



Open access

3,189 Views | 4 CrossRef citations to date | 10 Altmetric

Listen

Articles

# Economics for (and by) humans

Julie A. Nelson

Pages 269-282 | Received 07 Apr 2020, Accepted 01 Jul 2020, Published online: 23 Jul 2020

Cite this article <https://doi.org/10.1080/00346764.2020.1792966>



Full Article

Figures & data

References

Citations

Metrics

Licensing

Reprints & Permissions

View PDF

View EPUB

Share

## ABSTRACT

Formulae display: **MathJax**

This essay discusses the nature of, and challenges for, social economics. It begins by exploring how social economics differs from mainstream economics in its goals, definition, and models, and briefly examines the roots of Neoclassical orthodoxy. It then argues that social economists need to take more seriously the human and social nature of our created knowledge. An example from the empirical study of gender and risk preferences illustrates the effects of personal and cultural factors. The essay also argues that social economists have not yet sufficiently challenged the orthodox economics view of the economy as an ethics-free sphere. This view has contributed to increased inequality and a failure to act decisively in response to climate change. A better understanding of where orthodox economics models and methods come from opens up new ways of understanding our search for knowledge and emphasizes the importance of ethics in economic life.

KEYWORDS:

---

# 1. Introduction

The Review of Social Economy is an official journal of the Association for Social Economics (ASE). Yet not every reader of this journal – nor every member of the ASE – is likely to know what that means. This essay discusses the nature of, and challenges for, social economics from the particular vantage point of one whose advanced training was in mainstream economics. The essay begins by briefly discussing some key features of social economics, and how it differs from mainstream economics.<sup>1</sup> Yet, since ‘preaching to the choir’ is not very interesting, it goes on to investigate what more we who identify with social economics, from whatever discipline, should be doing. We could be doing more in relation to both current intellectual developments and – more importantly – urgent real-world problems. Two illustrative cases, about the social nature of knowledge and about the dangers of ignoring ethics, complete the essay.

---

## 2. The association for social economics

Key insights into the ASE can be found in some of its historical documents. Having begun as the Catholic Economic Association in 1941, the organization renamed itself in 1970. In the Constitution adopted that year, the first purpose listed in the ‘ASE Aims and Objectives’ was:

To foster research and publication centered on the reciprocal relationship between economic science and broader questions of human dignity, ethical values, and social philosophy. (Buckley, [1984](#), p. 82)

A more recent formulation of the ASE’s purpose, written in 2011 for inclusion in the Association’s website and brochures, stated (in part):

The ASE welcomes academics and practitioners who regard human behavior to be the result of complex social interactions with ethical consequences. (Clary et al., [2011](#))

### 3. Mainstream economics

Such principles, however, are not a part of a conventional economics education. Based on my many years of, essentially, participant-observation ethnography of the economics profession, the foundations of the dominant Neoclassical orthodoxy can be characterized in terms of the three questions and answers outlined in Figure 1.

**Figure 1.** Foundations of mainstream economics.

- I. What is economics?  
*The study of markets or rational choice.*
- II. What do we want to get from using good methodology?  
*Objectivity, truth, certainty.*
- III. What characterizes good methodology?  
*Mathematical formalism, logic, quantitative analysis, methodological individualism...*

Display full size

The discipline has been based on a mechanical metaphor: The underlying, unquestioned assumption is that economies function according to (Newtonian-)physics-like ‘laws’ and ‘mechanisms.’ The sort of ‘rational choice’ envisioned is not only logical, but also accomplished by autonomous individuals whose goal is the promotion of their own interests, which necessarily compete with the interests of others. Economists have assumed that our mathematical methodology makes our work ‘objective’ and ‘positive’ – that is, free of subjective views and ethical judgements.

