

# 8

## Epistemology of Feminist Economics

Zofia Łapniewska

### Introduction

Economics is often portrayed as an objective and rigorous science, giving the impression of being one of the physical rather than social sciences (Longino, 1990; Nelson, 1996a). The principle of rational choice, as well as the implementation of game theory and mathematical formulas, allows economists to calculate the effects of certain phenomena, or to predict, not necessarily precisely, the outcomes of some economic decisions. Despite its imperfections, econometrics remains the mainstay method of analysis—perceived as not necessarily accurate, but the best reflection of our economic reality. But, as always, the question remains: can we quantify everything? Would it be possible to make economic forecasts based on animal spirits (human emotions motivating consumer and investor confidence (Keynes, 1936)) or cognitive biases such as the illusion of control, selective perception, illusion of validity, optimism bias, risk

---

Z. Łapniewska (✉)

Institute of Economics, Finance and Management,  
Jagiellonian University, Kraków, Poland

compensation and so forth (Akerlof & Shiller, 2009)? Or, how about the way we value common goods and services that don't rely on notions from Hobbes' *Leviathan* to be governed and prosper (Hobbes, 2010 [1651]; Ostrom, 1990)? And finally, how can we use numbers to illustrate the emotions or affective and bodily sensations accompanying care (Deleuze & Guattari, 1987)? Feminist economics attempts to face these questions by referring to the ethics of care (Phillips, 2007; Tronto, 1987) and going beyond quantitative methods (Nelson, 1993; Poteete, Janssen, & Ostrom, 2010).

In this chapter, I put forward a thesis that feminist economics is an economics of becoming, focused on processes instead of only outcomes. To support it, I concentrate specifically on the epistemology of feminist economics. The first part of this text is dedicated to the premises of the ethics of care, its critique and prospects. In the second part, I introduce a selection of feminist epistemological concepts that are then used in determining research methods. The last part of this chapter recommends methods used by feminist economists and addresses new trends and discussions in this field.

## Economics and Ethics of Care

Feminist economics is a critical field of study within economics, attempting to overcome androcentric biases in the discipline (cf. chapter by Margunn Bjørnholt in this volume). It is guided by the ethics of care, a framework for moral and political judgement, as well as by feminist epistemology as the basis for its methodology (Strassmann, 1999). Julie A. Nelson argues that feminist economics “challenges economic analyses that treat women as invisible, or that serve to reinforce situations oppressive to women, and develops innovative research designed to overcome these failings” (Nelson, 2008). Feminist economics shares research interests with other heterodox approaches, such as institutional economics and post-Keynesian or ecological economics; yet it also differs substantially from them due to its overriding feminist perspective. Some of its core areas of concern include care, social reproduction, the environment and well-being.

Moreover, as I propose in my thesis, feminist economics focuses on processes—including processes of “becoming”—and, given its various epistemologies, it differs from mainstream economics’ interest in the figure of self-interested *homo economicus* at its core (Strober, 2003). The French philosopher Gilles Deleuze (2006) uses the term “becoming” to conceptualize “becoming different” from the identities present in our habitual thinking (Stagoll, 2005, pp. 25–27). For Deleuze, a human being is not a stable and rational individual that remains the same person despite various experiences and stimuli, but is a constantly changing being shaped by a moving order of forces. This dynamic approach to individuals is an important factor in care services. The “functionings” (Sen, 1993) of a caregiver and care-receiver evolve over time, and so does the relationship between them. Deleuze’s becoming, which I interpret here as becoming different from the economic man, refers to bonds built with others, which Rosi Braidotti (2006) describes as:

a faithfulness that is predicated upon mutual sets of inter-dependence and inter-connections, that is to say sets of relations and encounters. These compose a web of multiple relationships that encompass all levels of one’s multi-layered subjectivity, binding the cognitive to the emotional, the intellectual to the affective and connecting them all to socially embedded forms of stratification. (p. 136)

Feminist economists share this point of view, seeing the world around us in terms of social constructions and perceiving people as connected and concerned with the well-being of others, and, hence, also emotional beings influenced by their environment in their decision-making (Folbre, 1994; Nelson, 1996b; Waring, 1988). Consequently, their research is guided by the ethics of care, which is not only important for feminist economics but also constitutes an integral component of other heterodox traditions.

The ethics of care is described by Joan C. Tronto (1987) as “a set of sensibilities that every morally mature person should develop, alongside the sensibilities of justice morality” (p. 662). These sensibilities are developed when individuals experience both caring for others and being cared for by others. Tronto (1987) concludes further that “[t]he dearth of

caretaking experiences makes privileged males morally deprived” (p. 652). Care that mostly burdens women is often perceived as insignificant, hidden and belonging to the private sphere, even though it often leads to their time poverty and economic hardship. Feminist economists in their research aim to elevate the meaning of care by showing that the public/private split is artificial and harmful to both women and men. Clare Ungerson (1995) claims that to change our understanding of care and citizenship, it is essential to dispose of that split. Feminist economics shows that a more equal division of care responsibilities between women and men can improve the lives of women and men alike (Esplen, 2009). Numerous studies illustrate that care work contributes significantly to the economy, fosters reproduction and development of societies and provides equal chances for a good life for all (Budlender & Sharp, 1998; Elson, 1998).

It is also necessary to transform the dominant ethos away from individualistic perspectives to a more social and collective one based on reciprocity, solidarity and equal rights (Phillips, 2007). Seeing people as engaged in the relationships of care at every stage of their lives reformulates the definition of human nature in mainstream economics. It is no longer that of a rational self-made man maximizing his own interests. The ethics of care accepts the fact that relational responsibilities create a social order that may be incompatible with the full exercise of individual rights. Rosi Braidotti (2006) calls the forcible creation of such social identity “the death of the ego” (p. 155). She emphasizes that “ethical behaviour confirms, facilitates and enhances the subject’s *potential*” (Braidotti, 2006, p. 134). This “becoming”, or transformation, in people’s lives can also be seen as a deep journey to our inner treasure—which Plato (1993) calls *agalma*—that makes us valuable persons. Such an evolved form of self-knowledge may lead to building “a society based on care [that] would perhaps be less violent, rageful, and unhappy than many current societies are” (Tronto, 1995, p. 148). The epistemology of feminist economics is guided by that logic.

