1. INTRODUCTION

Let me make it clear from the outset that my main point is not either of the following: one, that there should be more women economists and research on "women's issues" (though I think there should be), or two, that women as a class do, or should do, economics in a manner different from men (a position with which I disagree). My argument is different and has to do with trying to gain an understanding of how a certain way of thinking about gender and a certain way of thinking about economics have become intertwined through metaphor – with detrimental results – and how a richer conception of human understanding and human identity could broaden and improve the field of economics for both female and male practitioners.

My thesis is that dualistic, hierarchical metaphors for gender have permeated the way we think about what economics is, and how it should be done, and that an alternative metaphor provides a more adequate base of understanding. I owe a debt to the pioneers of the rhetorical understanding of economics, Donald McCloskey and Arjo Klamer, for...
creating a niche in which the discussion of language and metaphor is possible (though still not entirely respectable) among economists. I warn sympathizers of this school, however, that I intend to use this niche for subversive purposes (Solow, 1988) – to tear down as well as to build up and improve.

2. THE DEFINITION OF ECONOMICS IS BASED IN DUALISTIC GENDER METAPHORS

Definitions

As the concepts of metaphor and gender are not in the typical economist's "toolbox," and the definition of economics may be a point of contention, I must start with brief definitions of my "variables."

"The essence of metaphor is understanding and experiencing one kind of thing in terms of another," as George Lakoff and Mark Johnson say in their work *Metaphors We Live By* (1980, p. 5). According to Lakoff and Johnson, and numerous other researchers in the areas of cognition, philosophy, rhetoric, and linguistics, metaphor is not merely a fancy addition to language, but is instead the fundamental way in which we understand our world and communicate our understanding from one person to another (e.g., Grassi, 1980, cited in Weinreich-Haste, 1986; Margolis, 1987; McCloskey, 1985; Ortony, 1979). Lakoff and Johnson give many examples of how the language we use reflects metaphorical elaborations of more abstract concepts on the foundation of basic physical experiences. Our perception of "up/down," for example, forms the basis for "good is up, bad is down" and "reason is up, emotion is down." Richer meanings can be found in more complex metaphors such as "argument is war" (reflected in language like "win," "lose," "defend," "attack"), "argument is a journey" (e.g., "step by step," "arrive at conclusions"), or "argument is a building" (e.g., "groundwork," "framework," "construct," "buttress," "fall apart"). These metaphors affect our understanding and our action; for example, if we perceive ourselves as engaged in an argument, how we interpret what we hear and how we respond depends in good part on which metaphor we use. Metaphorical understanding is also culturally variable. For example, there could exist another culture that uses the metaphor "argument is dance" and so uses language of esthetics, style, and synchronization. All of these examples are given by Lakoff and Johnson. Echoes of a similar understanding of cognition and communication can be found in works that speak about cognition in terms of "webs of connection" (C. Keller, 1986), "patterning" (Margolis, 1987; Wilshire, 1989), "cognitive schema" (Bem, 1981), gestalts, or analogies, instead of "metaphor." I will use the word "metaphor" loosely, to mean all these things.

I use "gender," as do most feminist scholars, to refer to the patterning a culture constructs on the base of actual or perceived differences.
between males and females. Gender is then the metaphorical connection of nonbiological phenomena with a bodily experience of biological differentiation. One of the major breakthroughs in feminist analysis has been the discovery that many (if not most) of the traits assumed to be “essentially” male or female related, in a biological sense, actually have very strong cultural components. Take, for example, the idea that men are more suited for intellectual work than are women. The smaller size of the female brain was taken as scientific proof of intellectual inferiority in the nineteenth century (Bleier, 1986). While the lack of connection between size and power has since removed this craniometric argument, the undermining of such supposed biological proofs does not necessarily carry with it a cessation of gender attribution. The cultural salience of the idea of men as intellectual and women as emotional may persist in spite of a lack of supporting theory and even in the face of evidence to the contrary. To say something has the masculine gender, then, is not to say that it necessarily relates to intrinsic characteristics of actual men, but rather to say that it is cognitively (or metaphorically) associated with the category “man.” A male person is biologically masculine; a pair of pants (as on the stick figures that adorn restroom doors) is only metaphorically so; an angular abstract shape may also be understood through the metaphor of masculinity, as contrasted to a curvy abstract shape. The attribution of masculinity to pants or angular shapes clearly reflects an imposition of a tendency to organize what we see according to gender, rather than a perception of any femaleness or maleness inherent in the object itself. There is general agreement within a particular culture, at a particular time, in a particular context, about what objects, activities, personality attributes, skills, etc. are perceived to be masculine, which are understood as being feminine, and which are more or less ungendered. As the functioning of gender categories varies historically and cross-culturally, I need to clarify here that when I talk about “our” conceptions of gender, I will be referring, with all due apologies to non-Western readers, to dominant conceptions held in the modern Western and English-speaking world. When I refer to “masculine” or “feminine” traits, I do not mean traits that are essentially “more appropriate for” or “more likely found in” persons of one sex or the other, but rather traits that have been culturally, metaphorically gendered.1