While economists seem, in general, singularly uncurious about the history of, or possible alternatives to, the dominant paradigm, it is worth noting that this characterization of the discipline did not just drop from the heavens. One key historical development was John Stuart Mill’s [1836](#) essay, ‘On the Definition of Political Economy.’ In this essay, Mill claimed that physical matters should be left to the physical sciences, normative matters should be left to the field of ethics, and life in society should be

called ‘Political Economy,’ would deal with ‘man [sic] ... solely as a being who desires to possess wealth, and who is capable of judging of the comparative efficacy of means for obtaining that end’ (Mill, [1836](#)). To be a pure science, he further argued, this discipline would need to model itself on geometry, and reach its conclusions through deductive reasoning from simple assumptions. Mill modestly argued that no political economist would ever be ‘so absurd as to suppose that mankind’ is really described by only these parts of human nature, and that in any application Political Economy would need to be complemented by the insights of other sciences and by practical experience. Yet, unfortunately, the narrow image of the optimizing, rational, autonomous, materialistic, and self-interested ‘economic man’ came to dominate economics. Economics has also been characterized more by an attitude of superiority than by a willingness to learn from other fields (Fourcade et al., [2015](#)). Later, in the late nineteenth century, the Neoclassicals formulated homo economicus’s decision-making in terms of calculus problems of utility- and profit-maximization, and the Neoclassical orthodoxy was born.

Another important aspect of the formation of mainstream economics has been its profoundly gendered nature. This issue of gender is not just about the sex of its practitioners, although historically these were (and still, to a lesser extent, are) predominantly male. More profoundly, human minds are deeply influenced by what might be called ‘cognitive gender’ – a tendency to categorize most things around us in gendered terms. Take for example, cats versus dogs, or pink versus blue. In dominant European-American culture, cats and pink are thought of as ‘feminine’ and dogs and blue have a ‘masculine’ connotation, even though there is certainly nothing intrinsic in these animals or colors that dictate these particular mental associations. Feminist economists have pointed out how the definition, models, and methods of mainstream economics have been built on a wholehearted adoption of areas of life and characteristics culturally associated with masculinity, and an equally wholehearted rejection of those associated with femininity (Ferber & Nelson, [1993](#); Nelson, [1992](#), [2010](#)). The feminine ‘other’ of the definition of mainstream economics is illustrated in Table 1.

Table 1. The gendering of mainstream economics.

Download CSV

Display Table



The illusion of ‘rigor,’ then, is actually based on a particular stereotype of masculinity, and misleadingly keeps many highly relevant aspects of human behavior and economic life from being recognized. It also bans many very helpful ways of gaining knowledge.

This intellectual barrier of sexism can be broken, but one must be careful about how one does so. It is not particularly helpful to just pick and choose, breaking away from the mainstream in subject matter, for example, but not expanding past conventional methods. Nor does one gain freedom from these strictures if one just flips completely from one side to the other, rejecting the ‘masculine’ side, and adopting only the ‘feminine’ one. Yet another trap would be to confuse these cultural gender associations with actual people, and conclude that male economists should do one kind of economics, while female (or trans or queer) economists should do another kind. Such approaches are all like trying to play a game of cards with half the deck missing.

## 4. A better approach

What would be a better approach? How about ‘To foster research and publication centered on the reciprocal relationship between economic science and broader questions of human dignity, ethical values, and social philosophy’ and to ‘regard human behavior to be the result of complex social interactions with ethical consequences’? How about adopting the values and insights of the ASE? Then better answers can be proposed to the three questions stated earlier, as shown in Figure 2.

Figure 2. Better answers.

- I. What is economics?  
*The study of the ways societies organize themselves to provide for the survival and flourishing of life.*
- II. What do we want to get from using good methodology?  
*Reliable knowledge, in the service of survival and flourishing.*
- III. What characterizes good methodology?  
*Careful inquiry, openness to new evidence, evaluation by larger communities.*

Display full size

The idea of economics being ‘for the survival and flourishing of life’ gets back to the

choice and markets, we social economists also often want to look at issues of norms and constraints, and at economic activities within families and by non-profits. One might also argue that ‘for humans’ is too narrow, and want to include other species. Our studies are purposive, motivated by ethics-laden concern for the well-being of living creatures. So far, these points are probably preaching to the choir.

The issues of methodology, however, I believe set out important challenges to social economics, and point to ways we should grow and develop. I do not think that, as a group, social economists have yet completely come to terms with the fact that economics is done by humans – by fallible, socially influenced, physically embodied, flawed human beings. The lure of the idea that the mathematical exploration of ‘mechanisms’ gives us ‘objectivity’ remains strong among economists. Yet as human beings, we have no neutral ‘view from nowhere.’ Perfect objectivity, when dealing with complex real-world issues, is an unobtainable goal, since we unavoidably live within what we study. But we can aspire to what we actually need, which is reliable knowledge – knowledge that, while never definitive, will yet stand up to critique and form a reasonable basis for action (Nelson, [1996](#)). But reliable knowledge can only be gained if we ‘play with a full deck.’

