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Feminist Economics For
Behavioral Economists

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Feminist Economics For Behavioral Economists^a

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Abstract

This paper attempts to elucidate key themes in feminist economics that are relevant to major concerns in behavioral economics, including gender differences in risk aversion. It makes use of the Institutional Analysis and Design (IAD) framework developed by Elinor Ostrom and her colleagues to organize this discussion. The paper examines how ideas about the structure and influence of mental models relate to a feminist critique of the standard methods used in studies of sex-based differences in behavior. It also argues that the feminist economic concept of ‘individuals-in-relation’ has the potential to guide future empirical and theoretical studies of men’s and women’s economic behavior.

Keywords: feminist economics, behavioral economics, institutional analysis and design framework, gender, risk preference

JEL codes: B4, B5, B54, D03

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1. Introduction

Feminist economics can be characterised as pluralist in a very broad sense: different ontological approaches are accommodated, in addition to a wide range of research methods. It is not unusual to see reference to ‘feminisms’, rather than ‘feminism’, and these words themselves are telling of the nature of pluralism within feminist economics. However, there is now a large enough volume of feminist economic research to identify a number of its key themes and concerns. Marianne Ferber and Julie Nelson outline these in their introduction to the 10 year retrospective “Feminist Economics Today: Beyond Economic Man”, noting that feminist economics is distinctive in the serious attention it gives to women, its challenging of the common confusion of gender and sex, and its challenging of the economics discipline in masculine-only terms (Ferber and Nelson, 2003: 1-2). They highlight the social construction of both economic behavior *and* the contemporary discipline of economics.

This paper attempts to elucidate these themes in feminist economics in a different (and potentially controversial) way. It makes use of the Institutional Analysis and Design (IAD) framework developed by Elinor Ostrom and her colleagues, although this framework is most commonly associated with new institutional, rather than feminist economics. Whilst this ‘cross-discipline’ approach produces some tensions (as are noted below), it is reflective of feminist economics’ ideals of open inquiry and its understanding of the importance of an atmosphere tolerant of potentially transformative critique (Barker, 1999: 326). Indeed, these ideals were emphasised in the opening article of the first issue of *Feminist Economics*, when Diane Strassman (1995: 1) asserted that “We take the position that ...gatekeeping, limiting scholarly conversation to those with similar backgrounds and training, produces knowledge that is less rich, representative, and useful.”

The IAD approach was selected to structure this discussion of feminist economics because the framework incorporates the concept of situated actors, and this

relates closely to one feminist economics' central themes: that economic behavior is gendered. The IAD framework allows us to trace out the various ways that men's and women's behavior is shaped by socially learned expectations and behaviors associated with being male or female. This is particularly useful for the analysis of observed sex-based differences in behavior, a field of research where the interests of many behavioral and feminist economists appear to intersect.

The IAD framework was also chosen because some of its key components relate to particular shared interests of feminist and smart behavioral economics, including the influence of mental models on individuals' processing information. This paper includes a discussion of how ideas about the structure and influence of mental models relate to a feminist critique of the standard methods used in studies of sex-based differences in behavior. In doing so it highlights a further important theme in feminist economics, that science is a socially constructed activity, with the social location, status and gender of scientists and scientific communities all playing a significant role in determining the methods and practices of science (Barker, 1999: 325).

As a meta-theoretical framework, the IAD also has the advantage of facilitating comparisons of different theories and models. This helps us identify some of the particular features of feminist economics, in comparison with other theoretical traditions in economics, including mainstream economics. Toward the end of this paper the discussion focuses on the feminist economics' critique of the separate/soluble dichotomy in mainstream economics, whereby individuals in market situations are assumed to be atomized, self-interested, with exogenously determined preferences, whilst individuals in family situations are characterized as connected to each other, altruistic and engaged in a process of shaping preferences. Feminist economists have identified several problems associated with this dichotomy, including barriers to the economic analysis of the unique aspects of women's lives. Reflecting one of feminist economics' basic aims – of addressing the realities of women's lives and their economic and other contributions (Harding, 1999: 131), an alternative concept is thus advanced: that

of ‘individuals-in-relation’. The paper argues that this concept has the potential to guide future empirical and theoretical studies of men’s and women’s economic behavior.

Some prominent feminist economists have already identified the strategic potential to link new institutional economics, which is Ostrom’s field, with feminist theory. Paula England and Nancy Folbre (2003: 62), for example, note the relevance of concepts such as endogenous tastes and reciprocity, which feature in new institutional (and smart behavioral) analysis, to notions about the gendered nature of economic behavior. However, many feminist economists contest other core concepts of new institutional and smart behavioral economics, such as the notion of boundedly rational economic agents. Julie Nelson (2003a and 2003b), for example, emphasizes the emotional and subjective aspects of decision-making.