1. The question of what significance to give to biological differences between the sexes is currently being debated in the feminist literature. On one side are those who tend to minimize the difference between the sexes, looking to a vision of “androgynous” humans who take on traditionally masculine or feminine traits as needed. On the other side are those who do not downplay difference, but rather emphasize the need for “revalorization” (i.e., increasing the perceived social value) of distinctly female bodily experiences such as childbearing. See Nelson (1992) and citations therein. As the issues involved tend to be subtle as well as politically charged (Ruddick, 1987), the position I take in this article is one of simply withholding judgment about any claimed link between gender categories and biological nature.
The dominant conception of gender is as a hierarchical dualism. That is, to the metaphorical connections outlined by Lakoff and Johnson of up-in-center-control-rational we can add "superior" and "masculine," and to the connections of down-out-periphery-submission-emotional we can add "inferior" and "feminine." I will have much more to say on this subject later in the article. To a reader who would question the asymmetry of what I argue is the dominant conception of gender (who would, perhaps, prefer to think of the actual social meaning of gender differences in terms of a more benign complementarity), I need only point out some obvious manifestations of asymmetry in the social domain. Rough "tomboy" girls are socially acceptable and even praised, but woe to the gentle boy who is labeled a "sissy"; a woman may wear pants, but a man may not wear a skirt. The hierarchical nature of the dualism – the systematic devaluation of females and whatever is metaphorically understood as "feminine" – is what I identify as sexism. Seen in this way, sexism is a cultural and even a cognitive habit, not just an isolated personal trait.

Turning to the definition of economics, the diversity of endeavors undertaken by economists suggests that there is no easy, definitive description of what economics is, and what projects are outside its realm. I will limit my comments to mainstream North American economics (often referred to as "neoclassical," in a broad sense) as I am not myself familiar enough with other branches such as Marxism or modern institutionalism. Clearly, the central concept in mainstream economics is that of "the market." On this, even economists as diverse as Robert Heilbroner and Gary Becker agree: Heilbroner traces the historical beginning of the field of economics to the ascendance of the market system over systems of "custom or command" (1986, p. 20); Becker simply carries this conception to its logical extreme in seeing markets in all aspects of human behavior (1976). The idealized market is a place where rational, autonomous, anonymous agents with stable preferences interact for the purposes of exchange. The agents make their choices in accordance with the maximization of some objective function subject to resource constraints, and the outcome of their market interactions is the determination of an efficient allocation of goods along with a set of equilibrium prices. The prototypical market is one in which tangible goods or labor services are exchanged, with money facilitating the transactions, and in which the agents are individual persons. The prototypical scholarly work in economics is an article that studies market behavior using sophisticated mathematics to formalize the model in a "theory" section, accompanied by econometric analysis of data in an "empirical" section. Few works in economics follow the prototype exactly – the "agent" may be a household, firm, or even a country, for example, instead of an individual, or the empirical work may be left "for further research" or be ignored entirely – but for a work to be accepted as "being economics,"
it must bear a family resemblance to the core model. This definition of economics is wide enough to include research on dual labor markets, intrafirm behavior, satisficing, bargaining, cooperative aspects of markets, the role of government, aspects of finance, the distribution of wealth, human capital, fertility, and many other areas – but some areas are considered more central than others. The less a work has in common with the prototype, the more it will be considered to be "on the fringe" or "not economics at all." Discussions of comparable worth, for example, violate the centrality of the idea of allocation by market forces, and thus the subject is usually demoted to the realm of politics. Articles that consist of "just words" are rarely recognized as "economics" – you might see them in the *American Economic Review* as presidential addresses or in clearly suspect journals such as those that deal with history or philosophy.

The definition of economics is not immutable. Some working economists may, of course, see themselves as working in an age-old process of creating ever-closer approximations to Truth. The idea that economics is socially constructed should not, however, be novel to anyone with an interest in methodology or the philosophy of science or who ever heard of Thomas Kuhn (1962). In the words of economists Bruce Caldwell and A. W. Coats (1984), "... reality is everywhere dense. Observation thus requires selection. All description is from a point of view." Economics, as a human endeavor, reflects human limitations in understanding a reality that is always just beyond our grasp. Economics, as a social endeavor, reflects some points of view, favored by the group that makes the rules for the discipline, and neglects others.

My argument begins with the point that while diversity does exist around the fringes of economics, the central program of economics is metaphorically linked with the hierarchical, dualistic conception of gender and a "privileging" of a particular conception of masculinity.

**Economics as Embedded and Distinct**

The role of the conception of gender as a hierarchical dualism in the construction of economics can be elaborated on two different margins: the way in which economics is defined as being embedded in a multitude of projects that together constitute "science," and the way in which economics is differentiated from other scientific disciplines, and especially the other social sciences.

The historical and contemporary links between thinking about science and thinking about gender have been explored in a plethora of recent works by feminist scholars, including the books *Reflections on Gender and Science* by Evelyn Fox Keller (1985) and *The Science Question in Feminism* by Sandra Harding (1986), as well as numerous articles and
anthologies (Bleier, 1986; J. Harding, 1986; S. Harding and O'Barr, 1987). Harding argues that

Mind vs. nature and the body, reason vs. emotion and social commitment, subject vs. object and objectivity vs. subjectivity, the abstract and the general vs. the concrete and particular— in each case we are told that the former must dominate the latter lest human life be overwhelmed by irrational and alien forces, forces symbolized in science as the feminine. All these dichotomies play important roles in the intellectual structures of science, and all appear to be associated both historically and in contemporary psyches with distinctively masculine sexual and gender identity projects. (1986, p. 25)

That is, science has been socially constructed to conform to a particular image of masculinity. A parallel idea of dualism, though with less emphasis on gender, can be found in Donald McCloskey's work on The Rhetoric of Economics. McCloskey asserts that "modernism" stresses the strict demarcation between scientific and humanistic, fact and value, truth and opinion, objective and subjective, hard and soft, rigorous and intuitive, precise and vague, male and female (1985, p. 42).

