An article in The Chronicle of Higher Education of June 30, 1993, reported, “Two decades after it began redefining debates” in many other disciplines, “feminist thinking seems suddenly to have arrived in economics.” Many economists, of course, did not happen to be in the station when this train arrived, belated as it might be. Many who might have heard rumor of its coming have not yet learned just what arguments are involved or what it promises for the refinement of the profession. The purpose of this essay is to provide a low-cost way of gaining some familiarity.¹

Most people associate feminism with a political program, which of course it includes. While there are now many varieties of feminism, they all share a concern with remedying the disadvantages historically born by women. Such a concern has been manifested within the discipline of economics in the form of efforts to encourage the advancement of women within the profession (for example, by the Committee on the Status of Women in the Economic Profession) and sometimes by the application of economic analysis for feminist ends. Less familiar to many economists, however, are the implications for economics of recent feminist theorizing about sexism and science. Feminist scholars have documented how beliefs about gender—that is, beliefs about the characteristics and social roles of men and women—have been important on an intellectual as

¹While isolated feminist challenges to neoclassical theories date back at least to the 1970s (for example, Bell, 1974), this article focuses on the “second revolution” (Coughlin, 1993) that has taken place in just the last few years. This stronger current is exemplified by publications such as Ferber and Nelson (1993), recent sessions on feminist economics at the meetings of the American Economic Association (Bartlett and Feiner, 1992; Shackelford, 1992; Strassmann, 1994; Strober, 1994), and the organization in 1992 of the International Association for Feminist Economics.

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well as social plane. Recent feminist theory leads to questioning of many basic assumptions and values that undergird current economic practice.

Feminist theory raises questions about the adequacy of economic practice not because economics is in general too objective, but because it is not objective enough. Various value-laden and partial—and, in particular, masculine-gendered—perspectives on subject, model, method, and pedagogy have heretofore been mistakenly perceived as value free and impartial in economics, as in other scientific disciplines. Traditionally, male activities have taken center stage as subject matter, while models and methods have reflected a historically and psychologically masculine pattern of valuing autonomy and detachment over dependence and connection.

The alternative suggested here is not, however, a "feminine" economics in which masculine biases are replaced by feminine ones, nor a "female" economics in which economics by or about women is done differently than economics by or about men. The alternative described in this article is an improvement of all of economics, whether done by female or male practitioners.

**Gender and Disciplinary Values**

If one believes that the current definitions and methods of economics come from outside of human communities—perhaps mandated by divine intervention, or descending via a Friedmanesque helicopter drop—then of course the idea that such standards could be gender-biased will seem nonsensical. But if we allow that economic practice is human practice, developed and refined within human communities, then the possibility must be admitted that human limitations, interests, and perceptual biases will have effects on the culture of economics. The feminist analysis of economics that will be discussed here starts from the premise that economics, like any science, is socially constructed. Social constructionism should not be mistaken for a claim that "anything goes" or that there are no standards of truth or reliability. It simply recognizes that such standards are determined from within a particular scientific community, not from without.

How, then, might gender influence economics? While women were historically excluded from the economics community, some caution is recommended in moving from the observation of women's exclusion to conclusions about the mechanisms by which gender biases take root. It is necessary to clarify here that feminist scholars make a subtle but important distinction between sex and gender. Sex, as the term is generally used in feminist scholarship, refers to biological differences between males and females. Gender, on the other hand, refers to the associations, stereotypes, and social patterns that a culture constructs on the basis of actual or perceived differences between men and women. Women's lesser average brain weight than men, for example, is a biological characteristic. The nineteenth-century interpretation of this fact as implying
that women are therefore less rational is an example of a social belief, that is, a construction of gender (Bleier, 1986).

Most feminist scholars see masculine bias in science as primarily an issue of gender, not of sex. The entrance of more women into scientific disciplines is seen as contributing to the transformation of the disciplines, not because women “bring something different” to the fields by virtue of femaleness, but rather because the illumination of gender biases at the level of the social structure of science makes gender biases at other levels more visible as well. To say that “contemporary economics is masculine,” then, is to say that it reflects social beliefs about masculinity, not that it reflects the maleness of its traditional practitioners (Keller, 1986). To say that a less masculine-biased economics would be more adequate is to say that social beliefs about economics must change and that economics would be enriched by a diversity of practitioners, not that economics must be practiced by eunuchs or neuters.

The analysis of links between modern western social beliefs about gender and about science was the accomplishment of groundbreaking work by feminist scholars starting in the 1980s (Bordo, 1987; Harding, 1986; Keller, 1985; Merchant, 1980). Objectivity, separation, logical consistency, individual accomplishment, mathematics, abstraction, lack of emotion, and science itself have long been culturally associated with rigor, hardness—and masculinity. At the same time, subjectivity, connection, “intuitive” understanding, cooperation, qualitative analysis, concreteness, emotion, and nature have often been associated with weakness, softness—and femininity. Such associations were sometimes explicit in the language used by the early scientists to define their endeavor. Henry Oldenburg, an early Secretary of the British 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” (Keller, 1985, p. 52).

Simple recognition that the characteristics most highly valued in economics have a particularly masculine gender association does not, however, suggest a unique response for scholars concerned with the quality of economic practice. One response might be to endorse this association so that we can go on doing as we have always done. If this is masculine economics, so be it. The only alternative to masculine economics, our usual way of thinking about gender tells us, would be emasculated, impotent economics.