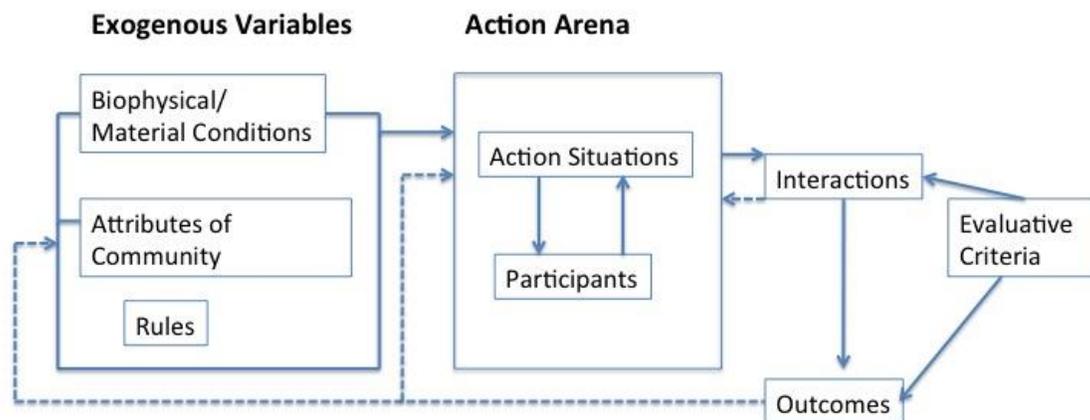
Acknowledging these tensions, this paper aims to further explore the potential connections between feminist, smart behavioral and new institutional economics. The organization of the paper reflects these aims. The following section provides a brief introduction to the IAD framework. This is followed with a summary of the key features of feminist economics. Section 4 turns to a key research topic where the interests of feminist and behavioral economists appear to intersect, namely the presence (or otherwise) of differences in the preferences and behavior of men and women. Section 5 explores the issue of (possible) differences in risk aversion in some detail, whilst Section 6 considers the issue of altruistic preferences. Section 7 brings the discussion to a close with a summary of the key themes of feminist economics and some recommendations for smart behavioral economic research.

2. The Institutional Analysis and Development (IAD) Framework

The IAD framework is closely linked to the life work of Elinor Ostrom, the first (and thus far the only) woman to be awarded the Nobel Prize in economics.

Ostrom described the IAD as a multi-level taxonomy of the universal components (organized in many layers) that are relevant to regularized social behavior (including interactions in markets, hierarchies and other situations).

The broad features of the IAD framework are summarised in the following diagram. Of prime importance is the idea of an action arena. This is a 'social space' within which "participants with diverse preferences interact, exchange good and services, solve problems, dominate one another, or fight." (Ostrom, 2005: 14) The focus of IAD analysis tends to be on how the interaction between participants in different action situations is affected by the characteristics of the situation itself, including the characteristics of the participants and their positions, preferences, levels of information, approaches to information processing, possible actions and potential payoffs.



A framework for institutional analysis. Source: Ostrom, E. Understanding Institutional Diversity, 2005, 15.

As the diagram indicates, interactions within situations lead to particular outcomes, which may be desirable or undesirable. The framework incorporates feedback loops, to account for the way in which participants may respond to these

outcomes by engaging in efforts to either change or reinforce the structure of the arena (as indicated by the line at the bottom of the diagram).

An important feature of IAD framework is its emphasis of the context of each action situation. Each action situation is understood to be 'located' within an action arena that is affected by a range of exogenous variables, including the attributes of the bio-physical world, the structure of the more general community (including the values generally accepted and the prevailing gender norms within the community), and the current set of rules in use, which will reflect the arena's historical context.

Some aspects of Ostrom's work address the role of culture in shaping the mental models used by boundedly rational participants in different action situations. Ostrom (2005: 106-7) highlights how the cultural environment, including its prevailing gender norms, shapes participants' perceptions of what actions are possible, legitimate and desirable (or preferred), and it coordinates the actions of groups of participants. She also asserts that, because mental models are affected by culture, they are likely to be transmitted across generations, producing stability in patterns of behavior and outcomes over time. However, in Ostrom's analysis, mental models can change/are not constant. Factors such as vividness and salience can be relevant to the type of model that is adopted and can be a source of change or difference in participants' perceptions and actions (Ostrom, 2005: 108)

3. Feminist Economics

The IAD can be used to explain key features of feminist economics. Feminist economics can be distinguished especially from mainstream economics by its concern for the influence of the contextual environment on the preferences, possible actions, payoffs and outcomes for men and women in market and family situations. The 'situated' nature of economic behavior is a fundamental concept in feminist economics. Informed by feminist philosophy of science, feminist

economics considers how individuals' [participants'] economic power, obligations, goals, interests and, ultimately, their economic outcomes, are affected by their social roles and relationships, and how these, in turn, are affected by their ascribed social identities, including their gender, race, sexual orientation, and ethnicity.

