turn to choice of groups.

III. Membership in a Social Group

We assume that A is a member of a social group $k = 1, 2, \dots, K$. Typically social groups have $n \geq 2$ members. We posit a *trivial social group* $k = 1$ which has $n = 1$ members—the *homo economicus* group. Members of a non-trivial social group k have access to proprietary collective goods G_k provided by the

group and to which outsiders have no access. To procure and maintain G_k , a mandatory monetary contribution c_k is required from each group k member, that is, $G_k(c_k, \Sigma c_k)$, where Σc_k is the total monetary contribution to G_k by members other than A . The first derivatives of G_k are nonnegative and decreasing in c_k and Σc_k . We assume that G displays a positive cross partials with respect to c_k and Σc_k . This means that the norm has a network externality character as described by Burke and Young (2010): “The key property of a social norm from a modeling standpoint is that it induces a positive feedback loop in behaviors: the more widely that a norm is followed by members of a social group, the more everyone wants to adhere to it”. A ’s solves the following programming problem:

$$\max_x V_k = U(x) + vG(c_k, \Sigma c_k, t_k) \text{ s.t. } B - c_k = px.$$

This gives $x^*(p, B - c_k)$ and the indirect utility function of A is $U^*(p, B - c_k)$. A then solves the time allocation problem:

$$\max_m U^*(p, B - c_k) + vG(c_k, \Sigma c_k, t_k) \text{ s.t. } B = wm \text{ and } L = m + t_k.$$

This gives $m^*(w, L)$, $t_k^*(w, L)$ and the doubly indirect utility function

$$U^{**}(p, B^*(w, L) - c_k) + vG_k(c_k, \Sigma c_k, t_k^*(w, L)).$$

This is the highest utility agent A can attain as a member of good standing of group k in a market location characterized by (p, w) . This can now be used to rank-order J groups in the same market location, i.e., same (p, w) . Groups will differ in their mandatory contribution c to group collective goods as well as in the efficiency and degree of cooperation in the use of those contributions and thus the size of G .

Note that the presence of Σc_k in collective goods production immediately implies that there can arise a problem of cooperation within the group. This is a collective action problem since some members may free ride on others’ contribution, a problem that is very salient and compelling in the social sciences following Samuelson (1954), Olson (1965) and Ostrom (1990). This brings the model into immediate contact with other social disciplines such as Sociology, Anthropology and Political Science where social dilemma games and attainment of cooperation are central. For the moment we assume that member A is norm-abiding, that is, he always pays c_k and on time. It could be because the sanction regime is so effective so that there is no incentive to deviate.

IV. The Sanction Structure for Monetary Contribution

The monetary contribution c_k can be viewed as a ‘norm’ for group k . The problem arises when agent A refuses to pay c_k in full trying instead to ‘free ride’ on contributors. This means that the network externality property of G is not enough to ensure compliance. When deviations may occur, a system of sanction for non-payment is called for to keep it in bounds. This system of punishment is a private ordering supported only by internal forces or what Ostrom called “self-organized governance.” Even in small groups, this system punishment is crucial for the support of cooperation.

There are many types of norms and many types of sanction structure. For c_k , we consider as penalty regime the 'reward or punishment type': that is, there is floor contribution $c_k^\wedge$ such that $c_k < c_k^\wedge$ is punished but $c_k > c_k^\wedge$ is rewarded. We model this by the cost function:

$$C_k = -a(c_k - c_k^\wedge)^3.$$

Now $C_k < 0$ (reward) for $c_k > c_k^\wedge$ but $C_k > 0$ (penalty) for $c_k < c_k^\wedge$. Finally, $C_k = 0$ for $c_k = c_k^\wedge$. The first derivative of C_k with respect to c_k is $-[3a(c_k - c_k^\wedge)^2] < 0$ for all $c_k \neq c_k^\wedge$. This makes intuitive sense: if $c_k < c_k^\wedge$, a rise in c_k brings it closer to compliance and penalty should fall; if $c_k > c_k^\wedge$, the reward should fall as c_k rises, that is, generosity is appreciated but at a decreasing rate. We are assuming that the sanction or penalty is non-monetary such as ostracism or denial of access.