Another response might be to turn the tables and seek to replace hard, objective, active, androcentric economics with soft, subjective, passive

2This is not to ignore the current scholarly (and popular) debates about the degree to which males and females may “think differently” due to genetic or hormonal conditions, only to note that it is not the central issue here. Carol Gilligan’s (1982) work, for example, is often quoted in these discussions as having uncovered male/female psychological differences. A more careful reading of her work, however, and of studies which have followed, indicates considerable overlap between men and women in the dimensions studied. What is important to the point here, and what has been shown in a number of studies, is the way in which people in U.S. and European cultures tend to mentally associate certain characteristics with masculinity or femininity. For a review of these literatures, see Jane Mansbridge (1993), especially notes 32 and 53.
gynocentric economics. One might focus on cooperation, for example, instead of competition and eschew all quantitative methods in favor of qualitative ones. While this might be appealing to those who consider modern economics to be responsible for all the ills in the world, such a response merely trades one set of biases for another.

A third response, particularly associated with the intellectual currents of postmodernism, might be to “deconstruct” the dualisms on which modern definitions of economics depend. In deconstructionist theory, all human projects are simply texts or discourses to which techniques of literacy criticism can be applied. In this view, neither the distinction science/nonscience nor masculine/feminine reflects any nonlinguistic underlying reality. This approach, however, yields little guidance about how to judge the quality of scientific practice.3

A fourth approach is adopted in this article. It does not require endorsing one side or the other of the masculine/feminine dualism, nor forgoing evaluation. The key to this approach lies in an unlinking of our judgments about value—that is, about what is meritorious or less meritorious in economic practice—from our perceptions of gender.

The notion that masculine economics is “good” economics depends on a general cultural association of masculinity with superiority and femininity with inferiority, or, in other words, a mental linking of value (superior/inferior) and gender (masculine/feminine) dualisms. Any reader who might question the asymmetry of this linking, preferring, perhaps, to think of gender differences in terms of a more benign complementarity, should ponder some of the more obvious manifestations of asymmetry in the social domain. Rough “tomboy” girls are socially acceptable and even praised, but woe to the gentle-natured boy who is labeled a “sissy”; a woman may wear pants, but a man may not wear a skirt. The sexist association of femininity with lesser worth implicit in such judgments, it should be noted, is not a matter of isolated personal beliefs but rather a matter of cultural and even cognitive habit.

Research on human cognition suggests that dualisms such as superior/inferior and masculine/feminine play an essential role in structuring our understanding (Lakoff and Johnson, 1980; Nelson, forthcoming, ch.1). Human cognition is not limited to such simple two-way associations, however. Consider the different interpretations we can make if we think of gender and value, instead of as marking out the same space, as operating in orthogonal dimensions. Then we can think of there being both valuable and harmful aspects to qualities culturally associated with masculinity, as well as both valuable and harmful aspects to traits associated with femininity (Nelson, 1992).

Consider, for example, the idea that a “hard” economics is clearly preferable to a “soft” economics. This judgment relies on an association of hardness

3While some feminist economists take a thoroughly postmodernist position, and a few even expound a gynocentric view, this essay focuses on those lines of feminist theorizing about economics that seem to have the most adherents, and that, to mainstream economists, should provide the most convincing case for reform.
with valuable, masculine-associated strength, and softness with inferior, feminine-associated weakness. However, hardness may also mean rigidity, just as softness may also imply flexibility. A pursuit of masculine hardness that spurns all association with femininity (and hence with flexibility) can lead to rigidity, just as surely as a pursuit of feminine softness (without corresponding strength) leads to weakness. There is no benefit to "specialization" on the side of one gender: neither rigidity nor weakness, the two extremes of hardness and softness, is desirable. There is benefit, however, from exploiting complementarity. Strength tempered with flexibility would yield a balanced and resilient economics. This is just one abstract example of how new thinking about gender could change how we think about discipline; many more concrete examples follow.

Four Aspects of Economics

Applying the feminist scholarship on science to economics suggests that the criteria by which we judge "good economics" have been biased, and that the use of less-biased criteria of evaluation would lead to a more adequate practice. Consider the biases that arise in four different aspects of economics: model, methods, topics, and pedagogy. While critiques and new directions concerning the subject matter of economics and teaching may be familiar to some economists, the more subtle areas of model and method will be discussed first since these have implications for the broadest range of economic practice.

Economic Models

At the center of mainstream economic modeling is the character of the rational, autonomous, self-interested agent, successfully making optimizing choices subject to exogenously imposed constraints. In adopting this conception of human nature, economists have carried out the suggestion of Thomas Hobbes (as cited in Benhabib, 1987), who wrote, "Let us consider men ... as if but even now sprung out of the earth, and suddenly, like mushrooms, come to full maturity, without all kind of engagement to each other." Economic man springs up fully formed, with preferences fully developed, and is fully active and self-contained (England, 1993). As in our Robinson Crusoe stories, he has no childhood or old age, no dependence on anyone, and no responsibility for anyone but himself. The environment has no effect on him, but rather is merely the passive material over which his rationality has play. Economic man 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.

This is not to say that all practicing economists believe that humans are no more than *homo economicus* (though there are a few true believers), but only that this model of human behavior is perceived as being the most useful and most rigorously objective starting point for economic analysis. Consider, however,
the gendered biases implicit in taking the “mushroom man” as representative of what is important about human beings. Humans do not simply spring out of the earth. Humans are born of women, nurtured and cared for as dependent children and when aged or ill, socialized into family and community groups, and are perpetually dependent on nourishment and a home to sustain life. These aspects of human life, whose neglect is often justified by the argument that they are unimportant, or intellectually uninteresting, or merely natural, are, not just coincidentally, the areas of life thought of as “women’s work.”