The precision and elegance of abstract, mathematical models can sometimes be impressive and even useful. Imprecision and messiness are not things to aim for. But if precision is our only goal, the richness and realism that come from more engaged, broad, and detailed investigation will be neglected. The resulting analysis will be thin and unrealistic. Humans are social beings. Knowledge-making is a profoundly social activity, and critique from an expanded community is required for reliability (Nelson, [1996](#)).

To make these points more concrete, we will look first at an example of these points about reliability and social knowledge, and then at a case that illustrates why the ethical dimensions of social economics are particularly badly needed.

---

## 5. Knowledge making requires social critique

We can’t do research on our own, and we even need to be very careful about how we do it in groups. Because we are human beings and social beings, not logical

the way of the creation of reliable knowledge. Our failings as researchers notably often include three factors: confirmation bias, a tendency to prefer things to be clear and simple, and publication bias.

Considerable research in psychology has shown that human beings have a strong tendency to notice and seek out information that confirms our pre-existing beliefs, while we tend to avoid information that would challenge them. This is 'confirmation bias,' from which even scientists and researchers are not immune (Nickerson, [1998](#)).

We also tend to like things to be simple, easy, and clear (Bennett, [2010](#)). One example of this is the 'p-value fallacy,' which is the misinterpretation of and/or overreliance on this common measure of statistical significance (Nuzzo, [2014](#); Sellke et al., [2001](#)). Even researchers who should know better often interpret the p-value as representing the probability that the null hypothesis is true, given the data. (In fact, it represents the probability of getting the data were the null hypothesis true – which is a very different thing!) Over time, the exact value of .05 has come to take on a totally misleading, nearly magical, level of prominence in many research circles, as though a value of .04999 were terribly different from .05001. If that were not bad enough, statistical significance is also often confused with substantive significance. The former only tells you something about the probable relation of a sample to a population, while the latter concerns the actual importance of the effect on something we care about.

This confirmation bias and confusion about p-values both feed into the problem of publication bias. Some research gets published; other research ends up in the proverbial file drawer. The reasons for this division are not neutral. A study that confirms what people already believe is more likely to get published than one with unexpected results, since researchers and reviewers alike will be more likely to suspect that the latter suffers from poor data or mistakes in technique. Studies with statistically significant results are more likely to get published than those that fail to show statistically significant relationships among the variables. When research is based on a small sample, there is some justification for this practice. But when research is based on a large sample, the lack of statistical significance is informative, suggesting that any relationship is weak if it exists at all.

What all this means is that while the lone economist armed with mathematical theories and econometric techniques may feel that they are being rigorous in their solo work,

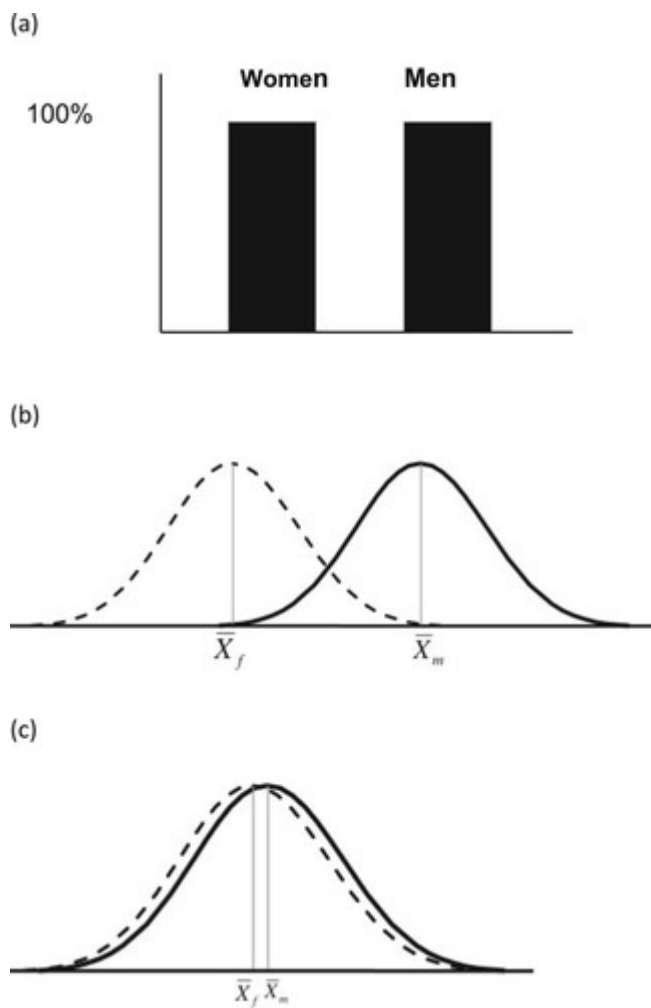
proof or the solution to a problem is consistent with the assumptions set out at the beginning. But that is consistency, which is quite different from objectivity, or an unbiased analysis of real-world phenomena. Work must be critiqued, replicated, and/or thoughtfully evaluated by a larger and more diverse body of scholars if the confirmation, simplicity, and publication biases of individuals or limited groups are to be overcome (Nelson, [1996](#)).