As its name suggests, feminist economics pays particular attention to the gendered nature of the contextual environment – and its implications for men's and women's economic roles, actions and outcomes. Gender is distinguished from sex, or the biological differences between males and females^c. It is understood that societies or communities assign different roles, norms, and meanings to men and women and their actions. For example, in most societies individuals are assigned to distinct social roles based on their gender (such as men to 'breadwinner' and women to 'caregiver' within the family). Men and women are also expected to comply with different norms of behavior (for example, men are expected to be brave, and women modest). Furthermore, psychological traits of masculinity and femininity are linked to gender norms (for example, women are considered virtuous if they comply with a norm of modesty but assertiveness can be considered a vice).

Using the language of the IAD, a community's gender norms affect various elements of the action arenas that men and women participate in. The norms influence the ability of men and women to participate in particular situations, the positions that they can take up within these situations, the range and nature of their possible actions, their access to information – and, potentially, the way they process this information, their payoffs from different actions, and arguably most importantly the quality of their outcomes. In turn, the gendered distribution of economic outcomes is likely to be reflected in patterns of action at various levels

^c Increasingly, the analysis acknowledges multiple genders. This takes into account individuals whose gender identity differs from their biological sex.

of the social hierarchy aimed at either entrenching existing norms, or challenging them.

The way in which these perspectives have influenced the feminist economic analysis of economic behavior and outcomes can be illustrated with examples relating to the labour market. Feminist economic analysis of occupational choice have focused on the impact of social structures and relationships on women and men's work and career goals (Pujol, 1997; Strassman, 1997). Studies of the gender pay gap have explored the influence of social norms associated with providing care on the distribution of unpaid household work and, subsequently, on the gendered nature and configuration of work (Folbre, 1994). Other studies have examined the failure of apparently gender-neutral market institutions to adequately value the commodities produced by women (Himmelweit, 1995; Ironmonger,1996).

Importantly, feminist economics' emphasis on the social construction of behavior and outcomes has also influenced its relationship with the discipline of economics. Feminist economists have identified the influence of a range of gender norms and cultural biases on [using the language of the IAD] the action situations associated with the development and perpetuation of economic theory. These include the tendency for “culturally ‘masculine’ topics, such as men and market behavior, and culturally ‘masculine’ characteristics, such as autonomy, abstraction, and logic...[to] define the field.” (Ferber and Nelson, 2003:1) It is important to note that feminist economics challenges these definitions of economics – and devotes energy to exposing the biases in the discipline, in addition to focusing on ensuring that the lives and experiences of women feature in economic analysis, and attempting to remedy the common confusion of gender with sex.

4. Feminist Economics and the Analysis of Observed Differences in the Preferences and Behavior of Men and Women

As can be anticipated, given the description provided in the above paragraphs, feminist economics' analysis of observed differences in preferences and behaviors of men and women is distinguished by its focus on their social origins. Observed differences in the preferences and behavior between men and women are, thus, often the starting point of inquiry (into their origins), rather than the end point of an investigation of (apparent) differences in the 'natures' of men and women.

Feminist economics' focus on the social origins of observed differences in the preferences and behavior of men and women reflects an argument that preferences and behavior are gendered. For example, boys and girls in most communities are socialized into particular behavioral patterns; trained to different norms of bodily comportment from an early age. Gender norms in Western societies tend to emphasise physicality, aggression and indifference for boys and constraint for girls and, as a result, men and women are likely to find different types of behavior comfortable and achievable with a degree of fluidity. Performing the gendered actions might feel "natural", be associated with positive "payoffs", and result in positive "outcomes". On the other hand, performing actions that are typically assigned to the opposite sex might illicit a sense of novelty, self-consciousness, and awkwardness [negative payoffs and outcomes that are evaluated as poor]. There are also important feedback effects, with the experience of poor/good performance influencing the incentive to invest in gendered skills.