One must be careful here, again, to draw a distinction between analysis at the level of sex (biological distinction) and analysis at the level of gender (social beliefs). An interpretation that some might draw from the above contrast might be that next to homo economicus to describe men’s autonomous, self-interested behavior, we need a femina economica to describe women’s connected, other-oriented behavior. Such an endorsement of separate spheres for men and women is, however, quite opposed to a feminist analysis that sees the gender distinctions as socially constructed rather than biologically determined. Homo economicus may not be a good description of women, but neither is he a good description of men. Both the autonomous, rational, detached, masculine projection and the dependent, emotional, connected, feminine one are equally mythical and distorting. Men’s traditional facade of autonomy has always been propped up by the background work of mothers and wives; to believe that women are passive requires turning a blind eye to the activity of women’s lives. What is needed is a conception of behavior that does not confuse gender with judgments about value, nor confuse gender with sex. What is needed is a conception of human behavior that can encompass both autonomy and dependence, individuation and relation, reason and emotion, as they are manifested in economic agents of either sex.

Feminists need not reinvent the wheel while looking for ways of building more satisfactory models. One example of a richer model of human behavior that is probably familiar to many economists is George Akerlof and Janet Yellen’s (1988) theory of efficiency wages as based on fairness. In their model, agents are not hyperrational, isolated monads, but rather human beings capable of “emotions such as ‘concern for fairness’” or jealousy (p. 45) and very concerned with their sphere of personal connections. As they point out, the idea that workers’ concern with fairness affects their job performance is in fact borne out by empirical studies done by psychologists guided by equity theory and sociologists guided by social exchange theory. In suggesting that wages may be influenced by fairness considerations, rather than purely by market forces, such a model contributes toward explaining the persistence of non-market-clearing wages and the existence of unemployment.

Similar analysis has suggested that notions of fairness play an important role in the setting of prices in product markets (Kahneman, Knetsch, and Thaler, 1986). Lee Levin’s (1995) theory of investment also borrows freely from psychology and sociology to gain insight into economic phenomenon. Levin suggests that Keynes’ notion of animal spirits can be fleshed out using theories
of convention, rumor, social comparison, fad, cognitive dissonance, and contagion theory borrowed from these other disciplines. Nancy Folbre (1994a), Amartya Sen (1977) and Robert Frank (1988) are economists who have also explored richer models of human economic behavior, both individual and collective. Readers may think of other examples. A degree of care must be maintained, of course, in moving away from the simple rational-choice model or borrowing from other disciplines: overthrowing a model of autonomous choice only to end up with, for example, a model of pure social determinism would lead to no great improvement. But feminist analysis suggests that the current neglect of social and emotional dimensions of human behavior should be considered a serious limitation, rather than a sign of rigor.

The question of economic models overlaps with the question of how economics is to be defined as a discipline. As Akerlof and Yellen’s (1988) model explains a particular macroeconomic phenomenon in an empirically supported way, it would seem to clearly qualify as an economic model. Yet some see economics as defined by the homo economicus model. For them, models like that of Akerlof and Yellen fail to qualify, being too “soft” or “too messy,” or perhaps “too sociological.” Gary Becker (1976, p. 5), for example, has argued that it is the model of individual choice in markets that is the distinguishing characteristic of economics. Robert Lucas (1987, p. 108) has stated that the assumptions of rational choice modeling provide “the only ‘engine of truth’ we have in economics.” The feminist analysis suggests that Becker’s and Lucas’ approaches are not, as they are often taken, statements of demand for high rigor, but rather are demands that androcentric biases be indulged.

Such a definition of economics according to (a restrictive) model, rather than subject matter, has been an effective rhetorical strategy for cutting off alternative views (Strassmann, 1993). One might take the growth and acceptance of much of the new classical macroeconomics modeling program, protected by Lucas’ definition of the discipline, as a case in point. But such a strategy can retain its effectiveness only so long as the association of masculinity with high value has emotional and cognitive power. The feminist analysis suggests that there should not be just one economic model, but rather many economic models, depending on the usefulness of various modeling techniques in the various applications. Many of these models will still emphasize individual choice and purposive behavior, but some will not. To argue that economists should continue to specialize in a single specific type of model, because that is how we have been trained, is to argue that sunk costs should play a role in determining current profit-maximizing choices—a fallacy we usually try to debunk in our undergraduate students’ sophomore year. An efficient business certainly would not allow an employee to continue practicing a skill that yields low returns because of an oversupply or a changing market, just because the skill was difficult and time consuming to acquire.

While feminist economics does not impose feminist policy conclusions on economic research, it can be noted that such a broadening of economic modeling opens new opportunities in the analysis of labor market
discrimination. Within a model of rational, autonomous individual behavior and perfectly clearing markets, women's lower earnings and exclusion from certain professions can be explained only by appeal to extra-market sources, such as women's career and education decisions or the amount of effort women put forth (for a review see Bergmann, 1986). Employer discrimination cannot persist in competitive markets, goes Becker's story, since discrimination is a taste that is costly to indulge. Discriminators will hence be outcompeted by firms that make profit-maximizing choices. Comparable worth is a political rather than an economic issue, it is sometimes said, since the idea that occupations held largely by women could be systematically underpaid is in violation of the thesis that wages are determined by market forces. The influence of such positions is not based in the empirical support they have garnered, however: the strength of their appeal to economists lies only in their consistency with the narrow choice-theoretic model. Broader models that include the social and emotional factors ignored in standard neoclassical analysis make room for discrimination as a potential issue.