Unfortunately, not all existing needs for care can be met, primarily due to the scarcity and commodification of care. In this respect, the analysis of care goes beyond gender issues and includes disadvantaged groups, such as ethnic minorities or the poor, that may have difficulties to access

care (Duffy, 2011). This broader perspective is close to the approach of intersectionality. In this regard, Tronto's (1987) following questions are still relevant:

[w]ho determines who can be a member of the caring society? What should be the role of the market in a caring society? (...) How much inequality is acceptable before individuals become indifferent to those who are too different in status? How well do current institutions and theories support the ethic of care? (p. 661)

Institutions, as well as people, function in a complex net of social relations, which is why the responsibilities they perceive as binding are also complex and sometimes competing. In addition, people tend to care more for those who are close to them—physically, emotionally or culturally. The question of context has always been important for feminist economists, as it enables them to situate the subjects and objects of their research in a particular time and culture/society. At the same time, feminist epistemology has rejected objectivity and pure rationality (Nelson, 1996b).

The market of care emerged for those without care relationships or with greater care needs than their social web could accommodate, resulting in the commodification of care and services provided by both public and private institutions. Efficiency seems to be the only factor impacting the market of care which encloses care within discourses focused on cost. Also for many individuals, buying care has become part of this reductive shortcut of bringing costs down, including capitalizing on resources offered by the black market of care services provided by migrant workers. These global care chains cause “care drain” in the migrants’ countries of origin and can also take the form of modern-day slavery (Ehrenreich & Hochschild, 2004). Care, however, should not be perceived as simply another commodity dragged into the capitalist market logic of exploitation. The nature of care is more complex and is based on relational responsibilities between a caregiver and a care-receiver. Care as a process, in order to develop properly, requires that both parties work on their specific roles and on their “becoming” subjects, which means transforming themselves into more sensitive beings and feeling empathy with

others. This corresponds with the position of Deleuze and other post-modern thinkers, for example Judith Butler (2004), that one's self does not remain the same stable, rational individual, but arises from confluences of expectations, societies, laws and other stimuli from their environment (Stagoll, 2005, p. 27). *Ipsa facto* care, described earlier, should include attentiveness to the needs of others, taking responsibility for their own actions, gaining certain skills and finally responding adequately (Fisher & Tronto, 1990; Phillips, 2007). These qualities are not limited to care relations only, but they can be used as principles in all spheres of life. They can guide professional activities, contacts with family and friends, or our capacity for engaging in collective political actions or volunteer work. All these spheres and issues are also studied by feminist economists.

The intention of this part of the chapter was to present only the most important focal points of political and moral discussions that guide inquiries in feminist economics as an economics of becoming. By applying the ethics of care and relational responsibilities perspective to their research, feminist economists concentrate on equality, justice, relationships with others and context. In doing so, they distance themselves from an individualistic point of view, which makes them different from mainstream economists and their methods. Care, efforts to reinforce its status and its equitable distribution between women and men are undoubtedly key issues in feminist economics. Other key issues include trying to create better living conditions for women and the disadvantaged, while questioning the concepts of rationality, truth and objectivity. These aspects of feminist epistemology will be discussed in the next part of this chapter.

## Feminist Epistemology

Feminist epistemology, defined as the feminist engagement with cognition, the production of knowledge and the perception of truth, coincides with the assumptions of feminist economics on at least four different planes: (1) a critique of rationality and dualism (Bordo, 1987; Lloyd, 1984), (2) gender biases in science (Code, 1996; Longino, 1990), (3) the

re-envisioning and reconstruction of scientific practices through, for example, the inclusion of context, values and ethical opinions (Beneria, 2003; Nelson & Goodwin, 2005) and, finally, (4) the knowledge formed by, for example, ordinary experience and leading to the improvement of life (Harding, 1995a; Nussbaum, 2000). These planes are also mirrored in Deleuze's works, since he challenges Platonic theories privileging originality, essence and constancy (Deleuze & Guattari, 1987). Although feminist epistemology is complex and includes a diversity of theoretical positions, I introduce and discuss in more detail the four themes I consider to be the most well-represented in feminist economics.

The feminist critique of rationality and dualism has been initiated by Genevieve Lloyd (1979) and Susan R. Bordo (1987), among others. They argue that "the Man of Reason" is derived from the "Cartesian promise of absolute epistemic objectivity and ultimate foundations for knowledge" (Bordo, 1987, p. 2). Lloyd determines that our contemporary consciousness, which follows the ideal of rationality, also associates the "male" with the "rational" and the "female" with the "non-rational" (Lloyd, 1979, p. 18). Susan Hekman (1990) and Julie A. Nelson (1996b) quote further dualisms on which Enlightenment epistemology rests, such as the public/private, subject/object, culture/nature, formal/informal, individual/social and autonomous/dependent dualism, thereby showing the privileged character of the first element, mainly attributed to men, over the second element, most often recognized as distinctly feminine. They disagree with the Enlightenment's "claim that only rational, abstract, universalistic thought can lead to truth" (Hekman, 1990, p. 5), and argue that "social sciences are subjective, but that this subjectivity is their strength, not their weakness" (ibid.). Bordo (2002, p. 85) also refers to Aristotelian modes of knowing, namely *thought* (or reason), which is immaterial and universal, and *sensing*, which is the domain of the body that Bordo describes as material and precise. In contrast, Gilles Deleuze's and Félix Guattari's (1987) concept of affect maintains that sensing can also refer to the states of body and mind, which are difficult to grasp.

Feminist economic methodologies, which are described in more detail in the next section, move beyond these dualisms, aiming to destabilize and deconstruct them (Jennings, 1993; Ungerson, 1995). By perceiving the world as a social construct, feminist economists avoid using bold

cognitive categories and reject dichotomous presuppositions to view social processes in their constant flux and forms of “becoming”, which is consistent with my thesis that feminist economics is an economics of becoming. As a social scientist, I not only maintain a pluralistic understanding of truth and knowledge that is contextually dependent, but I also view sex and gender as changing (cf. Butler, 2004) according to the “patterns of culture” (Benedict, 1934). Bodily transformations which do not necessarily reflect the traditional duality of sexual identity are becoming more and more common, and the models and patterns of social behaviour are evolving. In addition, Lloyd (1984) indicates that “[d]econstructive strategies can assist our understanding of the symbolic content of the ‘male’ and ‘female,’ and our understanding of what is distinctive about the relations between women and the symbol structures which, as symbol users, they share with men” (p. IX).