Gendered socialization can also cause differences in the way men and women process information about a similar situation or arena. This is because representational schemes that are functional for different gender roles can make different kinds of information salient. For example, in traditional domestic settings, women may notice dirt that men don't, "... not because women have a specially sensitive sensory apparatus...[but] because they have a role which

designates the females of the household as the ones who have to clean up.”(Anderson, 2009: 9)

These processes may also result in cognitive styles that differ between men and women. For example, the tendency for men to be allocated positions associated with political and economic power that require detachment and control may encourage a cognitive style that is abstract, theoretical, disembodied, emotionally detached and analytical. The tendency for women to be assigned positions associated with the provision of care may encourage a cognitive style that is concrete, practical, embodied, relational and emotionally engaged. (England, 2003: 36-8)

Patterns of value are also gendered. There is a cultural tendency in most communities to link psychological traits considered ‘masculine’ with virtue when demonstrated by men, and ‘feminine’ traits with virtue when women demonstrate them. This influences the payoffs from different actions that can be performed by men and women and creates incentives for individuals to comply with prevailing gender norms. In academic work situations, for example, the quest for “masculine” prestige may encourage the continued use of “masculine” methods by men, and a rejection of methods associated with femininity or female-dominated fields of enquiry^d (Nelson 1992, 1996, 2003c) More generally, the material and other payoffs associated with different jobs or career paths can vary depending on whether the tasks entailed in the occupational role align with the individual’s gender. For example, men might perceive costs associated with their participation in types of work regarded as ‘feminine’, such as childcare; and women might attach costs to their involvement in types of work regarded as masculine, such as mining.

^d Julie Nelson (1993) notes how the term *hard* is often metaphorically attached to mathematical and quantitative analysis, and seen as positive and masculine. In contrast, the term *soft* is attached to qualitative methods, is used as a pejorative, and is associated with femininity.

The gendered distribution of power between men and women in many action arenas is an additional important influence on behavior and outcomes. It can cause 'masculine' actions to be valorized in particular privileged situations *and* women's ability to participate in these situations to be limited. In academic situations, for example, the historical dominance of men has resulted in several formal and informal institutions that value (and thus produce positive payoffs for) 'masculine' forms of work and contributions to knowledge. The formal institutions include promotion criteria that emphasise a track record of journal publications and research grants. Often these criteria can only be satisfied by academics who are able to commit long work hours and have uninterrupted tenure, especially in their thirties. Gender differences (and inequity) in outcomes arise if men who conform to a traditional breadwinner role have some ability to achieve success in these situations, whilst other men and the many women who take on direct care roles in their families, find it difficult to achieve positive outcomes.

Finally, commonly held ideas about gender affect our perceptions of *others* (and their actions). A number of studies have demonstrated that the gender of a person affects the costs, benefits and probabilities that others assign to their actions (see, for example, Kahneman, 2003). Barbara Reskin (2003), for example, highlighted how in employment situations managers might unconsciously attach certain behaviors, such as reliability or competitiveness to particular individuals because of their gender. Whilst the managers might consciously reject discrimination, their tendency to rely on familiar social categories might still cause them to think and ultimately act in ways that privilege individuals with a particular gender and disadvantage others. Paula England's, Michelle Budig's and Nancy Folbre's (2002) analysis of the labour market outcomes of care workers has similar themes, highlighting how women are commonly perceived to be 'naturally' able to accomplish the work involved in caring for children, and for sick and elderly people. This is consequential because it tends to result in judgments of care work as something that does not require skill or effort, contributing to the low wage outcomes of the many women

engaged in care work (see also Austen and Jefferson, 2014).

5. Feminist Economics and Studies of Sex-based Differences in Attitudes to Risk

We can consider now how feminist economists engage with the growing body of literature on sex-based differences in preferences and behavior. An important part of this literature deals with differences in the risk aversion of men and women. Much of it has been motivated by concern about evidence of an over-representation of women in relatively low risk forms of assets and in particular occupations. This section provides an overview of these studies before introducing a critical perspective – informed by feminist economics – on the common conclusion that women are more risk averse than men.

Studies of sex-based differences in risk preference have featured both studies of investment and insurance decision-making in the presence of risk and lottery or gamble experiments of risk taking. Studies in the first group have used pension fund data to study the allocation of assets between investment options associated with different levels of risk.

Studies in the latter group have included gamble experiments with student participants. They have typically focused on whether (and to what degree) the willingness to take a gamble or invest in a lottery is affected by the level of risk involved. Reflecting the acknowledged importance of both risk and loss aversion, many of these experiments have include scenarios where the possible outcomes are framed in terms of gains, whilst others are framed in terms of losses. Understandably, the analysis of sex-based differences has focused on the magnitude and statistical significance of observed differences in the choices of male and female participants. Commonly the studies have incorporated controls for other factors that might be relevant to a person's risk preference, such as age.

Several contextual environment experiments have involved students participating in computer-based simulated currency trading and stock market games (where the decision to enter particular currency markets or purchase particular securities involves risk). Apart from testing for sex-based differences in risk preference, these studies also examine the effects of factors such as ambiguity about the game's outcomes, knowledge of financial markets, and confidence in financial decision-making. A recent study by Alison Booth, Lina Cardona-Sosa and Patrick Nolen (2014: 128) compared risk preferences exhibited by participants in mixed versus same-sex groups.

