## Frontiers in the Economics of Gender

Edited by<br>Francesca Bettio and Alina Verashchagina

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Gender is now recognized as a fundamental organizing principle of economic as well as social life, and related research has grown at an unprecedented pace in recent decades across branches of economics. This book takes stock of the research, proposes novel analytical frameworks and outlines further directions. The book has grown out of the Summer School of International Research in Pontignano, University of Siena, which traditionally brings together the most prominent scholars in the field.

The thirteen essays included in this book cover recent advances in gender related issues across disciplinary branches, from economic history and the history of economic thought to macroeconomics, household economics, the economics of care work, labour economics, and institutional and experimental economics.

The book is primarily addressed to graduate students in economics and is an essential companion for researchers in the area of gender economics. For intrinsic reasons, however, research on gender tends to transcend disciplinary boundaries. The author's effort to use non technical language whenever feasible makes most texts accessible to a wider audience, including students and specialists in sociology, demography and history.

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## Foreword

Gender is now recognized as a fundamental organizing principle of economic as well as social life; and the related research has grown at an unprecedented pace in recent decades across branches of economics. The book takes stock of this research, proposes novel analytical frameworks and outlines further research directions. It has grown out of the Summer School of International Research in Pontignano, University of Siena, which traditionally brings together the most representative scholars in the field.

The way in which the term 'gender' is used within economics and other social sciences often gives rise to ambiguity. Sometimes the 'economics of gender' is a catch-all expression used for any economic analysis that explicitly distinguishes men and women. In social and economic policy circles, 'gender approach' is often the new fangled name for the older 'equal opportunities for women' approach. In academic circles 'gender economics' may refer to an area that largely overlaps with the economics of female labour; or it may be understood as feminist research in a 'softer' guise. When the American historian Joan Wallach Scott first advocated the use of 'gender' in lieu of 'sex' to denote socially as opposed to biologically constructed differences between men and women, she could not have foreseen that, because of its very success, the term 'gender' would in its turn become a source of ambiguity.

We like to think that the spirit inspiring this collection of essays adheres to Scott's proposed meaning of the term in at least two important respects. Because gender is a social, and hence intellectual and historical, construct, its precise features vary across time and space. Likewise, the economics of gender cannot be identified with one or another specific ideology that inevitably influences the analysis, but should cross ideological boundaries. Because, moreover, gender is an all-pervasive social construct, within economics it cannot be confined to the study of such phenomena as fertility, labour market participation or the wage gap that, for historical and biological reasons, are more closely associated with women.

The book makes a special effort, in fact, to present gender research not only in labour or population economics but also in the history of economic thought, economic history, macroeconomics, institutional economics, experimental and behavioural economics. Of course, since labour and population economics were the first disciplinary fields to be renovated by recognition that gender divisions
matter, some imbalance in their favour are still visible in this collection of essays. To our knowledge, however, this volume is the first systematic attempt to explore how a gender perspective has opened up, and continues to do so, research horizons across disciplinary fields within economics.

Section one assesses the visibility and the conceptual impact of the category of gender within both the history of economic thought and economic history. It combines exploration of new research topics with a fascinating review of research on women and by women in both disciplines. The second section presents novel theoretical perspectives. Two of these perspectives adopt, respectively, a microeconomic and biology oriented approach and a general equilibrium welfare oriented analysis to re-examine the root causes of gender disparities at work, while the third one challenges conventional macroeconomics by introducing unpaid labour at home into macroeconomic modelling. Section three looks at gender from within the household and in light of two partially complementary approaches: intra-household bargaining and the economics of care work. Both approaches are now well established and are compellingly reviewed in this section, but it is apparent from such reviews that they still offer considerable potential for further development. Section four examines gender from within the labour market and inevitably focuses on the two disparities that have received the widest research attention to date, namely segregation and the wage gap. The question implicit in the three essays making up this section is what type of research is still needed and how it should be carried out, and the analysis divides between thorough investigation of methodology and comparative evidence. Section five offers fresh experimental evidence on differences in behaviour between men and women in the laboratory, reviews past evidence and provides a fascinating exploration of how differences in the labs may be sustaining actual disparities in the market. In contrast to labour market analysis, differences between men and women have never been a primary object of interest in experimental economics, but they are nevertheless becoming one of its most interesting research 'spillovers'. Section six fittingly draws the volume to a close by addressing the changing position of women in higher education from the standpoint of institutional economics.