This topic has been brought up by feminist economists for many years regarding political and social debates, such as in Nelson’s article entitled “Would women leaders have prevented the global financial crisis? Teaching critical thinking by questioning a question” (2013). She argues that in order to develop critical thinking, students must notice “both difference *and* similarity” between genders and avoid simplistic binary thinking (Nelson, 2013, pp. 2–3). These observations apply not only to the employees of institutions in the global financial market, but also to the structures of academia. This reflection brings us closer to the next theme of feminist epistemology, which addresses gender biases in science.

The feminist critique of science studies, which involves revealing gendered biases embedded in scientific practices, has been articulated by feminist theorists such as Sandra Harding (1995a), Helen Longino (1990) and Julie A. Nelson (1996a). Harding (1995a) aptly notices that “assumptions have been those of the dominant groups, as in the racist, sexist and class-bound biological determinist ones” (p. 11). They limit the hypotheses and methods of scientific inquiry, which consequently do not result in plausible models and theories (Longino, 1993). Nelson (1996a) recognizes that “contemporary economic theorizing is based on a set of a priori postulates that focus on only selected aspects of human behavior”, which covers “the ‘tough’ areas of public life (by which they mean markets



and government)” and “the efficient use of economic resources, pushing aside the ‘soft’ areas of family finances and economic and social equity” (p. B3).

The selection of economics research methods used to follow a similar path, valuing quantitative methods (regarded as “objective”, “formal” and “rational”) over qualitative ones (seen as “informal” and “imprecise”). Many feminist economists, instead of adhering to previous models, call for treating all methods on equal terms and selecting them depending on research topic and needs (Goodwin, Nelson, Ackerman, & Weisskopf, 2005; Macdonald, 1995). Janet Seiz (1995) recommends positioning a researcher on the epistemological “middle ground” between the overconfident angle of trust in scientific knowledge and overdiffident angle of relativism, pointing out that moving closer to either of these extreme stances may diminish expected results such as the improvement of women’s lives (p. 113). In order to advocate for social change and challenge the assumptions of mainstream economics, feminist economists must effectively communicate with a wider audience, including politicians, using language and arguments tailored to convince those who wield influence over social change. The difficulty lies in the fact that politicians have recently started making use of innovative psychographic microtargeting (sending diversified and precisely adjusted announcements to their voters), based on big data (detailed data on millions of people—their “digital footprints”—that can be purchased on the Internet databases markets) and modelled by private research companies (Kosinski, Wang, Lakkaraju, & Leskove, 2016). Nonetheless, such companies or research centres need to build their models in correspondence with research questions or theses/hypotheses, and these are often based on qualitative evidence. It is important to mention that big data can be used not only for marketing purposes, but also for the common good (e.g. by combing data for patterns in health) or for promoting values on which fairer and more equal communities and local economies can be built. For that reason, it is still important to draw attention to the selection of models, methods and techniques used by economists in all areas of studies (with preference to interdisciplinary ones), as well as to focus on empirical and policy-oriented work rather than abstract theorizing.

Feminist economists argue that androcentric bias is not only present in the thematic areas and methods selected in research, but also in the selection of research subjects that ignore women as either subjects or objects of scientific inquiries (Nelson, 1996a, p. B3). Feminist economists advocate for more studies on gender in the formal and informal economy, more research grants for such analyses, and more space for economic courses to include gender aspects so as to enrich the discipline (Schneider & Shackelford, 2001). Finally, they ask for the power to shape the discipline, to push it towards more inclusivity as well as to develop new and more diverse curricula, depending, in part, on women's representation within the field. Sadly, economics still has the lowest share of women among full professors in the social sciences; therefore, the appeals of feminist economists in this regard should be taken seriously (Ceci, Ginther, Kahn, & Williams, 2014; Romero, 2013).

The demand for scientific pluralism is aligned with the third dimension of feminist epistemology: the re-envisioning and reconstruction of scientific practices through, for example, the inclusion of context, values and ethical opinions. In a similar vein, Donna Haraway (1988), another postmodern philosopher, argues that “[s]cience has been about a search for translation, convertibility, mobility of meanings, and universality—which I call reductionism only when one language (guess whose?) must be enforced as the standard for all the translations and conversions” (p. 580). To do away with the prevalent trend of looking for a universal pattern of scientific inquiries, Haraway proposes making use of the diversity approach and a wide network of connections in order to learn about different communities and their knowledge deriving from their particular contexts—qualities she dubs “situated knowledges”. Additionally, Susan Bordo (1987) observes that “[p]hilosophy has been forced to recognize that its ‘enduring’ issues and ‘timeless’ concerns are the products of very particular cultural circumstances” (p. 3). The historical context in which certain lasting theories came into being is distinctive for economics. John Maynard Keynes (1936) and Michał Kalecki (1933) published at the same time. Their theories were used to justify the expansion of the welfare state as well as the introduction of, for example, the New Deal and the Marshall Plan after the Second World War (Hannsgen & Papadimitriou, 2009). Trends changed and in the 1970s the Chicago school of economics

began to build the neoclassical empire (Klein, 2007, p. 7). Feminist economists have critiqued schools of mainstream economics and their influence on real economies and on the development of economics as a discipline (Ferber, 1995; Waring, 1988). They emphasize that not only do historical conditions change, but so do the cultures and places in which ideas are implemented. For example, capitalism had different faces in the United Kingdom, the United States, Haiti and Chile in the 1980s (Toussaint, 2012). In those societies, the position of women, their *habitus* and their economic power also differed; therefore, comparing their economies by relying only on numbers, which reflect wealth or growth for instance, blurs rather than accounts for their real status. In their book entitled *Microeconomics in Context*, Neva Goodwin et al. (2005) emphasize that ultimately people and societies have different goals and:

there are costs as well as benefits to the continual expansion of human control over a finite material world, and to emphasizing wealth in our human relations. Looking at the complex fallout of our achievements—including environmental degradation, stress felt by families, and other social ills—it is clear that promotion of material wealth without concern for the ends to which wealth is used, or for the consequences of the manner in which wealth is pursued, may in fact work *against* the final goals we most desire. (p. 5)