If employers are themselves subject to widespread and systematic social pressures, for example, *nondiscrimination* might be a taste that is costly to indulge. Employers may meet not only with rebellion from their other workers but with ostracism from their peers and perhaps even from their friends and family when they violate widespread gender and racial norms in hiring or compensation (Strober and Arnold, 1987). If wages reflect perceptions of fairness, as Akerlof and Yellen (1988) have argued, then perceptions of the relative worth of men's and women's work is quite relevant to wage determination. If, as feminists argue, certain traits and jobs traditionally associated with women have been systematically undervalued, it may be perceived as fair to pay less for these skills (England, 1992).

The feminist insight into economic modeling does not prescribe in advance that injustice will be found in every study of the labor market. It does require, however, that we not dismiss the possibility that wages may depend on factors beyond marginal products simply because the models we use are blinded by their own assumptions.

**Economic Methods**

While models of individual rational choice could conceivably be expressed and analyzed in a purely verbal manner, it seems almost a tautology to say that in the discipline of economics, quality in method is identified primarily with mathematical rigor. Strict adherence to rules of logic and mathematics, formalization in the presentation of assumptions and models, sophistication in the application of econometric techniques—these are the factors, in many people's minds, that set economics apart from "softer" fields like sociology or political science. Use of formal and mathematical methods (particularly in the form of constrained maximization) is also often presumed to assure the objectivity of economic results. Abstract and highly formalized analysis is often valued over
concrete and detailed empirical work, for the logical purity of its proofs and for its context-free generality. While good writing and verbal analysis do not go entirely unrewarded, they are usually considered to be largely auxiliary to the real analysis.

Feminist scholarship suggests that such narrow views of knowledge and rationality are holdovers from a crisis about masculinity during the early years of the development of modern science, particularly manifested in the ascendancy of Cartesian philosophy (Bordo, 1987; Easlea, 1980). Far from protecting economics against biases, such a concentration on toughness and detachment hog-ties our methods of analysis. Emphasis on being hard, logical, scientific, and precise has served a valuable purpose, it is true, in guarding against analysis that is weak, illogical, unscientific, and vague. But if these are the only virtues we value in our practice, we are easy prey to other vices.

Emphasis on masculine hardness without flexibility can, as discussed above, turn into rigidity. Emphasis on logic, without sufficient attention to grasping the big picture, can lead to empty, out-of-touch exercises in pointless deduction. Scientific progress without attention to human values can serve inhuman ends. Arguments that have given up all richness for the sake of precision end up being very thin. Including both masculine- and feminine-identified positive qualities, on the other hand, makes possible a practice that is flexible, attentive to context, humanistic, and rich as well as strong, logical, scientific, and precise.

Feminist economists are not the only economists to voice dissatisfaction with the narrow strictures put on knowledge seeking in economics, that as a consequence leave economists inadequately educated and inadequately practiced in skills of richer and more substantive analysis. While feminist theorists offer a unique explanation for the psychological and social tenacity of the Cartesian view (and link it to failures in areas of model, topics, and pedagogy as well), feminist economists hardly need to start from scratch in envisioning a more adequate methodological toolbox. Donald McCloskey, for example, has written extensively on the possibilities for improvement of rhetorical standards within the profession. McCloskey (1993) argues that feminine-associated argumentation by metaphor and story must be given equal scientific prestige with masculine-associated argumentation by fact and logic. As a practical matter, he has even published a short guide to improved writing (McCloskey, 1987).

The Commission on Graduate Education in Economics (COGEE) of the American Economic Association recently expressed concern about overemphasis on context-free analysis. Its report noted a fear that economics "graduate programs may be turning out a generation with too many idiot savants skilled in technique but innocent of real economic issues" (Krueger, et al., 1991, pp. 1044–45). While this report set up the problem as one of an imbalance between (mathematical, technical) methods on the one hand and substance on the other, with the methodological approach itself left unchallenged, such an argument seems to suggest that knowledge of "facts, institutional information, data, real-world issues, applications and policy problems" (p. 1046) occurs by
direct absorption. Yet careful and systematic seeking out of information and good nonformal reasoning about real economic issues can only be accomplished through mastery of corresponding skills, such as (to start with) library research methods and techniques of critical reading. If it is recognized that such skills are just as valid, and just as teachable, as formal and abstract techniques, then the problem indeed includes the issue of balance in methods. As a practical matter, the COGEE report includes a number of specific suggestions about prerequisites, course syllabi, content, assignments, etc. that would begin to move graduate departments somewhat toward educating students to become more competent in analyzing actual economic problems.

Calls for increased attention to the nuts and bolts of empirical work by distinguished economists such as Thomas Mayer (1993) and Lawrence Summers (1991) are also calls for changes in the value system of economics that feminists can join and endorse. Economists tend to be highly skilled in mathematical and statistical theory. However, we generally demonstrate far less skill in other aspects of scientific empirical work like the seeking out of new data sources, the improvement of data collection, responsible data cleaning and quality evaluation, replication, sensitivity testing, proper distinction between statistical and substantive significance, and data archiving (for example, Dewald, Thursby, and Anderson, 1986). Empirical work characterized by such a continual refinement of abstract theory, accompanied by an egregious neglect of concrete detail, has been described by Mayer (1993, p. 132) as "driving a Mercedes down a cow track." While a few journals and funding agencies have in recent years sought to raise professional standards by, for example, requiring sensitivity tests andarchiving of data, much more could be done by journal editors, funding bodies, and dissertation advisors to encourage more efforts in these directions. Graduate studies committees could do more to provide the sorts of course work and experience in which good technique could be learned. The feminist critique suggests that there may be much to be gained by decreased use of the technique of detached "musing" (Bergmann, 1987a) and increased use of the technique of "hobnobbing with one's data" (Strober, 1987).