Due to chance more than choice, some important gaps remain, despite the wide variety of issues and disciplinary areas covered by the six sections. Neglect of the well-developed gender research in development economics is perhaps the most glaring omission. However, a perfectly balanced representation of gender research in economics across fields and countries was never the main priority in assembling this book. Following the tradition of the International Summer School in Siena, from which the book originates, participating scholars were asked to prioritize, on the one hand, evaluation and assessment of consolidated methodologies and, on the other, to bring to the fore advances in research methodologies and ideas.

In view of the strong focus on methodology and ideas, the book is primarily addressed to graduate students in economics, and it is an essential companion for researchers in the area of gender economics. For intrinsic reasons, however, research on gender tends to transcend disciplinary boundaries not only within economics but also externally to it. Whenever feasible, we have thus requested the
authors to use non-technical language so that the texts are accessible to a wider audience, including students and specialists in sociology, demography and history. At the same time, we have also asked the authors to buttress each chapter with clear references to key technical contributions and with a comprehensive and up-to-date reference list.

Francesca Bettio and Alina Verashchagina

## Part 1

## Historical perspectives

# 1 The history of economic thought through gender lenses 

Maria Cristina Marcuzzo and Annalisa Rosselli

## Introduction

The History of Economic Thought (HET) studies the making of economic ideas and their evolution through time, or, borrowing the definition from the most famous book in HET of the twentieth century, written by Joseph Schumpeter and published in 1954: HET is ' the history of the intellectual efforts that men have made in order to understand economic phenomena' (Schumpeter 1994 [1954]: 3; the first emphasis is ours ${ }^{1}$ ).

Several arguments can be used to support the importance of HET for economists. Here we will consider two of them. First, only the most naïve among us can believe that the market for ideas is so efficient that the best ideas prevail and are fully contained in the theory taught today, while the forgotten ideas were totally worthless and deserved oblivion. Many factors influence the path that a science follows and not just 'the search for truth'. The second argument - which is more relevant here - is that economic ideas are not invented by machines, but by human beings under the influence of the social, ideological and cultural context of their times. By studying the role that these influences have played in the past we enhance our awareness that economics is not 'neutral' with respect to nationality, political ideology or, for that matter, gender.

This chapter tries to summarize some of the findings of the recent feminist approach to HET which can throw some light on the points mentioned above. One word of warning: inquiry into HET through gender lenses is still in its early stages. There are not many people involved in this research yet, and they are almost exclusively in the Anglo-Saxon countries, mainly North America and Australia, although the annual conference of the European Society for the History of Economic Thought often has a session devoted to it. We were unable to find more than 10 articles on HET in the 12 volumes of Feminist Economics, and no more than 20 articles have been published on the subject in the most important HET journals.

It is too early, therefore, for a full assessment of the results. The most important of those achieved so far seem to lie largely in identification of the questions we should be asking, while in many cases the answers are still very tentative.

The main points that have been raised are:
a) What has been the contribution of women to the development of economic ideas?
b) Why have these contributions been neglected for so long? Were they deemed worthless, or were the women who provided them actively discriminated against?
c) What is the difference - if any - in men and women's approaches to economics, in terms of subjects and style of research? In other words, if there were more women in the profession, above the 'critical mass', would the profession be different?
d) What has economics had to say about the role played by women in the market and non-market economy?
e) How has gender bias shaped economic theory?

If these are the questions that lie behind the research carried out so far, it is interesting to note that HET has, albeit unintentionally, followed the same route traced by studies on women in science. In a survey article on the ample literature which has been addressing the issue of the place of women in science since the 1970s, Londa Schiebinger identified four approaches (Schiebinger 1987: 307). The first aims to 'brush off the dust of obscurity' from women who have been ignored by all mainstream history of sciences. The second, which complements the first, focuses on the institutions of science and on the limited access women have to them. The third looks at how sciences - such as the biological and medical science - have defined the nature of women. The fourth approach 'seeks to unveil distortions in the very norms and method of science that have resulted from the historic absence of women from any significant role in the making of modern science' (ibid.). It is the same route that we will follow here.