Many feminist scholars have discussed ethical opinions about wealth accumulation, which are now strongly evident in the international economic debate (Atkinson, 2015; Piketty, 2014) and in the orientation towards goals other than just material affluence (Beneria, 2003). These alternative goals—namely, well-being, freedom, participation, meaning, ecological balance—could also have different meanings for women versus men, as well as for other groups within society. The feminist economic assessment of established ends and the ways to accomplish them include normative and descriptive components and are not value-free. Furthermore, feminist economists situate their theories and research in a particular context, address communities and relationships between people, and include care, thereby deconstructing androcentric and individualistic bias in scientific practices. Julie A. Nelson and Neva Goodwin

(2005) give special importance to this approach in their working paper on teaching ecological and feminist economics:

...[t]he broader, final goal of “contextual economics” is well-being for all people, present and future, in all of their economic and social roles: not only as consumer and producer, but also as citizen, family member, teacher, and giver and recipient of nurturing care and other assistance. (p. 2)

The different social roles that we perform every day construct the context we live in; hence, they are part of our “situated knowledges” (Haraway, 1988) and relate to the fourth area of feminist epistemology discussed here: the knowledge derived from mundane experiences, aiming at the improvement of people’s lives.

The function and utility of knowledge is often determined in communities or groups, which understand it better than individuals. All of us have different experiences and abilities. If we share our knowledge, we can have more confidence that it is comprehended appropriately and the process of discussing it can lead to the emergence of new qualities. Additionally, knowledge can emerge from deductive processes as well as from casual accounts and qualitative research (an inductive approach). Gaining grassroots knowledge through, for example, fieldwork often leads to the greatest success in creating better conditions for women’s development and boosting their well-being. Sandra Harding (1995a) puts it this way:

[i]n order to generate economic theory that is more comprehensive and accurate, research must value—be interested in—nature, childhood, bodily needs, human connectedness, women’s work in the household, the gender-differing values and interests within every household and gendered power relations more generally. The neutrality ideal (ideal of “positivity”) itself, they are arguing, has been shown to limit the empirical and theoretical adequacy of economic theories. (p. 10)

By focusing on the issues of domestic labour or unpaid work, feminist economists place economic provisioning at the centre of their studies (Power, 2004). Additionally, what is also distinctive for the feminist standpoint theory (Harding, 2004) is that feminist economists try to

present their theories and research from the perspective of women's lives. Thus, they can be perceived as "outsiders within" (Collins, 1991), having an epistemic privilege as women that is contrary to their disadvantaged status within society. Harding (2004) emphasizes that this approach leads to the development of new research questions and goals, because the marginalized see problems differently. Furthermore, she calls for a "fundamental ethic of democracy: 'those who bear the consequences of decisions should have a proportionate share in making them'" (Harding, 1995b, p. 126).

The exclusion of local women's perspective from the process of implementation of the official employment programmes of the World Bank in sub-Saharan Africa is one of the more significant examples of that absence. Sarah Bibler and Elaine Zuckerman (2013) reviewed 36 projects conducted in Malawi, Mali, Niger and Rwanda, proving that 92 per cent of them were not effective because of the oversight of women's time poverty caused by the burden of care. Their report illustrates women's social marginalization and their invisibility in the decision-making process. Their lives were not adequately mapped nor needs identified; therefore, time poverty went unnoticed, and the programmes were introduced in vain. If only additional care services had been offered, the projects could have ended differently.

To achieve these different ends, however, local knowledge and norms have to be utilized first. Rules and social strategies which exist in dominant societies are not neutral, but are products of existing power relations. Gender is one of their many layers. That is why, before we start scientific inquiries, we have to re-envision our research premises to include the structures within the social matrix. The tools and methods which feminist economists use fit the epistemic assumptions discussed earlier. Now, in the next section, I will present some concrete examples.

## Feminist Economic Methodology

The debate about methodology in feminist economics might be based on a false polarization between the application of qualitative and quantitative methods. Thus, as Irene van Staveren (2010) points out "[w]e need

both quantitative and qualitative methods, in order to further our understanding of unpaid labour and care” (p. 26). As Shulamit Reinharz (1992) claimed over two decades ago, feminist economists have used a wide range of tools, including “all existing methods and have invented some new ones” (p. 4). I specifically mention the time frame because it is an important factor in the methodological field. Certain trends of using particular methods prevail at specific moments, including the recent trend of using big data (large datasets mentioned previously in this chapter) or certain research perspectives such as intersectionality. Later in the chapter, I outline the methodology of feminist economics and some old and new research approaches, accompanied by a number of examples illustrating their practical application. Due to the vastness of this thematic area, I do not show all academic discussions and arguments, but instead focus on the most common research practices.

Feminist methodology is defined as a feminist theory on the principles of conducting feminist research, indicating a course of application and thereby concentrating on the very process of doing feminist research (Harding, 1987; Jayaratne & Stewart, 1991). These principles are derived from the aforementioned approaches and viewpoints, such as the ethics of care and feminist epistemology. Feminist scholars propose to change economics as a discipline by accepting the vulnerability and interdependency of human beings as a core assumption, which contrasts with the existing figure of a rational economics man that underpins neoclassical economics (Blank, 1993). This figure of *homo economicus* is portrayed as a man that “springs up fully formed, with preferences fully developed, and is fully active and self-contained. He has no childhood or old age; no dependence on anyone; no responsibility for anyone but himself” (Nelson, 1996b, p. 31). To understand the economics of becoming, which constitutes the underpinnings of the feminist economics, as presented in the thesis of this chapter, is, however, to understand that “[h]umans are born of women, nurtured and cared for as dependent children, socialised into family and community groups, and are perpetually dependent on nourishment and shelter to sustain their lives” (ibid.).