Value judgments attached to "hard" versus "soft" data also deserve reexamination. Economists' skepticism about asking people about the motives behind their behavior is so strong that Alan Blinder (1991) devoted a full section in a recent piece on price stickiness simply to justify the use of such interview survey data. Judged by a standard of Cartesian "proof," such evidence may be inadmissible. But judged by a broader and more practical standard of learning about economic functioning, such data can be seen to potentially contribute important information. A recent conference of the International Association for Feminist Economics, for example, included presentations by a historian and a sociologist on the techniques of doing oral history studies. Economists who overcome their prejudice in this area may be surprised at the sophistication in technique and the attention given to issues of validity and replicability demonstrated by those trained in such "soft" and qualitative methods.
Personal experience should also not be discounted among ways in which we—consciously or not—gather data. It has been a matter of some ironic comment among feminist economists, for example, how what often really seems to matter in convincing a male colleague of the existence of sex discrimination is not studies with 10,000 “objective” observations, but rather a particular single direct observation: the experience of his own daughter.

The idea that one’s personal, “subjective” position and opinions could influence the outcome of one’s scientific work is, of course, anathema to those who believe that objectivity in scientific pursuits can be attained only by the cool detachment of the researcher from the subject of study, or that objectivity is assured by an individual’s strict adherence to particular methods of inquiry. Such a notion of objectivity is considered in the feminist analysis (as well as in much contemporary philosophy of science) to be one more outgrowth of the Cartesian illusion. Part of the practice of striving for objectivity, in fact, should be an examination of how the things that one believes from one’s own experience may influence one’s research. Sandra Harding (1995) calls the sort of objectivity in which one recognizes one’s standpoint “strong objectivity,” as contrasted to “weak objectivity” in which the issue of perspective is kept under wraps. Amartya Sen (1992, p. 1) similarly argues that objectivity begins with “knowledge based on positional observation.” The movement from subjective views to (strong) objectivity comes not through a sharp separation of the researcher from the object of study, but rather through a connection of the researcher to a larger critical community. According to feminist philosopher Helen Longino (1990, p. 79), “The objectivity of individuals ... consists in their participation in the collective give-and-take of critical discussion and not in some special relation (of detachment, hardheadedness) they may bear to their observations.” While concern with the reliability of results is still of prime importance, the criteria that guide research are internal to the community of researchers, not external. Formalization, rather than reflecting the height of objectivity, is simply seen as one tool in the toolbox. In the words of Knut Wicksell (quoted in Georgescu-Roegen, 1971, p. 341), the role of logic and abstraction is “to facilitate the argument, clarify the results, and so guard against possible faults of reasoning—that is all.”

**Economic Topics**

A prototypical economic article uses an economic model, economic methods, and is on an economic topic. Beneficial expansions in the first two areas were discussed above; the last consideration is, however, crucial as well. A broad definition of the core topic of economics to which most economists might agree is that of markets. Economics is often defined as the study of processes by which things—goods, services, financial assets—are exchanged. By this definition, most of the traditional nonmarket activities of women—care of the home, children, sick and elderly relatives, and so on—have been considered “noneconomic” and therefore inappropriate subjects for economic research. Families,
in fact, often seem to disappear entirely from the world of economists. Consider this textbook discussion: “The unit of analysis in economics is the individual . . . [although] individuals group together to form collective organizations such as corporations, labor unions, and governments” (Gwartney, Stroup, and Clark, 1985, p. 3). Families are, apparently, too unimportant to mention.

The most notable exceptions to this neglect, of course, come from Gary Becker and the other so-called “new home economists” and from more recent developments in the application of game theory to the family. The existence of these literatures is something of a double-edged sword to feminists. On one hand, they do bring into mainstream journals some discussion of family issues. However, they conform strictly to the narrow standards of method and model discussed earlier, and it is probably only by these criteria that they hang on to their “economic” credentials. Moreover, it is troublesome to feminists that this work has often assumed or endorsed traditional expectations about the sexes. While Becker has indeed developed models of family interactions, he, as Barbara Bergmann (1987b, pp. 132–33) has put it, “explains, justifies, and even glorifies role differentiation by sex . . . to say that the 'new home economists' are not feminist in their orientation would be as much of an understatement as to say that Bengal tigers are not vegetarians.”

While some debate has gone on about Becker’s models, and the possibility of using individualistic rational-choice models for feminist ends, such battles take place at the margins of economics. The expectation on the part of many economists that feminists will or should concentrate on debating Becker may primarily serve as a handy way to avoid engagement with feminist critique. Such a view limits feminist critique to a field that is perhaps safely distant from one’s own.

While families are “economic” to Becker to the extent that they can be modeled in terms of choices and markets, families have traditionally been “economic” to women in a much more direct sense. Many women’s economic security historically was, and to some extent still is, far less dependent on their own earnings than on whether or not they “marry well.” Further, while economists and census takers have waffled back and forth on whether unpaid housekeeping should be classified as leisure or work (Folbre, 1991), the women scrubbing the sink rarely entertained any doubt.

Drawing the distinction about what is “economic” and what is not at the household door leads increasingly to odd dead ends and bifurcations in economic analysis. Why should childcare, elder care, and care of the sick be “economic” when provided by markets (or sometimes government), but not worthy of study by economists when done in private homes? Rather than using marketization as the criterion for demarcating economics—or using the rational choice model, as discussed above—a broader definition of economics as concerned with “provisioning” could delineate a subject matter without using sexist assumptions about what is and what is not important (Nelson, 1993b).

\[4\] I thank Marianne Ferber for this example.
Adam Smith, for example, defined economics not as simply about choice and exchange, but also as about the production and distribution of all of the “necessaries and conveniences of life,” placing emphasis on the things that human beings need to survive and flourish. These things may include activities such as meaningful work, as well as goods and services such as food and health care. While some goods and services may be freely chosen by adult individuals acting in markets, many are provided to individuals by their parents during childhood or by other family members. They can also be provided as gifts or through community or governmental programs. The distribution of many “necessaries and conveniences” is also strongly influenced by tradition and coercion.