The connection of science with masculinity is blatant in some of the language and metaphors used by scientists to describe their endeavor. For example, an early Secretary of the Royal Society stated that the intent of the Society was to "raise a Masculine Philosophy . . . whereby the Mind of Man may be ennobled with the knowledge of Solid Truths" (E. Keller, 1985, p. 52). The relation of masculine science with feminine nature is often expressed in terms of domination, as in Francis Bacon's words, "I am come in very truth leading to you Nature with all her children to bind her to your service and make her your slave" (E. Keller, 1985, p. 39). The experience of sexual intercourse from the male point of view is often reflected in historical and contemporary language with imagery of penetration, probing, and piercing of nature, and the "overpowering rush" of scientific advance. While at times the metaphors suggest a loving intercourse, or at least a willing seduction of nature, at others times the combination of imagery of domination and of heterosexual intercourse suggests rape (E. Keller, 1985, chap. 2; Weinreich-Haste; Easlea, 1986).

The definition of economics is embedded in the definition of modern science, but economics is also differentiated from science-in-general. As social science, economics takes a "feminine" role vis-à-vis mathematics and the physical sciences. Human behavior is a "softer" subject than abstract math or the natural world, less amenable to quantitative (as opposed to qualitative) description or formulation in terms of "laws." This presents a problem for those economists who, perhaps to maintain a clear-cut gender self-image, need to see their work as consistently
masculine. Consider the language used in the statement of purpose of the Econometric Society, which can be found inside the back cover of every issue of *Econometrica*:

> The Society shall operate as a completely disinterested, scientific organization, without political, social, financial or nationalistic bias. Its main object shall be to promote studies that aim at the unification of the theoretical-quantitative and the empirical-quantitative approach to economic problems and that are penetrated by constructive and rigorous thinking similar to that which has come to dominate in the natural sciences.

Translated, I suggest that this says, “Hey guys, we want to penetrate and dominate, too!”

Among social sciences, the masculine identity of economics is more secure. A favorite pastime of economists is dumping on, expressing bewilderment about, or ridiculing the lack of “rigor” in the other social sciences. Classifying a work as “sociology” is an especially quick and sure-fire way of silencing it by removing it from the territory of serious conversation of economists. The hierarchical relations between the social sciences is especially evident in the ranking of journals within academic culture: having an article accepted for publication in an economics journal seems to be considered a coup for a sociologist or political scientist, but a publication in a political science or sociology journal by an economist (or in a sociology journal by a political scientist) is no harbinger of professional advancement. It may even be seen as an embarrassment.

Why is economics perceived as more masculine? One reason may be that economics is blessed with a natural unit of measure – money – which makes quantitative analysis easier. Another may be that economics as a profession has managed (whether by conscious intent or, more likely, by subtle gender structuring) to hold the line more strongly against the influx of women. Marianne Ferber (1990) notes that the fields of sociology, psychology, anthropology, and political science all have a substantially higher percentage of women among new Ph.D.s than has economics. One would think that this might be tied in with the first reason, in that women in general tend to have less mathematical training than men. However, Ferber also points out that mathematics also has more women as a percentage of new Ph.D.s than economics.

I suspect that other reasons going beyond the association of mathematics and masculinity can be found by looking at more subtle gendered aspects of the differentiation of economics from the other social sciences. It has been said, for example, that economics is about how people make choices, while sociology is about why people have no choices to make. The economist’s conception of a person as an autonomous agent (consistent with the centrality of the market metaphor) is quite different from the sociologist’s idea of persons as acting out social roles (consistent with
a central metaphor of functional society). Economics deals with concepts of the individual, activity, choice, and competition that are identified in our culture with masculinity; the domain of sociology might be seen, from the economist's point of view, as involving the more feminine-identified concepts of the collective, passivity, determinism, and cooperative social relations. This is not to say that sociology is immune from criticism that within its own structure it contains masculine biases, but only that vis à vis economics it takes the more "feminine" role.

Have the properties associated with the "masculine" identity of economics served any useful purpose? I believe that they have and do not want to leave the impression that I consider neoclassical economics to be evil incarnate. The emphasis on rigor can be seen as an attempt to avoid sloppiness, the use of mathematical formalism as a way of catching errors that might go unnoticed in ordinary language, and the emphasis on self-interest and competition as a way of avoiding a mushy sentimentality. So far, so good. But is sloppiness the only alternative to rigor? Empty rhetoric the only alternative to precise mathematics? Is mushy sentimentality the only alternative to heartless competition? Within the dualistic metaphors for gender and economics, these are the only alternatives, and a "less masculine" economics could only be "emasculated." However, metaphors, while highlighting certain aspects of experience, hide others. I argue that the simple dualistic model of gender hides very important aspects of reality; a more encompassing way of thinking about gender can contribute to a definition of science and of economics that is more fully human, rather than distinctly masculine.

3. "NEW METAPHORS HAVE THE POWER TO CREATE A NEW REALITY"

Thinking about Gender and Value

As long as masculinity is associated with superiority, the idea that economics could be improved by becoming less one-sidedly masculine makes little sense. But can the metaphorical associations between masculine/feminine and positive/negative be broken? Experience suggests that metaphors are not immutable; in fact the phenomenon of discovery in science (as well as the power of certain kinds of poetry) has sometimes been attributed to the creation of a new metaphorical association (Ortony, 1979).