According to Kenneth Boulding (1986), the presiding orientation of economics towards “how society was organized by exchange” rather than how “society was ‘provisioned’” has contributed to the failure of modern

economics. Feminist economists engage with caring and social provisioning as starting points in their methodologies and point out definitive goals such as “satisfaction of basic physical needs, realization of one’s potential, fairness, freedom, participation, good social relations and ecological balance” (Goodwin et al., 2005, p. 9). These goals are very similar to the central human functional capabilities put forward by Martha C. Nussbaum (2000) in her book *Women and Human Development*. By naming ten particular capabilities, Nussbaum defends a set of universal values that could be read as “basic political principles” (p. 70) for the improvement of women’s well-being. These basic principles follow “life of a normal length, bodily health, bodily integrity, being able to use the senses, to imagine, think and reason, emotions, practical reason, affiliation, other species, being able to laugh, to play, to enjoy, and control over one’s environment: political and material” (pp. 78–80). The capabilities approach, introduced by Amartya Kumar Sen (1985) and developed by Nussbaum, inspired many economists in their practical, comparative and quantitative research on the quality of life. The work of the British economists Paul Anand, Graham Hunter, and Ron Smith (2005) exemplifies such applied research since they operationalize and test Nussbaum’s approach by using data from the British Household Panel Survey. They “find evidence that a wide range of capabilities exhibit statistically significant relations to well-being [and] that the relations are complex and slightly different for men and women” (Anand et al., 2005, p. 9).

The Basic Capabilities Index developed by the Social Watch (Social Watch, 2015a) constitutes another example of applied research. Although statistical measurement is often reductive (losing specific context and culture dimensions), which is also the case if big data is used (e.g. a prevalence of “WEIRD” in samples—“WEIRD” standing for “Western”, educated, industrialized, rich and democratic countries’ citizens (Kosinski et al., 2016)), this index was created to demonstrate the critical deficiencies experienced by a large part of the world’s population and to encourage countries in the Global North to keep their promises with respect to the Millennium Development Goals (reformulated as the Sustainable Development Goals in 2015). The indicator is based on three components: child mortality under 5, maternal reproductive health and education measured in registrations for primary schooling, literacy and the

number of children finishing 5th grade (Social Watch, 2015a). A news release from 2007 states that “at the current rate of progress, universal access to a minimum set of social services will only be achieved in Sub-Saharan Africa in 2108” (Social Watch, 2015b). Undoubtedly, this message clearly expressed the gravity of the situation, and therefore meets the goals of the Social Watch. However, feminists often reject this kind of universalism. They view it as a reflection of the aims, values and experiences of dominant groups, in this case, as countries in the Global North imposing a certain vision of development on countries in the Global South. They also question the grounds on which its claims presumably meet a shared set of needs and interests between women or men or between any other homogenous groups, such as nations (Harding, 1999). Referring to Haraway’s concept of “situated knowledges”, Drucilla Barker (2003) posits that “collective subject positions are always socially constructed and partial” (p. 107). This brings us closer to the discussion on research methods used by feminist economists.

In order to reflect the complexity of economic phenomena, feminist economists are rather ambivalent about the exclusive use of formal mathematical methods and econometrics, even though they return very precise results if based on big data. Julie A. Nelson (1993) points out that the truth of economics can arise from a rigorous logical analysis, as well as from intuitive knowledge, reasoning beyond logic or imaginative rationality (pp. 29–30). Donald N. McCloskey (1993) proposes a new term for this combination called a *conjective* science that implies the use of both stories and metaphors for deeper argumentation, as well as facts, numbers and logic as traditional forms of evidence (p. 76). Toby E. Jayaratne and Abigail J. Stewart (1991) argue that using quantitative research methods has the following benefits: “power to change political opinion, advantage to change sexist belief systems or to support progressive legislation, ability to provide tests of theories, or identify the most effective strategies for implementing feminist goals” (p. 53). On the other hand, Amy R. Poteete et al. (2010) warn against the high levels of abstraction in mathematical models that may not be reflected in empirical studies (pp. 12–13). They recommend that “the external validity of general relationships can best be evaluated, however, through analysis of a large number of nonexperimental observations” (ibid.). In one study, for



example, Jayaratne and Stewart (1991) argue that ignoring important qualitative data, such as the role of values and attitudes in girl's math performance, "which reasonably may have explained the sex difference in performance" (p. 52), illustrates the failures of using solely quantitative data (cf. Eccles & Jacobs, 1986). On the other hand, quantitative models based on big data, if appropriately applied, can be suitable for feminist economic ends. Of course, it is still essential to ensure that the models match the underlying assumptions about epistemology through sound theoretical argumentation. In addition, one must take a critical approach to the interpretation of results (both qualitative and quantitative), making sure that they lead to accurate findings and avoid misrepresentations and overgeneralizations. This problem is also taken up by scholars (Kosinski et al., 2016) who analyse big data mining. They pinpoint a problem of overfitting—an occurrence of a random error being defined as an underlying effect or beyond underlying effect in a model. They recommend either a cross-validation or reducing the number of variables in the data set.

More reflexive approaches to economics may be based on mixed/multi-methods (a combination of both qualitative and quantitative methods) and triangulation (the use of multiple data sources) (Reinharz, 1992, pp. 197–213; Starr, 2014). This combination of using multiple methods and data sources helps to compensate for the weaknesses of using only one (Jick, 1979). However, it is important to remember that collecting data through qualitative techniques, such as participant observations, interviews, focus groups, case studies, oral histories or archival research, only leads to meaningful and explanatory results when they are thoroughly planned. Certain issues must be reflected upon and understood by a scientist in advance in order to apply the given method properly. To conduct fieldwork, for instance, a researcher must often learn a local language and possess key observational skills, as well as extensive knowledge of the history and culture of the observed community or group. They must be able to grasp the local context, exhibit self-awareness and good ethical conduct in inter-personal relations, keep a thorough and transparent record and interpret the collected data accurately (Burawoy, 1998; Rochelau, 1995).