Take, for example, the recent boom in research on ‘gender differences in preferences.’ Many articles now claim that ‘women are less competitive than men,’ or ‘more risk-averse than men,’ and so on. Investigation of this literature, however, shows that confirmation bias, simplistic thinking, and publication bias are rife. The following results come from a meta-analysis of many years of research into preferences regarding gender and risk (Nelson, [2018b](#)).

Confirmation bias showed up in that studies tended to over-hype results that showed men on average taking more risks than women, and – consistent with common gender stereotypes – to neglect cases where women took more risks on average, or in which no statistically significant difference was found. For example, one study proclaimed ‘a victory for gender difference’ and ‘robust gender differences’ even though statistically significant differences were found in only one of the four countries studied (Beckmann & Menkhoff, [2008](#), p. 367, discussed in, Nelson, [2014](#)). Reflecting a common ‘Men are from Mars, Women are from Venus’ preconception concerning gender, divergences in average scores on behavioral measures are often said to confirm the existence of ‘fundamental’ differences between the sexes (e.g. Croson & Gneezy, [2009](#), p. 467, more about this below).

Simplistic thinking showed up in an overall neglect of the substantive size of gender differences. Even very tiny statistically significant differences were often discussed as if of great importance, or even as indicative of categorical or ‘essential’ differences between the sexes. Figure 3 illustrates this point. Panel (a) illustrates a categorical difference, in which there is no overlap between women’s and men’s distributions. Panel (b) is a stylized representation of the distributions of men’s (solid line, mean =  $\bar{X}_m$ ) and women’s (dotted line, mean =  $\bar{X}_f$ ) heights. In the case of heights there is relatively large ‘on average’ difference between men and women. But men are not categorically taller than women: Some women (in the upper tail of the dotted line bell curve) are taller than some men (in the lower tail of the solid line bell curve).

**Figure 3.** (a) Categorical difference. (b) Large difference, some overlap. (c) Small difference, big overlap. Notes: In (b) and (c) the dark line bell curve illustrates the distribution for men, and the dotted line for women.  $\bar{X}_m$  marks the male average (or mean) while  $\bar{X}_f$  marks the female average.



[Display full size](#)

A convenient way of summarizing the importance of the difference between two mean values, relative to the spreads of the distributions is by measuring the number of standard deviations between the two means (a measure called 'Cohen's d'). Men's and women's mean heights are approximately 2.6 standard deviations apart. Panel (c) shows a case of a relatively small 'on average' difference between men and women – that is,  $\bar{X}_m$  and  $\bar{X}_f$  are 'different,' but only a slight 0.35 standard deviations apart. In this case, the overlap between the distributions is the far more prominent feature.