One way of changing the understanding of gender and value might be to assert simply that "feminine is good, too." While one might be able to gain some ground by this route, looking at the roles that stereotypically feminine concepts and traits might play in a different defi-

nition of knowledge, sooner or later it becomes clear that some of these factors are quite unattractive. For example, as mentioned, McCloskey (1985) contrasts the quality of "precision," associated with maleness, with "vagueness," associated with femaleness. Can "vagueness" really be elevated to the status of a virtue?

Another way of challenging the association of masculinity with superiority and femininity with inferiority might be to decide to do away with gender associations entirely. Perhaps we can just talk about good and bad ways of doing economics, and leave gender out of the discussion. While some may hope for such a case as an ultimate goal, it seems premature to throw away gender categories if they still are actively used as cognitive and social organizers. The line between overcoming gender distinctions and simply suppressing (or, the more psychoanalytic might say, repressing) them is one that can be too easily crossed.

I propose here an analysis that retains both culturally shared gender constructs and many common judgments about what is desirable in economics. In particular, I propose that we accept that terms like "hard," "logical," "scientific," "precise," are both masculine-identified and describe legitimate goals of economic practice. But I also propose that we think of gender and value as orthogonal dimensions and actively seek out what has been excluded from economics by the concentration on masculinity. This exercise is not definitive of gender in any sense, nor does it cover every possible term that could be used to describe economics. The idea of orthogonality is simply proposed as an alternative metaphor to the usual hierarchical dualism. As with any metaphor, it hides as well as exposes some aspects of the reality it is meant to describe.3

If we draw a picture of orthogonal gender and value dimensions, like this,

![Orthogonal Gender and Value Dimensions](image)

it is immediately obvious that two categories have been left out of the usual, masculine-up-positive and feminine-down-negative, metaphor.

3. By describing "hard," "logical," etc., as culturally defined as masculine, I by no means mean to imply that, for example, women are less logical than men. (See the discussion of gender in Section 2.) Also, while it is possible that the association of these terms with gender categories is stronger in the thinking of some individuals than in others (Bem, 1981), this does not negate the idea that these associations are culturally dominant.
The old metaphor has room neither for positive femininity or negative masculinity. Yet, with some thought, these gaps can sometimes be filled in.

As an example, take the idea that economic argument should be "hard," in the sense of "strong." The feminine-negative correspondent term, indicating a lack of hardness or strength is "soft," in the sense of "weak." This fills up one diagonal of the diagram:

\[
\begin{array}{c|c}
M+ & F- \\
\hline
\text{strong-hard} & \text{weak-soft} \\
\end{array}
\]

But hardness can also mean a lack of flexibility, rigidity, a lack of malleability needed to adapt to changing conditions. "Softness" also has other connotations besides weakness. The aspect of feminine "softness" that needs elevation here is not weakness, but rather flexibility or resilience:

\[
\begin{array}{c|c}
M+ & F+ \\
\hline
\text{strong-hard} & \text{flexible-soft} \\
M- & F- \\
\text{rigid-hard} & \text{weak-soft} \\
\end{array}
\]

Each of the positive terms now in the diagram can be seen as one-half of a necessary balance to achieve a "durable" argument. This suggests that while economics should be masculine-hard, it should also be feminine-soft (each understood in their positive sense). It suggests that rigidity is a potential hazard for a discipline that concentrates too much on the achievement of masculinity rather than the achievement of good argument.4

The association of economics with formal, logical reasoning can be addressed in the same framework. In the simple dualistic view, reason is conceived of as identical with formal logic and masculinity; any exposition not conforming to the laws of logic is identified as being illogical and, by implication, inferior. Economics seminars, for example, often

4. I have elsewhere described in more detail the role of relationships of "complementarity," "lack," and "perversion" in the structure of this diagram (Nelson, 1992). The formalization is omitted here; the point is simply to suggest that important insights might be hidden by the usual masculine-positive, feminine-negative dualism.
showcase a presentation of a formal model and its formal implications, and bring in as an aside an explanation of the "intuition" behind the result. These "intuitive" explanations (quite in contrast to the alternative meaning of "intuition" in terms of a flash of inspiration) often include long and elaborate chains of verbal reasoning, carefully constructed analogies, and concrete examples. These explanations, however, are considered "softer" than the formal models and, like the proverbial "feminine intuition," unreliable and unrelated to true rationality. A more sophisticated idea of what it means "to reason" and "to know," suggested in the works on metaphor and cognition previously cited, identifies reason, instead, with a complementarity of logic, on the one hand, and reasoning by other means, such as analogy or pattern recognition, on the other. For example, Howard Margolis (1987) expresses cognition as the combination of "reasoning why," or step-by-step critical analysis, with "seeing that," which involves a no less important perception of the bigger pattern. Georgescu-Roegen's (1971) distinction between "arithmomorphic" and "dialectical" concepts is helpful in suggesting terms for the missing feminine-positive, masculine-negative diagonal in the gender value compass. He calls "arithmomorphic" those concepts that can be manipulated by formal logic. Most of our thoughts, however (he argues), are concerned with forms and qualities and concepts that overlap with their opposites, and dealing with these requires "dialectical" thought. The "position that dialectical concepts should be barred from science because they would infest it with muddled thinking" he labels "arithmomania" (1971, p. 52). Such a richer understanding of the nature of rationality can be summarized in a gender-value diagram as