One example of a sensitive subject, one that requires the special preparation and sensitivity of researchers, is violence against women. Seema Vyas, Jessie Mbwambob, and Lori Heisec (2015) have conducted an exploratory study of the relationship between women's employment and the experience of violence from their intimate partners in 20 in-depth interviews among women aged 18–49 years in two different regions of Tanzania. Although a number of quantitative studies on that issue had already existed, they often showed contradictory findings. The research proved that:

[a]mong these women, we found that their access to money did not necessarily strengthen their fallback position in terms of being able to negotiate for the violence to stop or even to leave the violent relationship. One of the main factors that facilitated women's ability to either permanently or temporarily leave the home was their strong social, especially natal, support (Vyas et al., 2015, p. 53).

This example illustrates the salience of qualitative methods in detailing the complexity of relationships by taking into consideration different processes, actors and influencing factors described by the women fully and in their own terms. With regard to such difficult subjects, feminist economists recommend carrying out interdisciplinary studies drawing especially from other social sciences, like cultural anthropology or psychology, preparing researchers for interviews appropriately and finding different ways to interpret the collected information (see Laurence, 1999).

In summary, feminist economists conclude that the dichotomy between qualitative and quantitative methods is erroneous. The methodology they use encourages empirical research, and it is open to different approaches and forms of interpretation. The ultimate aim of feminist economists remains to contribute to policy change for the improvement of women's lives, which is analogous to distancing themselves from the mainstream research on ontologies of the economic man, outlined at the beginning of this chapter. Although feminist economics is an established school of heterodox economics, mainstream economists tend to discount the results of its studies. They disregard the findings provided by methods they are unfamiliar with, often labelling them unscientific, and condemn the references to work in other fields or publications in journals from

other disciplines including interdisciplinary ones. As a result, when methodological choices influence career incentives, many junior faculty may make a professional choice not to engage in broad collaborations and multi-method research (Poteete et al., 2010, pp. 20–21). Still, even if a single method is used by a single researcher, as Jayaratne and Stewart (1991) have accurately formulated it, “researchers need to consider practical issues such as the time, effort, money and other resources available to the research staff. It is our belief that any, even a limited, attempt at increasing the feminist value of research is worthwhile” (p. 53).

## Conclusion

The absolute criterion for judging knowledge production in feminist economics is the ethics of care. The distinct concerns of feminist economists regarding care for others, relational responsibility and equal opportunity for a good life differ from mainstream economics and their privileging of rational, egoistic and individualistic behaviour. This crucial issue was discussed in the first section of my study. Thereafter, I discussed feminist epistemology and its four planes: the critique of rationality, the existing gender bias in science, the necessity for the inclusion of context and values and the improvement of people’s lives. In the last section, I examined the unique methodology that these subjects require, linking qualitative and quantitative methods as well as deductive and inductive approaches. Together, the three thematic areas—ethics of care, feminist epistemology and diverse methods—present a coherent whole that supports the thesis that feminist economics is an economics of becoming—becoming different from the economic man. The answer to this essay’s opening question is a resounding “no”: we cannot quantify everything, and this admission shall be perceived as the strength, not the weakness, of social sciences.

**Acknowledgements** I would like to express sincere gratitude to Sara Cantillon for encouraging me to write this chapter, for drafting its initial structure and for discussing it at various stages. I am also grateful to Kirstin Mertlitsch for her continuous philosophical inspiration and feedback, and Stefan Łapniewski for his linguistic support.

## References

- Akerlof, G. A., & Shiller, R. J. (2009). *Animal spirits: How human psychology drives the economy, and why it matters for global capitalism*. Princeton: Princeton University Press.
- Anand, P., Hunter, G., & Smith, R. (2005). Capabilities and well-being: Evidence based on the sen-nussbaum approach to welfare. *Social Indicators Research*, 74, 9–55. <https://doi.org/10.1007/s11205-005-6518-z>
- Atkinson, A. B. (2015). *Inequality: What can be done?* London: Harvard University Press.
- Barker, D. K. (2003). Emancipatory for whom? A comment on critical realism. *Feminist Economics*, 9(1), 103–108. <https://doi.org/10.1080/13545700110059270>
- Benedict, R. (1934). *Patterns of culture*. New York: Mariner Books.
- Benería, L. (2003). *Gender, development, and globalization: Economics as if people mattered*. London: Routledge.
- Bibler, S., & Zuckerman, E. (2013). *The World Bank and women's unpaid care work in select sub-Saharan African countries*. Retrieved from <http://www.genderaction.org/carereport.pdf>
- Blank, R. M. (1993). What should mainstream economists learn from feminist theory? In M. A. Ferber & J. A. Nelson (Eds.), *Beyond economic man: Feminist theory and economics* (pp. 133–143). Chicago: The University of Chicago Press.
- Bordo, S. R. (1987). *The flight to objectivity: Essays on cartesianism & culture*. Albany: State University of New York Press.
- Bordo, S. R. (2002). Selections from 'The flight to objectivity'. In G. Lloyd (Ed.), *Feminism and history of philosophy* (pp. 82–97). Oxford: Oxford University Press.
- Boulding, K. (1986). What went wrong with economics? *The American Economist*, 30(1), 5–12.
- Braidotti, R. (2006). The ethics of becoming imperceptible. In C. Boundas (Ed.), *Deleuze and philosophy* (pp. 133–159). Edinburgh: Edinburgh University Press.
- Budlender, D., & Sharp, R. (1998). *How to do a gender-sensitive budget analysis: Contemporary research and practice*. Canberra: Commonwealth Secretariat and Australian Agency for International Development.
- Burawoy, M. (1998). The extended case method. *Sociological Theory*, 16(1), 4–33. <https://doi.org/10.1111/0735-2751.00040>