Such a definition of economics as concerned with the realm of “provisioning” breaks down the usual distinction between “economic” (primarily market-oriented) activities and policies on the one hand, and familial or social activities and policies on the other. The absence of entries for household production in the National Income and Product Accounts illustrates the way in which such a bifurcation has structured economic analysis, and the concern of many feminists about this neglect is relatively well known (for example, Waring, 1988). The priority to be given to a project of inclusion of household activities in gross domestic product is, however, actually somewhat controversial among feminists, with some arguing that increased emphasis on housework would only serve to glorify the homemaker role, and with many concerned that monetary figures would be downward biased due to the low value currently given to activities like childcare (Folbre, 1994b). Questions can also be raised about the importance to be given to the GDP numbers themselves. Feminists may join with others in criticizing the methodological reductionism of frequently using such a crude measure of market and governmental economic activity as a yardstick for economic welfare. Multidimensional measures, which might include measures of distribution and sustainability, and measures of human outcomes such as educational attainment and health (Nussbaum and Sen, 1993) would form a more adequate basis for economic analysis and national policymaking and evaluation. Accounting for the division of labor and of goods within the household, for example, has been particularly important in feminist work on development economics, economies in transition, and economies undergoing structural adjustment (Sen, 1985; Bakker, 1994).

Less well known than the GDP critique is the concern of many feminists about adequate attention to investment in children and the question of who bears the costs of such investment (Folbre, 1994a). Programs to improve child nutrition or preschool and primary education, for example, are usually thought of as “social” programs, merely frosting on the fiscal cake, rather than as economic programs, designed to advance investment in human capital. Programs to increase the quality of paid childcare arrangements are often thought of as consumption goods for parents, rather than as investments in children and in necessary infrastructure for parental (and particularly, given stereotyped patterns of work distribution within families, mothers’) participation in
the life of the community. Standard economic analysis and pedagogy tend to reinforce such trivialization: recall that the mythical economic "mushroom man" springs up without any need for provisioning by others in his youth, and recall that the actual work by women in historically providing such direct provisioning does not count as "economic."

Consider, as a specific example, the treatment of the subject of human capital in a standard labor economics textbook. It does not begin with a focus on nutrition, socialization, and informal and formal education of children within families and public schools, but rather with the college choice decision of the young adult (Ehrenberg and Smith, 1994). While there is, of course, some pedagogical benefit in designing textbook examples to appeal to the immediate interests of the students, there seems to be no pedagogical reason to focus so narrowly on higher education. When I teach this subject, I find it helpful to add readings about earlier human capital development and to ask students to reflect back on the creation of their abilities and aspirations, from the very start of their lives.

The question of topics cannot be unlinked from the earlier questions raised about models and methods. Consider how biases in models and methods have distorted the development of one research program that from the start has been concerned with household issues: the economics literature on "household equivalence scales." Such scales adjust measures of household income for differences in household size and composition. These scales are in daily policy use in, for example, setting equitable levels of social benefits across households of different size, as well as being frequently used by researchers in studies of income distribution.

The economic literature on household equivalence scales has, however, moved further and further away from questions of policy relevance (Nelson, 1993a). First, while policy applications are often concerned centrally with the welfare of children (for example, in setting levels for Aid to Families with Dependent Children), forcing the question into a utility-theoretic framework (in which the scale is interpreted as a ratio of expenditure functions) has led to household welfare being generally modeled as the welfare of the adults. Some of the most highly regarded models imply that adults will, in fact, substitute away from goods consumed largely by children when they are present. Second, while early empirical estimation of equivalence scales depended largely on prescriptive budget studies that listed how much each type of household would "require" for food, rent, and so on, more recent empirical practice has been characterized by greater subtlety and sophistication. Unfortunately, the estimation of scales using large-scale demand system regressions informed by specific utility-theoretic models, which was for a period the norm, has for the most part turned out to be fundamentally underidentified (since the same demand equations may be consistent with any number of expenditure functions).

While many economists have followed these trends to greater reliance on choice theory and advanced econometrics, a recent piece by Trudi Renwick and Barbara Bergmann (1993) gives one illustration of what can be accomplished
when the focus stays closer to the policy question, with less allegiance to particular models and methods. Renwick and Bergmann's formulation of "basic needs" budgets for households with different compositions follow the earlier prescriptive budgets approach, and is updated for changing times by the addition of childcare expenditures. While technically unsophisticated, one may actually learn more about costs from such direct (if admittedly approximate and prescriptive) evidence, than from more technically sophisticated but unfocused and indirect techniques.

**Economic Pedagogy**

A discipline of economics defined around a formal rational-choice model, with perhaps a few facts delivered on the side, can perhaps be adequately perpetuated by a style of teaching that focuses purely on the transfer of preset knowledge. If economics is defined more broadly, however, such an approach may not be adequate. Fostering the ability to think critically, analytically, and creatively about economic issues requires a different pedagogy. While such a way of thinking may be as teachable as current methods, as argued above, it may not be necessarily as easily teachable, nor teachable by the same teaching methods—nor perhaps even to exactly the same students.