<table>
<thead>
<tr>
<th>logical reasoning</th>
<th>&quot;dialectical&quot; reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;arithmomania&quot;</td>
<td>illogic</td>
</tr>
</tbody>
</table>

The extensive verbal explanations economists often call "intuition" are examples of dialectical reasoning, not merely cases of degraded or diluted logic. The identification of reasoning with logical reasoning alone

5. Georgescu-Roegen's examples of dialectical concepts include "good," "justice," "likelihood," and "want" (1971, p. 45). Another example of the contrast between logical and dialectical thinking is given by Howard Margolis's discussion of the meanings of the word "or" (1987, p. 94). In formal logic, "or" means "either or both, and not neither." But in common usage, its meanings are contradictory: in "Cream or sugar?" it means "either, both, or neither"; in a judicial decision of "$100 or 10 days" it means "either, but not neither and not both"; in a waiter's question of "soup or salad" it means "either or neither, but not both." Yet, in context, these are all meaningful and reasonable statements. It is hard to imagine any discussion of economic issues that would not rely heavily on such understanding of context.
ends up, in Georgescu-Roegen's words, "giving us mental cramps" (1971, p. 80). The usefulness of two-dimensional over one-dimensional thinking comes from the exposition of relationships that are hidden by the usual pairing of reason-masculine-superior with intuitive-feminine-inferior. That simple dualism can be seen to involve the too-easy collapsing of reason into logic and the false identification of other valid forms of reasoning with illogic.

Similarly, the idea that there are different kinds of knowledge can be pictured as

<table>
<thead>
<tr>
<th>scientific</th>
<th>humanistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>inhuman</td>
<td>unscientific</td>
</tr>
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</table>

where I use the term "scientific" in the sense of instrumental, technological ("how to") knowledge, systematically gathered from observation of phenomena "external" to the researchers own consciousness, and "humanistic" in the sense of affective, introspective knowledge focusing on the "why" and "for what purpose" questions of human existence. Humanistic knowledge without at least a touch of the practical, outward-focusing approach I have labeled "scientific" is at best sterile (because it can have no effect on what actually happens) and at worst the ravings of a lunatic (if unique to a single person). But the elevation of scientific knowledge (implicit in the project of "demarcation" of science) without attention to human values could very well lead to the very efficient destruction of life on earth.

The emphasis on mathematics as the key to "rigorous" understanding in economics, and the downplaying of language as having any importance to the business of knowledge seeking, can be understood using the diagram:

<table>
<thead>
<tr>
<th>precise</th>
<th>rich</th>
</tr>
</thead>
<tbody>
<tr>
<td>thin</td>
<td>vague</td>
</tr>
</tbody>
</table>

The left side highlights aspects of mathematical language and the right side aspects of common language. The advantage of use of mathematics is the precision it supplies, as opposed to the vagueness or ambiguity that may be associated with words in all their diverse meanings. On the other hand, pure mathematics is precisely content-free; the application of mathematics to problems of human behavior can come only through the explanation of mathematical formulas as metaphors for some real
world phenomenon, and this drawing of analogies involves the use of words. In the process, meanings beyond that immediately present in the mathematical analogy will also be suggested. Mathematics can certainly be helpful in overcoming the failings of imprecise words, but, if concentration is put on maintaining the gender boundary rather than on recognizing the value boundary, the failure of thin, empty mathematics may sneak in unobserved. Empty math, or "rhetorical math" in the pejorative sense, is described by Philip J. Davis and Reuben Hersh (1987) as math that neither brings forth any new mathematical idea nor "leads back to the phenomenon being modeled" (p. 58). "Precision" is a virtue in economics; this analysis suggests we also consider "richness" to be good, too, and furthermore that we recognize the pursuit of precision alone, without richness, as a vice.

Gender, Value, and "Economic Man"

While the previous analysis can aid in developing new and broader understandings of rationality, knowledge, rigor, and numerous other concepts that come into play in the definition of economics, this section applies the expanded metaphor for gender and value to the concept of individual agency. The point at issue here is not whether the assumption of individual agency can lead to fruitful hypotheses: there is no doubt that the assumption of "economic man" has been fruitful, especially as contrasted to the alternative hypotheses that human behavior is completely socially determined, as assumed in my caricature of sociology, or that it is materially determined, as in some variants of Marxism or perhaps in sociobiology. The problem is that when we limit the choices to an autonomy/determinism dualism, we limit ourselves to playing with only half a deck.

The conception of human nature underlying neoclassical economics is of an individual human as radically separate from other humans and from nature; the emphasis is on separation, distance, demarcation, autonomy, independence of self. *Homo economicus* is the personification of individuality run wild. "Economic man," the "agent" of the prototypical economic model, springs up fully formed, with preferences fully developed, and is fully active and self-contained. He has no childhood or old age, no dependence on anyone, no responsibility for anyone but himself. The environment has no effect on him, but rather is merely the passive material, presented as "constraints," over which his rationality has play. He interacts in society without being influenced by society: his mode of interaction is through an ideal market in which prices form the only, and only necessary, form of communication. 6 *Homo economicus*

6. I use the pronoun "he" intentionally: the gender biases in economics would by no means be overcome by replacing or alternating with the pronoun "she," in an attempt at cheap gender neutrality. See Frank and Treichler, editors, 1989, for the difference between gender-neutral and nonsexist language.
is the central character in a romance of individuality without connection to nature or to society.