The problem is that when one uses the phrase 'women are more risk averse than men' people inculcated with common gender stereotypes will gravitate towards an essentialist, categorical interpretation – that is, a belief that the 'difference' found resembles 3(a). In fact, empirical findings of gender 'difference' almost always arise

gender and risk, it was found that the situation is actually even more extreme than illustrated here: The most precise estimates (that is, those from the largest samples) put the on average ‘difference’ between men’s and women’s risk preferences at less than half the Cohen’s  $d$  value shown in Figure 3(c) – that is, only 0.13 standard deviations (Nelson, [2014](#)). In a large enough sample, even such a small difference between means may show up as statistically significant. Yet it is substantively very small, and is quite definitively not categorical. In contrast to the claims being made in the literature, all the evidence points away from there being any ‘fundamental,’ distinguishing difference between men and women in risk preferences.

A technique called a ‘funnel diagram’ allows one to further investigate publication bias, by allowing one to compare the sorts of results that would be expected from statistical theory to the pattern of results actually appearing in journals. This investigation, in regard to studies about gender and risk, revealed a marked tendency of authors and journals to publish only results that were both statistically significant and in the (stereotypically) expected direction (Nelson, [2014](#)).

Thus, the idea that men and women are very different in their attitudes to risk turns out to be a mirage based on confirmation bias, simplistic thinking, and publication bias. In this case, it took expansion of the scholarly community to someone not so convinced by the stereotype, and willing to look critically at  $p$ -value testing and publication patterns, to reveal the unreliability of the body of research.

Some researchers are waking up to ways in which our being human (in the above-described ways) have made research less than reliable (Open Science Collaboration, [2015](#); Ziliak & McCloskey, [2008](#)), and proposals for solutions such as pre-registered studies, meta-analysis, replication, and the publication of non-statistically-significant results (Abadie, [2020](#); Christensen & Miguel, [2018](#)) are gaining ground. Social economists need to get on board.

---

## 6. Economists have done great damage by ignoring ethics

Returning to Figure 1, mainstream economics has been built on an emphasis on individuality over relatedness, an elevation of self-interest over other-interest, and a vision of agents competing rather than cooperating with each other. Mainstream

right, especially in terms of how we treat each other – as ‘not our job.’ This has had quite pernicious effects.

One of the most dramatic negative consequences has been the rapidly increasing inequality between the income of the top 1% and the rest of the population over recent decades. To go back a bit in history, recall that John Stuart Mill had created the image of an economic agent ‘solely as a being who desires to possess wealth.’ The Neoclassicals formalized this, in terms of business, in the doctrine that the essence of capitalist firm behavior is the maximization of profit. This doctrine of ‘shareholder primacy’ has since permeated scholarship, business education, and the media. Yet for many decades it was still assumed that corporate executives would, in return for a healthy salary, exert themselves in trying to maximize returns to shareholders. In a crucial turn, Jensen and Meckling ([1976](#)) pointed out this was inconsistent: If CEOs are self-interested agents, they must be only interested in their own compensation, not the well-being of the firm. Therefore, these authors argued, CEOs must be ‘incentivized’ with stock options if they are to pay attention to stock prices. Such compensation packages are largely responsible for lifting the ratio of average compensation of a CEO of a large US corporation from 42 times the pay of an average hourly worker in 1980 to 344 times that pay in 2007 (Anderson et al., [2008](#)), a ratio that has only dropped back to the high 200s in the years since. While it may be fictional movie character Gordon Gecko who is known for proclaiming ‘Greed is good,’ economists theorizing about radically self-interested, radically individual agents bear great responsibility for originating and popularizing this myth, and by means of it increasing inequality.

So far, this may be more ‘preaching to the choir.’ But it seems to me that often the responses of people with a more social and humane view, including a number of social economists, and including many from disciplines such as sociology, geography, or philosophy, often are based on an acceptance of the theory of profit maximization. That is, we may decry the harm done by greedy businesses, but still fundamentally accept the idea that capitalist- or market-based economies are fundamentally places where ethics have no role, and self-interest and competition reign. Instead of properly challenging orthodox economists’ strange, a priori belief in profit maximization as the sole goal of business, we falsely believe economists have superior knowledge of the economy. We may naively think that the economic theory of the firm arose from an actual study of how businesses operate, unaware that its source was, instead, a geometry-like starting assumption. The solutions we imagine, then, often follow the

Table 1. Leaving ‘the economy’ for lost, we try to carve out realms for interest in the well-being of others, for attention to bodily needs and emotion, and for authentic sociality within such spheres as cooperative enterprises, local communities, or public institutions. Notable scholars including Michael Sandel (Sandel, [2012](#)), Virginia Held (Held, [2002](#)), and Jurgen Habermas (Habermas, [1981](#)) have taken this approach.