Cathrine Eckel's and Philip Grossman's (2008: 6-11) assessment is that neither the experimental nor the other studies provide conclusive evidence on the nature or extent of sex-based differences in risk preferences. Apparently this is "...is consistent with results from psychology, which tend to show differences in risk attitudes across environments for a given subject..." Booth et al. (2014) also conclude that attitudes to risk are influenced heavily by contextual factors. In their study, the female participants' willingness to invest varied substantially across the same-sex and mixed group settings of their experiments.

Despite the mixed evidence from studies of the issue, Eckel's and Grossman's (2008: 6) general summary of the results of the gamble experiments is that they "suggest greater risk aversion by women..." Rachel Croson and Uri Gneezy (2009: 448) are more strident, claiming from their review of the literature on gender differences in preferences that "women are indeed more risk averse than men."

This is the starting point for an important review by prominent feminist economist Julie Nelson, who challenges the assumptions, methods and conclusions of behavioral studies of sex-differences in risk preferences. In her 2012 paper "Are Women Really More Risk-Averse than Men?" Nelson reported the findings of a meta-analysis of published articles on the topic of sex and risk, including the studies canvassed by Croson and Gneezy (2009), Eckel and Grossman (2008), and Booth et al.'s more recent work. It examined the available

evidence on the *quantitative magnitudes* of the differences between the average level of risk aversion observed for men and women, and the extent to which the observed *distribution* of risk aversion varies between male and female samples. In doing so, Nelson attempted to redress the tendency for behavioral studies to rely on measures of statistical significance in their judgements of the significance of observed differences in the risk aversion of men and women:

In the gender-and-risk literature, as in other literatures, however, judgments of "significant difference" are generally based on statistical significance alone. Discussions of the absolute size of the difference, much less its possible implications for society or policy, are rare (Nelson, 2012: 6)

Nelson's 'alternative' approach to assessing the evidence on gender differences in risk preference produced some revealing insights. Only 25% of the studies that she reviewed identified a difference favouring lower male risk aversion of more than half a standard deviation. Only two studies found a difference of more than one standard deviation of difference. Four studies identified differences that are statistically significant in the direction of greater female risk taking.

Thus, in Nelson's assessment, an appropriate summary of the results of studies of sex differences in risk preference is that they point to "... a statistically significant difference in mean risk aversion between men and women, with women on average being more risk averse." (Nelson, 2012: 2) This stands in important contrast to Croson's and Gneezy's (2009, 448) claim that "women are indeed more risk averse than men." The latter statement implies that risk preference is a stable characteristic of people defined by their sex; and that a lower risk preference is universally true for every individual member of the class "women" (as compared to "men"). As Nelson notes (2012: 3), "this exceedingly strong implication is not likely intended by those who write such statements", noting that "just one example of a cautious man and a bold woman disproves it." However, she goes on to draw our attention to how the more probable meaning of the statement (that women are, or are disposed to be more risk averse by virtue of

being a woman) is also problematic.

In the current example, the statement would imply that greater risk aversion is an essential characteristic of womanliness—or, by parallel reasoning, that greater risk seeking is an essential characteristic of manliness. (Nelson, 2012: 3-4)

Reflecting themes in feminist economics introduced earlier, Nelson rejects the notion that risk aversion is a sex-linked “trait” and, instead, locates the source of observed sex-based differences in risk preferences in patterns of gendered socialization and power. As such, observed sex-differences should not be the endpoint of inquiries into risk preferences but, rather, the stimulus for further inquiry into the gendered norms and other institutions that influence men’s and women’s attitudes to risk. This potentially creates an important role for future studies of the issue in different cultural contexts.

It is important to note that Nelson’s critique of the gender and risk literature also relates to another theme of feminist economics that was highlighted in earlier sections of this paper, namely its critical perspective on possible biases within the economics discipline. Nelson highlights the influence of mental models on the work of researchers; of how the inferences we derive from empirical data are likely to reflect “the structure of our inside worlds— that is, of evolved, developmental human cognition.” (Nelson, 2012: 5) She notes that the models that we use are significantly influenced by our experiences of and beliefs about men and women and, thus, perhaps, it is not surprising that many studies ‘leap’ from evidence of a statistically significant difference in average levels of risk aversion to conclusions about men’s and women’s natures. In other words, researchers are (as are others) prone to “confirmation bias”, whereby we tend to more readily absorb information that conforms to our pre-existing beliefs, including our beliefs about the ‘nature’ of men and women. This can be an important (and potentially dangerous) source of distortion in our work. For example, as Nelson points out, if we report a statistically significance in risk aversion that is not *substantially* significant we can reinforce common

stereotypes about men's and women's 'natures.' To the extent that this diverts attention from cultural and other institutional sources of differences in behavior, it can be an obstacle to the design of appropriate policy measures aimed at improved gender equity. In other words, there is a risk that research into sex-based differences may contribute to the perpetuation of gender inequality, rather than help to reduce it.