Feminist economists suggest that not only the content of economics courses, but also the teaching style used could undergo a beneficial transformation (Strober, 1987; Bergmann, 1987a; Bartlett and Feiner, 1992; Shackelford, 1992). Some emphasize the use of experimental learning and laboratory sessions in which students work with simulations, collect their own interview data, and/or analyze data, to give students more chance to "do economics" and work out the answers to questions (Bartlett and King, 1990). Some suggest that feminist pedagogy requires a different relationship between the professor and students, with less distance and more dialogue between the professor and students, and also among students. Some suggest that explicit attention be paid to the affective aspects of learning (Strober, 1987).

Feminists are, of course, not the only educators interested in more interactive and cooperative learning; to many educators, this is just "good pedagogy," as demonstrated by studies of how students actually learn. Feminist theorists are more likely, however, to see the resistance to pedagogical reform as being rooted in general cultural associations of gender and value. These pedagogical insights are intended to apply across the curriculum, not just to "women and the economy" courses. Active learning techniques could improve the practice of even the more familiar forms of economic analysis. An ability to think critically is arguably as important in making good judgments about the choice of statistical methods or the use of significance tests, for example, as it is in writing an essay on antidiscrimination policies.

One point of interest to many feminists is the way in which economic pedagogy may subtly shape the demographic composition of future economists. Much has been written about the way in which the "classroom climate"—including instructors' patterns of interaction with men and women students
and sex stereotyping in textbooks—may make women less confident about succeeding in particular areas (Hall and Sandler, 1982; Ferber, 1990). The standard androcentric biases in the topics, models and methods of economics may be added to the list of ways in which women students may be subtly influenced to believe that “economics is not for (or about) me.” The current emphasis on mathematical technique also leads to self-selection of those students, male and female, who find abstract analysis satisfying but who may be weak in broader analytical thinking, and the self-exclusion of many students who perhaps have fine analytical skills, but see little use for them in economics. Such selection leads to a vicious cycle, in which students and instructors are both heavily invested in the status quo.

Conclusion

Feminist economics, to reiterate, is not female economics, to be practiced only by women, nor feminine economics that uses only soft technique and cooperative models. Feminist scholarship suggests that economics has been made less useful by implicitly reflecting a distorted ideal of masculinity in its models, methods, topics, and pedagogy. Feminist scholars argue that the use of a fuller range of tools to study and teach about a wider territory of economic activity would make economics a more productive discipline for both male and female practitioners.

Many readers may have discovered that they are already doing “feminist economics” in some ways, although they have preferred to think of themselves as just doing “good economics.” If one feels a need to defend one’s work from the description “feminist,” it might be enlightening to ask oneself about the source of this discomfort. Perhaps such defensiveness reflects cultural beliefs about masculinity and femininity, and superiority and inferiority, that could stand some examination.

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References


Bartlett, Robin L., and Paul King, "Teaching Economics as a Laboratory Science," *Jour-


Keller, Evelyn Fox, “How Gender Matters: Or, Why It’s So Hard for Us to Count Past Two.” In Harding, Ed., Perspectives on


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4. Catherine Herfeld. 2022. Revisiting the criticisms of rational choice theories. *Philosophy Compass* 17:1. . [Crossref]

5. Lauren Kaufmann. 2021. Feminist Epistemology and Business Ethics. *Business Ethics Quarterly* 19, 1-27. [Crossref]

6. Umut BELEK ERSEN. 2021. BİR FEMİNİST İKTİSAT İNCELEMESİ: OLANAKLAR, SINIRLAR, TANIMLAR. *ODÜ Soyal Bilimler Araştırmaları Dergisi (ODÜSOBİAD)* . [Crossref]


10. Tiffani M. Williams, Gregory C. Wolniak. Unpacking the “Female Advantage” in the Career and Economic Impacts of College 5-28. [Crossref]

11. Valeria Esquivel. Feminist Economics 265-279. [Crossref]


16. Tawny Paul. The Poverty of Disaster 15, . [Crossref]


18. Giandomenica Becchio. 2019. Behavioral economics, gender economics, and feminist economics: friends or foes?. *Journal of Economic Methodology* 26:3, 259-271. [Crossref]