This is unnecessary, and even unhelpful. It lets those who would engage in corporate malfeasance off the hook with the excuse that ‘the system made me do it.’ What if, instead of seeing business through the orthodox economic lens of ‘profit maximization,’ we were to study the actual history and behavior of firms, and how individuals in fact combine forces to produce goods and services. Then we would realize that the opportunistic ethos in fact destroys companies and economies (Smith, [2010](#); Stout, [2012](#)). We would realize that cooperation (as well as competition) and other-interested (as well as self-interested) behavior are integral to the social endeavors we call ‘firm’ and ‘economy.’ We could recognize that commerce is no less an ethical sphere than any other aspect of human life and society (Nelson, [2018a](#)).

Dualistic thinking also reinforces poverty. Situated on the opposite end of the inequality scale from overly-compensated CEOs are under-compensated workers, many of them in the ‘care sector’ such as childcare workers, nursing aides, and the like. Because authentic caring is thought to require an emotional dimension of sincere concern, caring labor is often thought of as being in a completely different class from other sorts of market employment, and even as something that needs to be ‘protected’ from financial concerns. This romanticization causes the actual skills required, and the actual needs of the workers to support themselves and their families, to often be ignored. Articles have been written arguing that the best way to get good care workers is to pay them very little, because – it is reasoned – that way only altruists will take the job! The contrast between high pay ‘incentives’ for (largely male) CEOs and low pay ‘protection’ of the supposed tender sensitivities of (largely female) care workers could not be more stark. Or more unhelpful (Folbre & Nelson, [2006](#); Nelson, [2018a](#)).

Another example of the danger of economists’ dismissal of ethics comes from efforts to combat climate change. Christiana Figueres, who directed the United Nations 2015 climate summit, claimed that it would succeed because nations were recognizing that it was in their national economic self-interest to reach an agreement. ‘Humans don’t have a stronger guiding force than my own self-interest. True for you, true for me, but it’s

there certainly are some ‘low-hanging fruit’ policies that could help mitigate climate change while still encouraging national economic growth and competitiveness, we know that real change will require much greater efforts. It will require real concern about weaker groups and future generations. This does not seem quite so impossible when we recognize that Figueres’ claim about human and national ‘guiding forces’ is far more reflective of the influence of Neoclassical economic orthodoxy than of actual human nature and human history. Psychologists know that we are social beings, often motivated by concerns beyond ourselves and holding complicated but often strong views regarding morality. History shows many instances of nations seeking respect – whether through gaining honor and appreciation, or through a vengeful show of force – at the expense of their national economic self-interest. So listening only to the Neoclassical orthodoxy is harmful, and limits our vision of what is possible. We must go beyond (Nelson, [2019](#)).

If we, in the social economics community, can help people think past the Neoclassical orthodoxy and the unhelpful dualisms and reactivity it has spawned, we will be providing a great service. Instead of corporations versus coops, or CEOs versus careworkers, or economy versus the environment, we could help people see that we are all part of a complex social economy, and can take an ‘all hands on deck’ attitude towards addressing the world’s pressing problems.

---

## 7. Conclusion

The economics mainstream tells us that economics is about studying markets or rational choice. It says that methodology defined by formalism, logic, quantitative analysis and methodological individualism will give us objectivity, truth, and certainty. We will be far better and more useful as scholars, however, if we see economics as studying the ways societies organize themselves to provide for the survival and flourishing of life. We will actually create knowledge if we realize that careful inquiry, openness to new evidence, and evaluation by larger communities can yield reliable knowledge, in the service of survival and flourishing.

---

## Acknowledgements

This essay is based on a 4 January 2020 Presidential Address with the same title delivered at the Presidential Breakfast of the Association for Social Economics at the Allied Social Science Association meetings in San Diego, CA.

---

## Disclosure statement

No potential conflict of interest was reported by the author(s).