6. Feminist Economics and Studies of Altruism

Similar themes are apparent in feminist economic analyses of altruism. A number of studies of differences in altruism between men and women have been undertaken, motivated by a sense that they could lead to different patterns of charitable giving, bargaining, and household decision-making. As such, gender differences in altruism are potentially consequential for outcomes across a number of different market and family situations. In their 2008 paper "Altruism in individual and joint-giving decisions: what's gender got to do with it?", Linda Kamas, Anne Preston and Sandy Baum reviewed the experimental evidence on sex-based differences in altruism, and contributed the findings of their own study of the issue. The first part of this section draws heavily on their summary of the relevant literature. Broader feminist economic perspectives on the topic of altruism are considered in the latter part of this section. Here the focus of the discussion turns away from the question of whether women are more/less altruistic than men and toward the general importance attached to altruistic (and other other-regarding) preferences by feminist economists.

As Kamas, Preston and Baum (2008) describe, experimental studies of altruism typically assess participants' willingness to sacrifice their own outcomes to improve the well-being of another either by using a dictator, ultimatum, public good or investment/trust game. The authors favour a dictator 'game', where the dictator decides how to allocate a sum of money between himself/herself and another player, on the grounds that it has the greatest ability to separate the

effects of altruistic preferences on behavior from the effect of risk and competition. In their dictator games, the recipient of the money is a charity.

Kamas, Preston and Baum (2008) report findings from their own experiments that indicate significant gender differences in altruistic behavior, with women giving significantly more, on average, than men. Their finding was generally suggestive of a pattern of difference similar to that observed by James Andreoni and Lise Vesterland (2001: 293). However, several studies included in their review, such as those by Martin Dufwenberg and Astri Muren (2006) reported higher levels of generosity by men. Kamas, Preston and Baum (2008: 25) conclude that in the experimental literature there is no consensus on the statistical significance of gender differences in altruistic behavior.

The explanation offered for the mixed-results on altruistic preferences by Kamas, Preston and Baum (2008: 25) centres on the differences in the experimental settings of the various studies. These differences relate to both the type of game used, as well as "...the experimental design or context, ...the framing of the experiment, the degree of anonymity, the subject population, and/or the manner in which the participants are chosen." Whether men or women are identified as the "more generous sex" apparently varies with the price of giving, the degree of anonymity, and the possibility of reciprocity (see also Cox and Deck, 2006). Several studies conclude that the gender of the recipient of an altruistic act also affects gift-giving. The study conducted by Kamas, Preston and Baum (2008) found that gift-giving increased in mixed-sex team situations, and especially when the participants were able to negotiate a common gift.

Kamas, Preston and Baum (2008: 44) acknowledge (albeit in a footnote) that they do not provide an in-depth explanation of the causes of observed sex-based differences in altruism. However, they do allude to a number of influences stemming from the social environment, and these are potentially reflective of the processes of gendered socialization that were noted in earlier sections of this paper. For example, their explanation for the observation of higher levels of gift-

giving by mixed-sex teams includes a role for social information (about the social norm for gift-giving) and social image (a desire to be considered favourably by others) (Kamas, Preston and Baum, 2008: 27). As a reviewer of their paper apparently observed, it may also be possible that women are socialized to be more giving than men, and women's identification as mothers or caregivers may lead to altruistic acts (Kamas, Preston and Baum, 2008: 45). The authors also acknowledge the possibility that as experiments of this type are conducted beyond the confines of the current set of developed Western countries, the impacts of cultural and sociological forces on gender differences in altruism will become more apparent.

The interpretation of experimental evidence offered by Kamas, Preston and Baum contrasts that provided by James Andreoni and Lise Vesterland (2001). The latter appear to succumb to the various pitfalls involved in assessing sex-based differences in behavior that were noted by Julie Nelson. They infer from their experimental evidence [of a statistically significant gender difference in the observed levels of gift giving across 142 students in eight experimental settings] that “... when altruism is expensive, women are kinder, but when it is cheap, men are more altruistic.” (Andreoni and Vesterland, 2001: 293) The focus of their results is on the statistical significance of observed differences in means, rather than on the magnitude of these differences or the distribution of results. Their study ‘essentialises’ the nature of men and women, reinforces common stereotypes, and fails to acknowledge the preferences of men and women who don't conform to group averages. It provides no insights into the possible sources of observed gender differences in altruism, and its discussion of policy implications is limited to a consideration of the consequences of gender differences in charitable gift giving and restaurant tipping.