- Butler, J. (2004). *Undoing gender*. New York: Routledge.
- Ceci, S. J., Ginther, D. K., Kahn, S., & Williams, W. M. (2014). Women in academic science: A changing landscape. *Psychological Science in the Public Interest*, 15(3), 75–141. <https://doi.org/10.1177/1529100614541236>
- Code, L. (1996). What is natural about epistemology naturalized? *American Philosophical Quarterly*, 33(1), 1–22.
- Deleuze, G. (2006). *Two regimes of madness: Texts and interviews 1975–1995*. Los Angeles: Semiotext(e).
- Deleuze, G., & Guattari, F. (1987). *A thousand plateaus: Capitalism and schizophrenia*. Minneapolis: University of Minnesota Press.
- Duffy, M. (2011). *Making care count: A century of gender, race, and paid care work*. New Brunswick, NJ: Rutgers University Press.
- Eccles, J. S., & Jacobs, J. E. (1986). Social forces shape math attitudes and performance. *Signs*, 11(2), 367–380. <https://doi.org/10.1086/494229>
- Ehrenreich, B., & Hochschild, A. R. (Eds.). (2004). *Global woman: Nannies, maids, and sex workers in the new economy*. New York: Holt Paperbacks.
- Elson, D. (1998). Integrating gender issues into national budgetary policies and procedures: Some policy options. *Journal of International Development*, 10, 929–941. [https://doi.org/10.1002/\(SICI\)1099-1328\(199811\)10:7<929::AID-JID563>3.0.CO;2-5](https://doi.org/10.1002/(SICI)1099-1328(199811)10:7<929::AID-JID563>3.0.CO;2-5)
- Esplen, E. (2009). *Gender and care cutting edge pack—Overview report*. BRIDGE. Brighton: Institute of Development Studies.
- Ferber, M. A. (1995). The study of economics: A feminist critique. *The American Economic Review*, 85(2), 357–361.
- Fisher, B., & Tronto, J. C. (1990). Toward a feminist theory of caring. In E. Abel & M. Nelson (Eds.), *Circles of care: Work and identity in women's lives* (pp. 35–62). Albany: State University of New York Press.
- Folbre, N. (1994). *Who pays for the kids? Gender and the structures of constraint*. New York: Routledge.
- Goodwin, N., Nelson, J. A., Ackerman, F., & Weisskopf, T. (2005). *Microeconomics in context*. Armonk: M.E. Sharpe Inc.
- Hannsgen, G., & Papadimitriou, D. B. (2009). Lessons from the new deal: Did the new deal prolong or worsen the great depression? *Working Paper 581*. The Levy Economics Institute Working Paper Collection.
- Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575–599. <https://doi.org/10.2307/3178066>
- Harding, S. (Ed.). (1987). *Feminism and methodology: Social science issues*. Bloomington: Indiana University Press.

- Harding, S. (1995a). Can feminist thought make economics more objective? *Feminist Economics*, 1(1), 7–32. <https://doi.org/10.1080/714042212>
- Harding, S. (1995b). Bon voyage: Navigating through the contemporary epistemological landscape. *Feminist Economics*, 1(3), 125–127. <https://doi.org/10.1080/714042254>
- Harding, S. (1999). The case for strategic realism: A response to lawson. *Feminist Economics*, 5(3), 127–133. <https://doi.org/10.1080/135457099337842>
- Harding, S. (Ed.). (2004). *The feminist standpoint theory reader: Intellectual and political controversies*. New York: Routledge.
- Hekman, S. (1990). *Gender and knowledge: Elements of a postmodern feminism*. Boston: Northeastern University Press.
- Hill Collins, P. (1991). *Black feminist thought: Knowledge, consciousness and the politics of empowerment*. New York: Routledge.
- Hobbes, T. (2010 [1651]). *Leviathan* (Revised ed., A. P. Martinich & B. Battiste, Eds.). Peterborough: Broadview Press.
- Jayarathne, T. E., & Stewart, A. J. (1991). Quantitative and qualitative methods in the social sciences: Current feminist issues and practical strategies. In M. M. Fonow & J. A. Cook (Eds.), *Beyond methodology: Feminist scholarship as lived research* (pp. 44–57). Bloomington: Indiana University Press.
- Jennings, A. L. (1993). Public or private? Institutional economics and feminism. In M. A. Ferber & J. A. Nelson (Eds.), *Beyond economic man: Feminist theory and economics* (pp. 111–130). Chicago: The University of Chicago Press.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602–611. <https://doi.org/10.2307/2392366>
- Kalecki, M. (1933). *Próba teorii koniunktury*. Warszawa: Instytut Badania Koniunktur i Cen.
- Keynes, J. M. (1936). *The general theory of employment, interest and money*. London: Palgrave Macmillan.
- Klein, N. (2007). *The shock doctrine: The rise of disaster capitalism*. New York: Henry Holt and Company.
- Kosinski, M., Wang, Y., Lakkaraju, H., & Leskove, J. (2016). Mining big data to extract patterns and predict real-life outcomes. *Psychological Methods*, 21(4), 493–506.
- Laurence, L. (1999). Domestic abuse. In J. Peterson & M. Lewis (Eds.), *The elgar companion to feminist economics* (pp. 121–126). Cheltenham: Edward Elgar.
- Lloyd, G. (1979). The man of reason. *Metaphilosophy*, 10(1), 18–37. <https://doi.org/10.1111/j.1467-9973.1979.tb00062.x>