---

## Additional information

### Notes on contributors

Julie A. Nelson

Julie A. Nelson is Professor Emeritus of Economics at the University of Massachusetts Boston and Senior Research Fellow at the Global Development and Environment Institute at Tufts University. Her research interests include social economics, feminist economics, and ecological economics. She is the author of many publications including *Economics for Humans* (Univ. of Chicago Press, 2nd ed. 2018) and articles in journals ranging from *Econometrica* and *The Journal of Political Economy* to *Economics and Philosophy* and *Hypatia: Journal of Feminist Philosophy*. She was the 2019 President of the Association for Social Economics.

---

## Notes

1 Some of the characteristics of social economics discussed in this essay are shared with other non-mainstream approaches, and perhaps in particular with ('old') institutional economics (Nelson, [2003](#)). These two schools differ primarily in their historical roots and emphases, with institutionalism associated with thinkers such as Thorstein Veblen and emphasizing the evolutionary nature of economic institutions, while social economics originated in Catholic social thought with a special emphasis on

ethics. A thorough comparison of social economics with other schools is, however, beyond the scope of the present essay.

---

## References

1. Abadie, A. (2020). Statistical nonsignificance in empirical economics. *American Economic Review: Insights*, 2(2), 193–208. <https://doi.org/10.1257/aeri.20190252>  
[Web of Science ®](#) | [Google Scholar](#)
2. Anderson, S., Cavanagh, J., Collins, C., Pizzigati, S., & Lapham, M. (2008). Executive excess 2008. Institute for Policy Studies and United for a Fair Economy.  
[Google Scholar](#)
3. Association for Social Economics. (2019). Constitution and bylaws. Retrieved December 30, 2019, from <https://socialeconomics.org/about/constitution-and-bylaws/>  
[Google Scholar](#)
4. Beckmann, D., & Menkhoff, L. (2008). Will women be women? Analyzing the gender difference among financial experts. *Kyklos*, 61(3), 364–384.  
<https://doi.org/10.1111/j.1467-6435.2008.00406.x>  
[Web of Science ®](#) | [Google Scholar](#)
5. Bennett, D. (2010). Easy = true: How ‘cognitive fluency’ shapes what we believe, how we invest, and who will become a supermodel. *Boston Globe*.  
[Google Scholar](#)
6. Buckley, L. (1984). Early years of the Association for Social Economics. *Forum for Social Economics*, 14(1), 63–83. <https://doi.org/10.1007/BF02761512>  
[Google Scholar](#)

7. Christensen, G., & Miguel, E. (2018). Transparency, reproducibility, and the credibility of economics research. *Journal of Economic Literature*, 56(3), 920–980.  
<https://doi.org/10.1257/jel.20171350>
- [Web of Science ®](#) | [Google Scholar](#)
8. Clary, J., Charles, A., Collier, B., Davis, J., Elsner, W., Mutari, E., Starr, M., Warnecke, T., White, M., & Emami, Z. (2011). Report on ASE’s 2011 strategic planning. The ASE Documents Archive.
- [Google Scholar](#)
9. Croson, R., & Gneezy, U. (2009). Gender differences in preferences. *Journal of Economic Literature*, 47(2), 448–474. <https://doi.org/10.1257/jel.47.2.448>
- [Web of Science ®](#) | [Google Scholar](#)
10. Ferber, M. A., & Nelson, J. A. (Eds.). (1993). *Beyond economic man: Feminist theory and economics*. University of Chicago Press.
- [Google Scholar](#)
11. Folbre, N., & Nelson, J. A. (2006). Why a well-paid nurse is a better nurse. *Nursing Economics*, 24(3), 127–130.
- [PubMed](#) | [Web of Science ®](#) | [Google Scholar](#)
12. Fourcade, M., Ollion, E., & Algan, Y. (2015). The superiority of economists. *Journal of Economic Perspectives*, 29(1), 89–114. <https://doi.org/10.1257/jep.29.1.89>
- [Web of Science ®](#) | [Google Scholar](#)
13. Habermas, J. (1981). *The theory of communicative action*. Beacon.
- [Google Scholar](#)
14. Harvey, F. (2015). Christiana Figueres: The woman tasked with saving the world from global warming. *The Guardian*.