The idea that this conception of selfhood as radically separate from our fellow humans could be misleading and indeed dangerous is not unique to feminist scholarship. The way in which it leads us to ignore the sociality of our thought and existence is pointed out by, among others, McCloskey and other scholars who investigate the role of rhetoric (McCloskey, 1985). The way it causes us to neglect the physical basis of our thought has been pointed out by Lakoff and Johnson, who stress the "bodily basis of meaning, imagination and reason" (Johnson, 1987). Not all criticism of this solipsistic view of individuality is this recent: Alfred North Whitehead wrote about the dehumanizing and self-defeating aspects of the modernist view in 1925.

Recently, however, a rich line of feminist scholarship developed that has focused on the gendered meaning of the Cartesian view. The relation of gender to the "privileging" of separation over connection has been traced through history by Sandra Harding (1986) and Susan Bordo (1986); through psychological development by Nancy Chodorow (1980); through personal ethical development by Carol Gilligan (1982, 1986); through myth and religion by Catherine Keller (1986). The projection of autonomy onto masculinity and connection to nature and society onto femininity is "embarrassingly empirical," to borrow a phrase from Catherine Keller (1986, p. 201). Abstract philosophy connects with gendered experience in everyday distinctions between who does the thinking versus who does the dishes; who writes the journal articles versus who writes the Christmas cards; the man who envisages "man" as individual and autonomous versus the woman who changes her name to Mrs. John Jones when she marries. What could be a recognition of physical embodiment and social connectedness, as well as individuality, within each person becomes a negative complementarity. The male's "transcendence" of nature and society is made possible only through the subjection of the female to full-time maintenance of the social and physical connections that are, after all, indispensable for human existence (C. Keller, 1986; Fee, 1983).

To this familiar dualistic contrasting of individual to social identity, and individual agency to social or material determinism, the scholarship on gender adds complementary contrasts of connection and isolation, "influenced" action and radical autonomy. The various conceptions of human nature, particularly in regard to the relation of the self to other humans and to nature, can be encompassed in:

<table>
<thead>
<tr>
<th></th>
<th>individuated</th>
<th>connected</th>
</tr>
</thead>
<tbody>
<tr>
<td>isolated</td>
<td></td>
<td>engulfed</td>
</tr>
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That is, the conventional idea of identity stresses the northwest-southwest-east diagonal: the lack of any individuality or differentiation implies the dissolving or engulfing of the individual into the larger whole of nature or society. The gender connotations are "masculine" for the positively valued individuality and "feminine" for the undifferentiated state. But differentiation can go too far, into radical separation or isolation. And the message of a certain strain of current feminist scholarship is that connection and relation do not necessarily imply the dissolving of individual identity. The positive complementarity of the upper two terms in the diagram refers to the recognition of selfhood as including both individuality and connectedness or relatedness. Or, in Alfred North Whitehead's words, we are "organisms" who require "an environment of friends" (1925, p. 206). The boundaries between oneself and others and oneself and nature are not strict, but neither does this imply that one is therefore swallowed up. The separation of the gender/value dimensions creates a way of seeing that individuality is not definitive of the human condition.

Similarly, for the question of the locus of decision-making, the separation of the dimensions suggests alternatives to individual agency and social or material determinism:

<table>
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<tr>
<th>individually agenic</th>
<th>influenced</th>
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<tbody>
<tr>
<td>radically autonomous</td>
<td>determined</td>
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The radically autonomous decision-maker admits no influence from society or nature: as the sociopath whose psychological development lacks the interactive aspects shared by the rest of society, or the anorexia nervosa patient who claims that eating is a "lifestyle" habit that she can do without. Or Economic Man, whose behavior can be described purely in terms of individual preferences, without recourse to any description of social context, preference formation, or physical need. The feminist approach to economics that I am suggesting is by no means only "more sociological" than current economics, if what is meant by that is a turn to analysis assuming that agency lies entirely outside the individual. It means rejecting both radical autonomy and social determinism as paradigmatic stand-alone models of agency.

4. GENDER, VALUE, AND THE DEFINITION OF ECONOMICS

If we were to change the central character in our economic story from the radically autonomous, isolated agent, who is unneedful of social contact and uninfluenced by physical concerns, to the socially and materially situated human being, what effect would this have on the definition of economics? As pointed out earlier, the central concept of modern economics is that of the market, the locus of exchange activity.
One direction might be to promote the study of markets with an eye to their social and institutional character, instead of always starting from the view that they are more or less corrupted versions of idealized (perfectly competitive, perfect information, etc.) markets. Arjo Klamer’s (1989) project on “interpretive” economics, for example, captures some of this approach. Another direction is suggested by the dimension of physical connection. Kenneth Boulding has remarked on the loss of an ecological understanding of economics, as concerned with the biosphere. He argues that part of what he sees as the “failure” of modern economics results from the loss of an earlier understanding of economic life as being both about “how society was organized by exchange” and about “how society was ‘provisioned’” (Boulding, 1986).