- Lloyd, G. (1984). *The man of reason: 'Male' and 'Female' in Western philosophy*. London: Routledge.
- Longino, H. (1990). *Science as social knowledge*. Princeton: Princeton University Press.
- Longino, H. (1993). Subjects, power and knowledge: Description and prescription in feminist philosophies of science. In L. Alcoff & E. Potter (Eds.), *Feminist epistemologies (thinking gender)* (pp. 101–120). New York: Routledge.
- Macdonald, M. (1995). Feminist economics: From theory to research. *The Canadian Journal of Economics/Revue canadienne d'Economie*, 28(1), 159–176. <https://doi.org/10.2307/136027>
- McCloskey, D. N. (1993). Some consequences of a conjunctive economics. In M. A. Ferber & J. A. Nelson (Eds.), *Beyond economic man: Feminist theory and economics* (pp. 69–93). Chicago: The University of Chicago Press.
- Nelson, J. A. (1993). The study of choice or the study of provisioning? Gender and the definition of economics. In M. A. Ferber & J. A. Nelson (Eds.), *Beyond economic man: Feminist theory and economics* (pp. 23–36). Chicago: The University of Chicago Press.
- Nelson, J. A. (1996a, June 28). The masculine mindset of economic analysis. *The Chronicle of Higher Education*, 42(42), B3.
- Nelson, J. A. (1996b). *Feminism, objectivity and economics*. New York: Routledge.
- Nelson, J. A. (2008). Feminist economics. In S. N. Durlauf & L. E. Blume (Eds.), *The new Palgrave dictionary of economics* (Vol. 3, pp. 282–285). London: Palgrave Macmillan.
- Nelson, J. A. (2013). Would women leaders have prevented the global financial crisis? Teaching critical thinking by questioning a question. *Economics Faculty Publication Series*, 40. Retrieved from [http://scholarworks.umb.edu/econ\\_faculty\\_pubs/40](http://scholarworks.umb.edu/econ_faculty_pubs/40)
- Nelson, J. A., & Goodwin, N. (2005). Teaching ecological and feminist economics in the principles course. *GDAE Working Paper 05-05*. Teaching Ecological and Feminist Economics. Medford: Global Development and Environment Institute, Tufts University.
- Nussbaum, M. C. (2000). *Women and human development: The capabilities approach*. Cambridge: Cambridge University Press.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge: Cambridge University Press.
- Phillips, J. (2007). *Care*. Cambridge: Polity Press.
- Piketty, T. (2014). *Capital in the twenty-first century* (A. Goldhammer, Trans.). Cambridge: Belknap Press.

- Plato. (1993). The symposium. In W. S. Cobb (Ed.), *The symposium and the phaedrus: Plato's erotic dialogues* (pp. 11–60). Albany: State University of New York.
- Poteete, A. R., Janssen, M. A., & Ostrom, E. (2010). *Working together: Collective action, the commons, and multiple methods in practice*. Princeton: Princeton University Press.
- Power, M. (2004). Social provisioning as a starting point for feminist economics. *Feminist Economics*, 10(3), 3–19.
- Reinharz, S. (1992). *Feminist methods in social research*. Oxford: Oxford University Press.
- Rochelau, D. (1995). Maps, numbers, text, and context: Mixing methods in feminist political ecology. *The Professional Geographer*, 47(4), 458–466. <https://doi.org/10.1111/j.0033-0124.1995.00458.x>
- Romero, J. (2013). Where are the women? *Econ Focus*. Second Quarter 2013, Federal Reserve Bank of Richmond.
- Schneider, G., & Shackelford, J. (2001). Economics standards and lists: Proposed antidotes for feminist economists. *Feminist Economics*, 7(2), 77–89. <https://doi.org/10.1080/13545700110059243>
- Seiz, J. (1995). Epistemology and the tasks of feminist economics. *Feminist Economics*, 1(3), 110–118. <https://doi.org/10.1080/714042252>
- Sen, A. K. (1985). Well-being, agency and freedom: The Dewey lectures 1984. *The Journal of Philosophy*, 82(4), 169–221. <https://doi.org/10.2307/2026184>
- Sen, A. K. (1993). Capability and well-being. In M. C. Nussbaum & A. K. Sen (Eds.), *The quality of life* (pp. 30–53). Oxford: Clarendon Press.
- Social Watch. (2015a). *The basic capabilities index*. Retrieved from <http://www.socialwatch.org/node/9376>
- Social Watch. (2015b). *Social watch: G8 countries have not met their promises*. Retrieved from [http://www.socialwatch.org/sites/default/files/ICB\\_2007\\_eng/SocialWatch\\_NewsRelease.pdf](http://www.socialwatch.org/sites/default/files/ICB_2007_eng/SocialWatch_NewsRelease.pdf)
- Stagoll, C. (2005). Becoming. In A. Parr (Ed.), *The Deleuze dictionary* (pp. 21–22). Edinburgh: Edinburgh University Press.
- Starr, M. A. (2014). Qualitative and mixed-methods research in economics: Surprising growth, promising future. *Journal of Economic Surveys*, 28(2), 238–264. <https://doi.org/10.1111/joes.12004>
- Strassmann, D. (1999). Feminist economics. In J. Peterson & M. Lewis (Eds.), *The Elgar companion to feminist economics* (pp. 360–373). Cheltenham: Edward Elgar.



- Strober, M. H. (2003). The application of mainstream economics constructs to education: A feminist analysis. In M. A. Ferber & J. A. Nelson (Eds.), *Feminist economics today: Beyond economic man* (pp. 135–156). Chicago: University of Chicago Press.
- Toussaint, E. (2012). *A glance in the rear view mirror: Neoliberal ideology from its origins to the present*. Chicago: Haymarket Books.
- Tronto, J. C. (1987). Beyond gender difference to a theory of care. *Journal of Women in Culture and Society*, 12(4), 644–663.
- Tronto, J. C. (1995). Care as a basis for radical political judgements. *Hypatia*, 10(2), 141–149. <https://doi.org/10.1111/j.1527-2001.1995.tb01376.x>
- Ungerson, C. (1995). Gender, cash and informal care: European perspectives and dilemmas. *Journal of Social Policy*, 24(1), 31–52. <https://doi.org/10.1017/S004727940002451X>
- Van Staveren, I. (2010). Feminist economics, setting out the parameters. In C. Bauhardt & G. Caglar (Eds.), *Feministische Kritik der politischen Ökonomie* (pp. 18–48). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Vyas, S., Mbwambo, J., & Heise, L. (2015). Women's paid work and intimate partner violence: Insights from Tanzania. *Feminist Economics*, 21(1), 35–58. <https://doi.org/10.1080/13545701.2014.935796>
- Waring, M. (1988). *If women counted: A new feminist economics*. San Francisco: Harper & Row.

**Zofia Łapniewska** is an economist, an assistant professor in the Institute of Economics, Finance and Management at the Jagiellonian University in Kraków, Poland, and Women in Scotland's Economy Research Centre International Fellow at Glasgow Caledonian University. For two semesters in 2015, she was a Visiting Fellow at the Gender Institute at the London School of Economics and Political Science. She also spent more than two years in Germany between 2012 and 2014 as a post-doctoral fellow at the Humboldt-Universität zu Berlin, and later as a research fellow at the Technische Universität Berlin. Her areas of scientific interest are feminist economics, institutional economics and alternatives to capitalism.