A more important feminist economic discussion of altruism shifts the focus of attention away from possible sex-based differences and toward the general importance of altruistic preferences (for men *and* women). This discussion forms part of a broader critique of the theoretical structure of mainstream economics by

feminist economics. The critique argues against a narrow specification of the sources of individual motivation and argues instead for specifications that take account of various sources of motivation, including altruistic preferences, and the social influence on these motives.

The critique of mainstream economic theory, developed by Paula England (see, for example, England, 2003) focuses, first, on its assumption that individuals in market situations are atomized, self-interested, and have preferences no one can change. This is contrasted against the assumption that individuals in family situations are connected to each other, with inter-dependent preferences and engaged in a process of shaping the preferences and values of the young. As England explains, whilst the theory's analysis of market situations features a 'separative' view of the self that presumes, amongst other things, that individuals lack sufficient emotional connection to others to feel any empathy – or to be altruistic, a 'soluble' self is assumed in its analysis of family situations, allowing both empathy and altruism to influence behavior and outcomes.

England (2003: 36-40) highlights the various problems with this theoretical structure. These include problems caused by incorrectly assuming pure self-interest in market situations, and by over-emphasising the extent of empathy and altruism in family situations. Additional problems arise from the separative/soluble dichotomy and its relationship to gender dichotomies in western thought. England notes that in simple (sexist) formulations of western thought, men are seen as naturally separative, autonomous and individuated, whilst women are seen as naturally soluble, connected and yielding. Separation has been valorized in western thought, at least for men, whilst connectedness has been devalued. As a consequence, writing in economics and other fields has "failed to recognize that men are *not* entirely autonomous....whilst women's nurturing work was taken for granted and excluded from...theory." (England, 2003: 38)

These observations link to several of the themes of the feminist critique of mainstream economics noted in earlier sections of this paper. For example, the valorizing of separation – and market situations – has contributed to a failure to adequately recognize the experiences and contributions of women. The gendered nature of the separative/soluble dichotomy helps to explain common confusion of gender with sex; of the tendency to identify ‘essential’ differences between men and women.

Feminist economic analysis suggests that it is appropriate to assume that both male and female participants in market and family situations will have *both* “separative” and “connective” qualities; and that these qualities will have *both* positive *and* negative aspects. Core concepts, therefore, are of “individuals-in-relation” or “relational autonomy” (England, 2003: 39).

These concepts have obvious relevance for the feminist economic analysis of altruism (and for the analysis of the related concepts of cooperation and strong reciprocity). Altruism is potentially relevant to the preferences and behaviors of men *and* women. It should be considered as a source of motivation in market *and* other situations. There is a need for more theoretical and empirical studies of men’s and women’s altruistic (and other other-regarding) preferences. We need additional insights to how these preferences interact with other preferences, including self-regarding preferences; how they are shaped; and how they are influenced by different aspects of the contextual environment, such as general levels of altruism in the surrounding community. Taking this approach, studies of gender difference in altruism would ideally focus on women’s traditional association with the family sphere; how, therefore, they have been traditionally assumed/expected to be altruistic; and the consequences of these assumptions/expectations for their observed behavior and their economic outcomes.

This approach features in Nancy Folbre’s (1995) analysis of caring labour, a topic that calls into question the role and impact of altruistic preferences and which

also has relevance for a range of important policy issues, including the future quality and cost of child and elder care, and pay equity.

Folbre highlights that caring relies on a range of motivations, including reciprocity, altruism and responsibility. She also emphasizes that these motivations are constructed in a social environment. Folbre recognizes that caring labour is associated with tasks that women often specialize in, such as mothering. However, she also emphasizes that caring labour can (and is) undertaken both men and women, and that it occurs in both family and market situations.

Folbre is particularly concerned with the interactions between the different sources of motivation for caring labour. She acknowledges the role of altruism but notes that it interacts with long-run reciprocity and the fulfillment of obligation or responsibility. As such, she describes carers as being both “connected” (through their altruistic preferences) and “separate” (in their concern for their individual payoffs). In Folbre’s analysis, individuals may provide care out of a sense of affection or responsibility for others, but their motivation to care is likely to also be influenced by long-run expectations of reciprocity of either tangible or emotional services. Care motives are also described as being dependent, in part at least, on the level of altruism and reciprocity within the surrounding community. In turn, social norms are ascribed a potential role in helping prevent a coordination (or caring) failure.