An understanding of economics as centrally concerned with provisioning, or providing the necessaries of life, has quite different implications from the idea of economics as centrally concerned with exchange. In the exchange view, the primary distinguishing characteristic of a good is whether or not it can be exchanged on a market, not what human needs or wants it may satisfy or what role it may play in a more global, ecological system. The choice of goods depends only on abstract preferences. This radical conceptual separation of humans from their physical environment implies, among other things, sterility of economics about questions of human welfare. In the provisioning view, on the other hand, there are qualitative differences between different goods and services. Cooter and Rappoport (1984) explain how the pre-1930s material welfare school considered needs for survival and health to be more economic than desires for goods more at the luxury end of the spectrum. While the dividing line between “needs” and “wants” may be far from distinct (the concept of “need” being clearly in Georgescu-Roegen’s “dialectical” category), the admittance of a category of “need” implies the recognition of an inescapable dependence of human bodies on their physical environment, which is lacking in the modern view. The tie of the depreciation of need to the depreciation of the feminine has been expressed by Muriel Dimen (in another context) as “Wanting, associated with adulthood, active will, and masculinity, is better than need, linked to infancy, passive dependency, and femininity” (1989, p. 42).

The primacy within market-oriented economics of the focus on “want,” to the neglect of any consideration of the provisioning-related concept of “need,” suggests the following gender/value diagram:

<table>
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<th>ability to choose actively</th>
<th>ability to discern what is needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>unlimited wants</td>
<td>neediness</td>
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</table>
The masculine quadrants suggest interpretation of the world as a world of scarcity, hostile to human purposes, or the standard Lionel Robbins definition of economics as the study of human choices in context of unlimited wants and scarce resources (1935). The feminine-positive quadrant, missing from economic analysis, is the sensitivity about oneself and one’s relation to the environment that allows one to determine what is useful, not merely what gives the highest rating on some immediate pleasure/pain calculus. Anyone who has been a parent should recognize the skill involved in this activity in discerning the needs of one’s children: all I suggest is that we also focus such “maternal thinking” (the term is Ruddick’s, 1989) on ourselves. Note also that while resources are by definition scarce in relation to wants conceived of as unlimited, resources might (still) be abundant in relation to human needs. The closest work in economics I have seen to this conception of how humans are actually involved in their natural environment is Amartya Sen’s notion of “capability” (“a feature of a person in relation to goods,” 1984, p. 316). Without this understanding of material connection, we have the scandal of professional economists working out endless theoretical yarns about preferences, while a majority of people in the world live in a state of neediness apparent to any observer who has not lost her or his humanity. With an understanding that incorporates both choice and material connection, comes the possibility of abundance and a hospitable nature, if we choose wisely.

In highlighting the connections as well as the distinctions between humans and between humans and nature, does a wider, “encompassing” view of economics then imply that economics has to be about “life, the universe, and everything”? I do not think so. The relationship of economics with other social sciences could be closer and more cooperative, of course, and based on shared understanding of the multiple dimensions of human experience (rather than imperialistic, based on imposition of the model of radical separativeness). But economics need not be undifferentiated. As a practical matter, I tentatively suggest that our discipline take as its organizational center the down-to-earth subject matter of how humans try to meet their need for material goods and services. This core corresponds better to the common sense use of the term “economics” (and to the etymological roots of the term in the Greek words meaning “household management”) than does the present central concept of the idealized market. This core grounds the discipline both socially and materially. Economic provision becomes the center of study, whether it be through market, household, or government action, or whether it be by symmetric exchange, coercion, or gift. This definition dethrones choice, scarcity, and rationality as central concepts, and relegates them to the status of potentially useful tools. It brings previously taboo or fringe subjects like power and poverty into the core.
5. IS GENDER REALLY SO IMPORTANT?

This article is not, of course, the first to suggest that economics should be flexible, intuitive, humanistic, and rich, as well as hard, logical, scientific, and precise; or that the notion of Economic Man is seriously deficient as a model of actual human behavior in relation to nature and society; or that economics should concern itself more with concrete issues of provisioning and less with abstract analysis of hypothetical choice. What this article does suggest, perhaps for the first time, is a systematic basis for the biases that have grown up in economics: nobody wants to be called a sissy.

As a devil's advocate position, suppose we argue for the moment that gender, or more specifically, the protection of a particular "masculine" conception of economics, is not an important factor in these internal debates within the discipline. Suppose that these are all real debates, but I am making a mountain out of a molehill by drawing out masculine/feminine associations. The major counter-argument to this comes directly from the sociology of knowledge: does not this argument also suggest that the exclusion of women from economics is of negligible importance? If sexism, on the social and intellectual levels, is simply incidental and suitable as the subject of drawing- (or seminar-) room jokes, then the debate about the definition of economics can presumably be carried on without any discussion of gender and even entirely by men. If on the other hand sexism (manifested, among other ways, in the exclusion of women from the community of scholars who define economics) is a pervasive social fact, is it not likely that it has had some influence on the construction of the intellectual foundations of the discipline? Note that my argument does not rest, as does Donald McCloskey's (1988), on the claim that women think differently, and so would "bring" something different to economics. Most female economists I know do research that is indistinguishable from that of their male colleagues. Rather, I claim that it is systematic sexism – the systematic devaluation of women as part of a systematic devaluation of "the feminine" on many levels – that is the most important link between women and the disparaged ways of knowing. The historic exclusion of women, combined with evidence of the one-sided recent development of economics and the (limited) proof-texting that I engaged in earlier (with quotes from Bacon and Econometrica), is, I believe, at least suggestive of the idea that the protection of the "masculinity" of economics has played a role in the construction of the discipline.