The doubly indirect utility function now becomes:

$$V_k^{**} = U_k^{**}(p, B^*(w, L) - c_k) + v[G_k(c_k, \Sigma c_k, t_k^*(w, L)) - C_k].$$

The expression $[G_k(c_k, \Sigma c_k) - C_k]$ is the net collective goods accessible to A as a member of group k. Note that with full compliance, $C_k = 0$, and A enjoys the total available G_k . The monetary contribution c_k now itself becomes an instrument rather than a parameter, that is, A maximizes V_k^{**} with respect to c_k . Letting $B^\wedge = B^*(w, L) - c_k$, we have at interior solution: $(\delta V_k^{**}/\delta c_k) = (\delta U^{**}/\delta B^\wedge)(-1) + v[(\delta G_k/\delta c_k) - \delta C_k/\delta c_k] = 0$. We solve for c_k^* from:

$$(\delta U^{**}/\delta B^\wedge) = v[(\delta G_k/\delta c_k) + [3a(c_k - c_k^\wedge)^2]].$$

The first expression to the left, $(\delta U^{**}/\delta B^\wedge)$, is the private cost to A of increased c_k in terms of market goods; the expression to the right of the equal sign is the social benefit to A of added c_k , first by raising G_k and second by increasing the social reward (lessening the penalty) of good behavior, $[3a(c_k - c_k^\wedge)^2]$. Thus, there are now three optimization problems confronting agent A as a group member: first of V_k with respect to x to get V_k^* , and then of V_k^* with respect to m to get V_k^{**} and finally A has to optimize V_k^{**} with respect to c_k to get V_k^{***} . This latter optimization is peculiarly to social economics. Thus:

- (i) the more productive is c_k to collective good production (higher $(\delta G_k/\delta c_k)$), the higher is the monetary contribution by A to the group,
- (ii) the higher is the reward to good behavior relative to norm (a higher), the higher is the monetary contribution,
- (iii) the greater A values the collective good of the group (v higher) the higher is c_k ,
- (iv) the more A values his private welfare (higher $\delta U^{**}/\delta B^\wedge$), the less contribution A makes to the group.

V. Coherent Groups and Inter-Group Competition

Coherent groups are groups whose members are characterized by $c_k \geq c_k^\wedge$. Where the collective good of the group is related to inter-group competition, the more coherent group will outspend the less coherent group and thus more likely to emerge as the winner. The stake of the inter-group competition will determine how the members value their private and collective good. If the price of

defeat in the inter-group competition is the demise of the group and the enslavement its members, then even the deep preference $U(x)$ of A will be affected. One way to write the inclusive utility function here may be: $V = (1 - \nu)U(x) + \nu[G_k(c_k, \Sigma c_k) - C_k]$ where $0 \leq \nu \leq 1$, where $(1 - \nu)$ enters as a Hicks neutral parameter, and ν depends on how important is the stake in the inter-group competition. The higher the stake is, the more important is the collective good to A ($\nu \rightarrow 1$) and private welfare will recede as a goal. The following illustrates how a change in the stakes of inter-group competition pushed aside private preferences among the Romans.

[Box 1: Cincinnatus: When in 458 BC Rome became severely threatened from invasion by neighboring groups, Aequi and Sabines, the Roman Senate hurriedly offered Lucius Quinctius Cincinnatus the dictatorship of Rome (*magister populi*). This commission was for a period of six months and on condition that he raises and leads an army in defense of Rome. He was a farmer living in exile on the other side of the River Tiber but with recognized military past. Cincinnatus accepted the commission, raised an army and succeeded in repulsing the invasion in 17 days. Having done so, he promptly resigned his commission and returned to his farm. He repeated the cycle years later (438 BC) when Rome was once more threatened by a social disorder stemming from a conspiracy to install a king. Cincinnatus has since then been considered the icon of responsible authority. In this story, the Romani weakened by intra-group strife, saw the stakes of the inter-group competition spike to alarming levels; the likelihood of subjugation and enslavement confronted the Romani. The citizens of Rome agreed as it were to devalue their own private preferences in favor of collective good, survival. Collective survival required the contribution of the very man who the Romani had previously deprived of wealth and forced into exile as a result of intra-group skirmishes. Cincinnatus, a member of the Patrician party, had his own private quarrels with the other Roman faction, the Plebians, but which he set to defend the collective good. At that juncture, their $\nu \rightarrow 1$.]

The same $\nu \rightarrow 1$ dynamics explains the *Kamikaze* phenomenon in WWII Japan and the *suicide bomber* phenomenon among Radical Islam groups. In the above, $(1 - \nu)$ attaches to $U(x)$ as a Hicks-neutral parameter. This need not be so; $(1 - \nu)$ may attach to elements of x in a biased way instead so that as $\nu \rightarrow 1$, some elements of x lose importance while others gain. In case of a Cobb-Dougllass utility, we can have $U(x_1, x_2) = x_1^{\alpha(1-\nu)} x_2^{(1-\alpha)\nu}$. In this case, x_2 , which may be staples, gains while, x_1 , perhaps leisure goods such as tobacco, loses, in importance as $\nu \rightarrow 1$.