Folbre accounts for gender differences in caring labour in a variety ways. First, social norms, as well as notions of obligation, are gendered. As such, they result in a different structure of payoffs for men and women involved in caring and other roles. The historical context is also important, with women’s traditional roles in caring for others potentially affecting the nature and extent of their altruistic ‘preferences’ and, thus, their evaluation of caring and other roles.

The outcomes from caring situations, described by Folbre, are often not positive for women. Caring labour is typically low paid and aspects of the work – including the responsibility, skill and effort involved are not generally reflected in wage and other outcomes. Given that at least part of the motivation for caring labour is self-interested, the low wages place at risk the ongoing supply of care. An appropriate policy response to this dilemma would be to improve the ‘rate of return’ from caring labour, regulating wage outcomes to ensure that low wages do not crowd out care motives.

The contrast between Folbre’s analysis of caring labour and that offered by mainstream economists is stark. The latter tend to rely on the notion of non-pecuniary preferences, which are typically ‘lumped together’ and modeled as exogenously (and, presumably, biologically) determined. The independent determination of motivation in these models results in a prediction that if an individual gains positive utility from caring he/she will be willing to trade-off lower wages to ‘indulge’ this preference. Wage regulation is rejected on the assumption of the absence of social or other barriers to mobility. Indeed, in some analyses, higher wages for carers are viewed as a threat to caring labour – based on a belief that higher wages would encourage the participation of individuals with less altruistic preferences (Heyes, 2005).

7. Conclusions

This paper has attempted to convey key themes in feminist economics of relevance to smart behavioral economists. It took a novel approach to this task by structuring the discussion using concepts and terms drawn from the Institutional Analysis and Design framework, developed by Elinor Ostrom. The framework was used to identify the distinctive features of feminist economics, including, perhaps most importantly, the emphasis it places on understanding the social influences on individual preferences, actions and outcomes. The ‘situated’ nature of economic behavior is a fundamental concept in feminist economics. Feminist economics pays particular attention to how individuals’ economic power,

obligations, goals, interests and, ultimately, their economic outcomes, are affected by their social roles and relationships, and how these, in turn, are affected by their ascribed social identities, including their gender. Gender is distinguished from sex, or an individual's biological identity of being male or female. It refers to socially learned expectations and behaviors associated with being male or female.

The paper has highlighted the various ways in which the concept of a 'situated actor' influences feminist economists' engagement with topics in behavioral economics. It has demonstrated that feminist economists tend to take a cautious approach to the analysis of observed differences in behavior between men and women. Whilst feminist economists do not deny that these differences exist, they emphasise the need to explore their sources in the social environment, and they sound a strong warning about the dangers of drawing inferences about the essential 'natures' of men and women from these differences.

The concept of a situated actor is also apparent in feminist economists' perspectives on the theories and methods used in the analysis of economic behavior. The paper highlighted the feminist perspective that academic inquiry itself is a fundamentally social process. As such, participants in academic work situations are subject to biases that arise from their own (essentially limited) set of experiences, including their experiences of and beliefs about men and women. This can be an important source of error in academic work, potentially contributing to a reinforcement of stereotypes about men and women, rather than promoting greater gender equity. An important concern of feminist economists is to minimize these sources of error by training economists and promoting the adoption and enforcement of methodological principles designed to check the influence of gender bias.

The paper also emphasized the feminist economics' critique of the separate/soluble dichotomy in mainstream economics. The mainstream assumption is that individuals in market situations are "separate", that is,

essentially atomized, self-interested, with preferences no one can change. In contrast, this theory assumes that individuals in family situations are “soluble”, that is, connected to each other, with inter-dependent preferences, and engaged in a process of shaping the preferences and values of the young. The critique observes that the separate/soluble dichotomy that characterizes mainstream economics has a strong gender dimension, with market situations commonly associated with the activities of men, whilst family situations are commonly linked to the activities of women. This has various negative impacts, including the tendency for the lives and experiences of many women to be excluded from economic analysis, and the “essentialising” of men’s and women’s natures [“men are self-interested and autonomous, whilst women are caring and dependent”]. The approach has limited the analysis of the *range* of motivations [self-interested and other-regarding] affecting the behaviors of men *and* women in market *and* family situations.

Feminist economics offers an alternative concept to guide future empirical and theoretical studies of behavior: that of ‘individuals-in-relation’. This conveys that men and women, in market and non-market situations, are likely to be influenced by self-interested and other-regarding preferences. The recommendation is for smart behavioral economists to pursue studies of how different sources of motivation interact with each other; how they are shaped; and how they are influenced by different aspects of the contextual environment, such as general levels of altruism or reciprocity in the surrounding community. Further studies of gender differences in behavior are needed, but they should focus on how, for example, prevailing gender norms affect the positions men and women can participate in, the payoffs and value attached their alternative actions, and, ultimately, their economic outcomes.

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