7. See, for examples of some of such points raised within the mainstream, addresses by American Economic Association presidents in Gordon (1976) and quoted in Heller (1975), or the original statement of principles of the American Economic Association – later rescinded (Ely, 1936). Articles and books expressing these points of view from somewhat outside the mainstream are legion.
It might also be argued that while gender is important, other social and conceptual ways of dividing the world – such as white/nonwhite – might also be influential. I take no issue with this argument. Sandra Harding (1987) pointed out that interesting similarities can be found between feminist analysis and work on an “Afro-centered” view by the economist Vernon J. Dixon (1970, 1977). It may be that the defense of the privileged status of masculinity is only a part of a defense of privilege on many fronts.

The direction I suggest for economics is “feminist” in that it revalues the concepts metaphorically associated with femaleness. It is, however, distinct from what some might call a “feminine” approach to economics, in which one simply emphasizes those stereotypically feminine characteristics that have been neglected in the current construction of science. Such an approach runs the risks of reifying masculine/feminine categories, glorifying feminine-negative aspects, neglecting the task of distinguishing the positive and negative aspects of masculinity, and, just like the current masculine construction of economics, viewing economic phenomena through one lens when encompassing vision would be more appropriate. For example, it might be considered more “feminine” to model a particular phenomenon in terms of its aspects of cooperation rather than in terms of its aspects of competition or conflict or to focus on social constraints instead of on individual agency. I would argue, however, that while aspects of cooperation have in general been unjustly neglected, substantial feminist insights into the understanding of the economics of the household have been accomplished by denying the existence of total cooperation within the household and, instead, noting the actual presence of conflict and by rejecting common dictatorship models of the household (mislabeled as “altruistic” is a particularly glaring example of blindness to issues of power) in favor of attributing some form of agency to female actors (Folbre and Hartmann, 1988). A femin/sf approach, while revaluing the positive aspects of femininity, does not then limit one to using these categories of analysis that happen to be in the socially created cognitive category of feminine.

6. WHY PROGRESS IS SLOW

I have laid out in this article some hints as to how economics might look if it were to be based in an understanding of balanced humanity rather than in a perverse image of masculinity. These are only hints, and the lack of indications of what a more fully worked-out research program would look like presents an even more glaring lack to me than it, perhaps, presents to the reader. It is natural to want to know what “the bottom line” would be or “what difference it would make” in each specific area of research if an encompassing view were adopted.

Let me suggest two reasons why progress up to this point has been
very limited. The first is a very real and significant problem that underlies
not only a feminist transformation of economics but the whole endeavor
of speaking and writing in a feminist mode: the problem of language.
That is, the hierarchical dualism that links femininity with all things
inferior is so ingrained in our cognition and our language that a feminist
writer is often at a literal loss for words to express what she (or he)
means. It is much easier to fill in the masculine-positive and feminine-
negative quadrants in the gender/value diagram than to think of ade-
quate expressions for the strengths associated with femininity and the
dangers of unbalanced masculinity. One example of this problem was
given earlier, where recourse had to be made to special terms coined by
Georgescu-Roegen in discussing the question of rationality. To see this
problem of language in a larger framework, consider how one would
complete a gender-value diagram with the term “virile” (meaning
“manly vigor”) as its masculine-positive term. The lack of virility is
“emasculaton,” which is a term in common use and which belongs in
the feminine-negative quadrant. There exists a term, “muliebrity,”
whose definition is “womanliness” or the feminine “correlative of vi-
rility,” but this is a very obscure word, to say the least. There exists no
term suited for the masculine-negative quadrant: by analogy to “emas-
culation,” the term that belongs there should be “effemination,” but the
word “effeminate” already exists and signifies an abundance of feminine
(presumably negative) traits, not the lack of feminine positive traits.
Even when one does come up with positive complementarities, one finds
oneself dealing with expressions like “embodied rationality” or “social
individuality” that sound awkward and vague in a society used to think-
ing in terms of dualisms and clear demarcations. Extend this problem
to all areas of discourse, and it becomes obvious why much feminist
scholarship is devoted to analysis of language and why at times the
process of communication is frustrating and slow.

The second reason for not having a clear program worked out is
that very few economists are as yet working along this line. While con-
versation within economics about women has a couple of decades of
history, and discussion about feminism and economics has been carried
on by a dedicated few, conversation about the ties between the social
construction of gender and the social construction of economics is still
in its infancy.8 Economics is far behind other disciplines in looking at
the implications of gender; there is more scholarship on gender not only
in such fields as history, literary criticism, philosophy, psychology, and
sociology but also in areas such as biology and the sociology and history
of science. Several fields have one or more scholarly journals devoted

8. For other examples from these literatures, see Bergman (1987), Brown (1989), England
and Kilbourne (1990), Feiner and Roberts (1990), Ferber and Birnbaum (1977), Folbre
contains a collection of essays.
entirely to gender issues. As latecomers, economists could benefit from the analysis that has already been done. I especially see interesting parallels to economics in feminist scholarship on evolutionary biology (E. Keller, 1988a,b) and to work on alternatives to contractarian notions of justice (Gilligan, 1986; Benhabib, 1987).

Economics could be improved by an exploration of feminine-positive ways of knowing and being and the excising of masculine-negative perversions of the choice of subject and scholarly method. The positive-negative dualism should be the salient schema for judging the adequacy of economic research rather than the feminine-masculine schema. An approach based on a new understanding of gender and value would incorporate all aspects of knowledge that are helpful in approaching a problem, whatever they may be, and would extend the possible subject matter beyond simply those areas that can be “squeezed and moulded” (the words are Francis Bacon’s, in Weinreich-Haste, 1986) into the form of a mathematically tractable model of an idealized market.

REFERENCES