VI. Conclusion

This paper attempts to graft sociality and thus humanity into Economics. Following Akerlof and Kranton as well as the emerging Social Economics paradigm, we assume that the economic agent is member of a social group—a collection of agents that together provide a collective good, both tangible and intangible, for its members. The agent values the collective good which he cannot procure from the market nor from individual effort. One very basic example of a collective good is the production and nurture of offspring. The Neo-Classical *homo economicus* is in this model a member of a trivial group with exactly one member, himself, assumed to have no taste for collective goods ($\nu = 0$). To erect and maintain the collective good, the group requires abidance to a set of behavioral norms. In this paper we

focus only on a monetary norm. This norm is supported by a sanction regime which punishes breaches of these norms. Collective goods provision immediately confronts the group with a collective action problem which touches base with other social disciplines such as Sociology, Political Science, Anthropology and Evolutionary Biology. As a member of a group, the agent exhibits an inclusive utility (akin to Postlewaite's *reduced form utility*) consisting of the agent's private utility (Postlewaite's "deep preference") over private goods, $U(x)$, and the utility S he attaches to the group's collective good. The agent's access to the group's collective good is assumed diminished by penalties (such as limiting access) for breach of norms. We give S a simple specific structure that may apply to most groups. We focus on the case where members are allowed a trade off the extent of abidance against penalties associated with breach of the norm.

The inclusive utility of A is: $V = U(x) + vS$, where $v \geq 0$, is the weight A gives to his well-being as a member of group, S is defined as $S = (G(c, \Sigma c, t) - C)$; G is a function of the agent's monetary contribution c and the contributions of others, Σc , and A 's time input t , C is the sanction regime for violation of the monetary norm $c^\wedge$. The sanction regime is a penalty function, $C(c - c^\wedge)$. Our analysis is based on a specific form $C = -a(c - c^\wedge)^3$. A 's highest utility as a member of group k is given by V_k^{***} which is derived by a series of optimization: (i) optimization of V_k subject budget constraint given price vector p to get the indirect inclusive utility function $V_k^* = U^*(p, B) + vS$; (ii) optimization of V_k^* subject to $B = wm$ and $L = m + t$ to get the doubly indirect inclusive utility $V_k^{**} = U^{**}(p, B^*(w, L) - c_k) + v(G(c, \Sigma c, t^*) - C)$; and (iii) maximizing V_k^{**} with respect to c_k to get V_k^{***} . In the latter, the agent trades off the negative income effect of the contribution with the increased social approbation for increased contribution.

Agent A can now rank order all the K groups in the vicinity open to him and choose the one that gives him highest utility. A 's social group membership is thus rendered endogenous. The choice of market location is determined in analogous way. Many times the choice of market location and the choice of group are folded into each other. A male may opt out of a marriage with a perfectly agreeable female (that is to say, a potential group may fail to materialize) because of a disagreement about where to locate - the promise of a substantial collective good G possible in their union does not sufficiently compensate the male for his inferior private welfare accorded by (p, w) in the market location favored by the female.

Finally, inter-group competition and how it impacts behavior is treated by letting $1 \geq v \geq 0$ and defining the inclusive utility function at first approximation as: $V = (1 - v)U(x) + v[G_k(c_k, \Sigma c_k) - C_k]$. The group collective good G in this case has to do with competitive capacity which influences the likelihood of winning the inter-group race. The stakes in the race then determines the weight v . When the stakes are very high $v \rightarrow 1$ and private welfare exits as a consideration. This allows the deep utility to be affected by stakes in the inter-group competition. In this case, $(1 - v)$ enters as a Hicks-neutral parameter. But v can also enter as a biased parameter in elements of x in which case as $v \rightarrow 1$, some private goods gain and some lose in importance.

Social science consists a number of seemingly non-overlapping *magisteria*; isolated islands of assumptions, canons and regularities that hardly talk to each other. And though social reality is one and

entire, social scientists insist on explaining and deriving hypotheses and insights from separate slices of this reality. Economics is especially notable for imperiousness based on its marked preference for abstract formalisms. Herbert Simon attempted to bridge the chasm between Economics and the other social disciplines but his alternative paradigm remained on the margins of Economics because it was never packaged in a way that the economics profession could easily relate to. Facts on the ground have changed since then. The Kahneman-Tversky 'systematic bias' results have proven robust and have engendered Behavioral Economics whose advocates have won Nobel Prizes. The Akerlof-Kranton *Identity Economics* has been proposed and vigorously defended. Economics requires a rethinking in different dimensions but especially in Simonian sociality. This paper seeks to contribute to this emerging tradition.

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