5. Held, V. (2002). Care and the extension of markets. *Hypatia*, 17(2), 19–33.

<https://doi.org/10.1111/j.1527-2001.2002.tb00763.x>

[Google Scholar](#)

6. Jensen, M. C., & Meckling, W. H. (1976). The theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)

[Web of Science ®](#) | [Google Scholar](#)

7. Mill, J. S. (1836). On the definition of political economy; and on the method of philosophical investigation in that science. *London and Westminster Review*, 4(26), 1–29.

[Google Scholar](#)

8. Nelson, J. A. (1992). Gender, metaphor, and the definition of economics. *Economics and Philosophy*, 8(1), 103–125. <https://doi.org/10.1017/S026626710000050X>

[Web of Science ®](#) | [Google Scholar](#)

9. Nelson, J. A. (1996). *Feminism, objectivity and economics*. Routledge.

[Google Scholar](#)

10. Nelson, J. A. (2003). Confronting the science/value split: Notes on feminist economics, institutionalism, pragmatism and process thought. *Cambridge Journal of Economics*, 27, 49–64. <https://doi.org/10.1093/cje/27.1.49>

[Web of Science ®](#) | [Google Scholar](#)

11. Nelson, J. A. (2010). Sociology, economics, and gender: Can knowledge of the past contribute to a better future? *American Journal of Economics and Sociology*, 69(4), 1127–1154. <https://doi.org/10.1111/j.1536-7150.2010.00738.x>

[PubMed](#) | [Web of Science ®](#) | [Google Scholar](#)

12. Nelson, J. A. (2014). The power of stereotyping and confirmation bias to overwhelm

Economic Methodology, 21(3), 211–231.

<https://doi.org/10.1080/1350178X.2014.939691>

[Google Scholar](#)

23. Nelson, J. A. (2018a). Economics for humans (2nd ed.). University of Chicago Press.

[Google Scholar](#)

24. Nelson, J. A. (2018b). Gender and risk-taking: Economics, evidence, and why the answer matters. Routledge.

[Google Scholar](#)

25. Nelson, J. A. (2019). Climate change and economic self-interest. In R. Kanbur & H. Shue (Eds.), Climate justice: Integrating economics and philosophy (pp. 113–122). Oxford University Press.

[Google Scholar](#)

26. Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. Review of General Psychology, 2(2), 175–220. <https://doi.org/10.1037/1089-2680.2.2.175>

[Google Scholar](#)

27. Nuzzo, R. (2014). Scientific method: Statistical errors. Nature, 506(7487), 150–152. <https://doi.org/10.1038/506150a>

[PubMed](#)

[Web of Science ®](#)

[Google Scholar](#)

28. Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. Science, 349(6251), 943–aac4716-8. <https://doi.org/10.1126/science.aac4716>

[Web of Science ®](#)

[Google Scholar](#)

29. Sandel, M. J. (2012). What money can't buy: The moral limits of markets. Farrar, Straus and Giroux

30. Smith, Y. (2010). *Econned: How unenlightened self interest undermined democracy and corrupted capitalism*. Palgrave MacMillan.

31. Stout, L. (2012). *The shareholder value myth: How putting shareholders first Harms Investors, corporations, and the public*. Berrett-Koehler.

32. Sellke, T., Bayarri, M. J., & Berger, J. O. (2001). Calibration of p values for testing precise null hypotheses. *The American Statistician*, 55(1), 62–71.  
<https://doi.org/10.1198/000313001300339950>

[Web of Science ®](#) | [Google Scholar](#)

33. Ziliak, S., & McCloskey, D. N. (2008). *The cult of statistical significance: How the standard error costs us jobs, justice, and lives*. University of Michigan Press.

[Download PDF](#)

## Related research

People also read

Recommended articles

Cited by  
4

## Information for

Authors  
R&D professionals  
Editors  
Librarians  
Societies

## Opportunities

Reprints and e-prints  
Advertising solutions  
Accelerated publication  
Corporate access solutions

## Open access

Overview  
Open journals  
Open Select  
Dove Medical Press  
F1000Research

## Help and information

Help and contact  
Newsroom  
All journals  
Books

## Keep up to date

Register to receive personalised research and resources by email

 Sign me up



Copyright © 2025 Informa UK Limited   Privacy policy   Cookies   Terms & conditions  
Accessibility

Registered in England & Wales No. 01072954  
5 Howick Place | London | SW1P 1WG