20. Hülya DERYA. 2019. Feminist Economics and Its Critics from a Historical Perspective. *Fiscaoeconomia* 92-114. [Crossref]
21. Maria Gabriella Baldarelli, Antonietta Cosentino, Mara Del Baldo, Angela Magistro. Toward the Theory of Enterprise: Dialogue Between Business and Economics Women Scholars 59-81. [Crossref]
27. Cecilia Conrad. Feminist Economics: Second Wave, Tidal Wave, or Barely a Ripple? 97-134. [Crossref]
28. José Luis Iparraguirre. Life-Cycle Framework 255-334. [Crossref]
29. Khairul Anuar Kamarudin, Wan Adibah Wan Ismail, Airul Aezza Kamaruzzaman. Board Members Diversity and Financial Statements Fraud: Malaysian Evidence 165-183. [Crossref]
30. Julie A. Nelson. Feminist Economics 4512-4517. [Crossref]
31. . References 197-225. [Crossref]
33. Katherine Chalmers, Walter Schwarm. New Approaches to Gender in Regional Science 175-182. [Crossref]
34. Rachel Connelly, Ebru Kongar. Feminist Approaches to Time Use 1-26. [Crossref]
35. Valdas Pruskus. Ekonomika ir filosofija: šąveikos ir trajektorijos 29, . [Crossref]
36. Valeria Esquivel. L’économie féministe du point de vue de l’Amérique latine : enrichir les débats sur l’économie sociale et solidaire ? 155-168. [Crossref]
37. Christine Verschuur, Isabelle Guérin, Isabelle Hillenkamp. Concepts et théories en études féministes et économie sociale et solidaire. Croisements et fertilisation 15-33. [Crossref]
38. Cheryl Lans. 2016. Worldwide Opportunities on Organic Farms (WWOOF) as part of the existing care economy in Canada. *Geoforum* 75, 16-19. [Crossref]
39. Birol ERKAN. 2016. ANA AKIM (ORTODOKS-NEOKLASİK) İKTİSAT ÖĞRETİSİ ELEŞTİRİSİ: HETEREDOKS YAKLAŞIM İHTİYACI. *Akademik Araştırmalar ve Çalışmalar Dergisi (AKAD)* 8:19262, 25-40. [Crossref]
43. Ruth Hagengruber. Measuring the Value of Women: A Feminist Analysis of Economic Categories and Thought 171-183. [Crossref]
44. Julie A. Nelson. Ethics and Climate Change Policy 171-193. [Crossref]
45. Roksana Bahramitash, Hadi Salehi Esfahani. Introduction 1-20. [Crossref]
47. Bregje van Eekelen. 2015. Knowledge for the West, Production for the Rest?: Journal of Cultural Economy 8:4, 479-500. [Crossref]
51. John McMahon. 2015. Behavioral economics as neoliberalism: Producing and governing homo economicus. Contemporary Political Theory 14:2, 137-158. [Crossref]
52. Peter J. Boettke, Solomon M. Stein. Alternative Schools of Economic Thought 573-578. [Crossref]
53. Giandomenica Becchio. A Note on the History of Gender Economics and Feminist Economics 28-38. [Crossref]
54. Damla Isik. 2014. "Just Like Prophet Mohammad Preached": Labor, Piety, and Charity in Contemporary Turkey. Feminist Economics 20:4, 212-234. [Crossref]
55. Gamze Çavdar, Yavuz Yaşar. 2014. Moving Beyond Culturalism and Formalism: Islam, Women, and Political Unrest in the Middle East. Feminist Economics 20:4, 33-57. [Crossref]
56. Thomas de Hoop, Luuk van Kempen, Rik Linssen, Anouka van Eerdewijk. 2014. Women’s Autonomy and Subjective Well-Being: How Gender Norms Shape the Impact of Self-Help Groups in Odisha, India. Feminist Economics 20:3, 103-135. [Crossref]
57. A. Cooper Drury, Dursun Peksen. 2014. Women and economic statecraft: The negative impact international economic sanctions visit on women. European Journal of International Relations 20:2, 463-490. [Crossref]
58. Lourdes Benería. Neoliberalism and the Global Economic Crisis: a View from Feminist Economics 257-285. [Crossref]
59. Örn B. Bodvarsson, Hendrik Van den Berg. Immigration and Economic Growth: More Fundamental Issues 249-283. [Crossref]
61. Lucia del Moral Espin. 2012. En transición. La epistemología y filosofía feminista de la ciencia ante los retos de un contexto de crisis multidimensional. e-cadernos CES :18. . [Crossref]
63. Amanda Driscoll, Mona Lena Krook. 2012. Feminism and rational choice theory. European Political Science Review 4:2, 195-216. [Crossref]
65. Annamaria Carusi, Giovanni De Grandis. 2012. THE ETHICAL WORK THAT REGULATIONS WILL NOT DO. Information, Communication & Society 15:1, 124-141. [Crossref]
66. Kristina Rolin. Feminist Philosophy of Economics 199-217. [Crossref]
68. Julie A. Nelson. 2012. Is Dismissing the Precautionary Principle the Manly Thing to Do? Gender and the Economics of Climate Change. *SSRN Electronic Journal*. [Crossref]
73. Julie A. Nelson. 2010. Getting past “rational man/emotional woman”: comments on research programs in happiness economics and interpersonal relations. *International Review of Economics* 57:2, 233-253. [Crossref]
75. Amy Trauger, Carolyn Sachs, Mary Barbercheck, Kathy Brasier, Nancy Ellen Kiernan. 2010. “Our market is our community”: women farmers and civic agriculture in Pennsylvania, USA. *Agriculture and Human Values* 27:1, 43-55. [Crossref]
78. Jane E. Miller, Yana van der Meulen Rodgers. 2008. Economic importance and statistical significance: Guidelines for communicating empirical research. *Feminist Economics* 14:2, 117-149. [Crossref]
79. Julie A. Nelson. Feminist Economics 1-6. [Crossref]
80. Günseli Berik, Xiao-yuan Dong, Gale Summerfield. 2007. China’s Transition and Feminist Economics. *Feminist Economics* 13:3-4, 1-33. [Crossref]
82. Deborah M. Figart. 2005. Gender as more than a dummy variable: Feminist approaches to discrimination. *Review of Social Economy* 63:3, 509-536. [Crossref]
83. Andrew Worthington, Helen Higgs. 2004. Factors explaining the choice of an economics major. *International Journal of Social Economics* 31:5/6, 593-613. [Crossref]
84. Wilfred Dolfsma, Hella Hoppe. 2003. On Feminist Economics. *Feminist Review* 75:1, 118-128. [Crossref]
86. Julie A. Nelson. Feminism and the Economics of Deception: An Examination of Adam Smith’s “Spirit of System” 43-54. [Crossref]
88. Georgina Waylen. Gendered Political Economy and Feminist Analysis 14-38. [Crossref]


93. GABRIELLE MEAGHER. 1998. “A WOMAN SELDOM RUNS WILD AFTER AN ABSTRACTION”: FEMINIST CONTRIBUTIONS TO ECONOMICS. *Economic Papers: A journal of applied economics and policy* 17:1, 51-69. [Crossref]


100. Shoshana Grossbard. The New Home Economics at Columbia and Chicago 37-49. [Crossref]

101. Giandomenica Becchio. A Note on the History of Gender Economics and Feminist Economics 1-11. [Crossref]