## Who were the women economists?

Those like the authors of this chapter who began studying economics in the 1970s were convinced that they belonged to the first generation of women setting out to pursue an academic career in economics. Of course there were exceptions, notably Joan Robinson, who was doubtless a theorist (and of whom we will have more to say below), and a few other women scholars in economic history. But most of our teachers, in Italy and in London (where we did our post-graduate work), were men, and together with our women colleagues we felt that we were entering an entirely male-dominated profession for the first time in history. Our impression was shared by the majority of the profession: as late as 1985, William Baumol, in an article for the centenary of the American Economic Association, observed that 'before World War I, as today, a (distressingly) few women were contributing to the literature' (Baumol 1985: 11). He added that his research assistant had found only seven articles by four women.

When Baumol delivered his speech, the only book which had tried to rescue a few eminent women economists from oblivion had been the pioneering work by Dorothy L. Thompson, Adam Smith's Daughters, a book that the author had published with difficulty and that had received scant attention when it first came out in $1975 .{ }^{2}$ After that came important contributions by the late Michèle Pujol (1992), and a few other works: for example Groenewegen (1994); Dimand et al. (1995); Dimand and Nyland (2003).

However, we are still in the preliminary stage, since some of the basic tools for research are yet to become available. The questions like 'Who were the women economists?', 'What did they write?', 'Where are their papers preserved, if still extant?' have been answered only partially, especially as far as the non-AngloSaxon countries are concerned. A Biographical Dictionary of Women Economists (Dimand et al. 2000) was published not long ago, and it is very incomplete, by admission of the editors themselves. A bibliography of works by women economists has recently come out (Madden et al. 2005); it took several years to complete since the widespread use of initials makes the task of identifying the sex of the authors of articles in journals particularly tiresome.

Although incomplete, the above mentioned biographical dictionary of women economists contains - to the surprise of many - 120 entries covering a period of 200 years. The dictionary excludes women who were still active in the year 2000 and includes only women 'who were important, either because they made a substantive contribution to the field or, in a few cases, because they were historically important, such as being the first woman (of whom we were aware) in a particular country to contribute to the discipline' (Dimand et al. 2000: xvi). Table 1.1 shows the breakdown in the entries of the dictionary by nationality. The largest group is from the US, but this does not entitle us to infer that US women economists were more numerous. They were just better researched.

In general, the attention that a woman economist has drawn is not necessarily proportional to her merits, because it also depends on the motivations behind this

Table 1.1 Women economists by nationality in A Biographical Dictionary of Women Economists

| Country | Number of female <br> economists | Country | Number of female <br> economists |
| :--- | :--- | :--- | :--- |
| USA | 58 | Italy | 2 |
| UK | 24 | Russia | 2 |
| Germany | 6 | Brazil | 1 |
| France | 5 | Hungary | 1 |
| Austria | 4 | India | 1 |
| Canada | 4 | The Netherlands | 1 |
| Greece | 3 | Poland | 1 |
| Japan | 3 | Spain | 1 |
| Denmark | 2 | Sweden | 1 |

Source: Marcuzzo 2002a.
first stage of the search for our predecessors. We believe that, over and above curiosity and genuine interest, some of the recent studies in feminist HET were animated by the (unconscious?) desire to redress a possible injustice. Notorious examples in other sciences have revealed how little fairness there is in the scientific world when it comes to acknowledging the merits of women. Therefore we can suspect a secret hope of finding unknown geniuses whose gifts were sacrificed to the greater glory of the male. In other words, the Rosalind Franklin ${ }^{3}$ or the Lise Meitner ${ }^{4}$ of economics.

For this reason perhaps, women partners of famous male economists were the first to be investigated, with the strong suspicion that their talent was hidden in the works of their husbands/partners. More than one essay is devoted to Harriet Taylor, the friend of John Stuart Mill and, after the death of her first husband, his wife for the short time before her death (Pujol 1995, 2000; Forget 2003). Mill expresses his admiration for her talent not only in his posthumous Autobiography, but in many of his works, Principles of Political Economy included, where, in a limited number of copies, given small circulation out of respect for her husband who was still alive at the time, he says that many of his ideas 'were first learned from herself' (Hayek 1951: 122). Mill's long and enthusiastic expressions of admiration and gratitude elicited sceptical comments of disbelief from their very first appearance. However, if we read the detailed account of her contribution to the Principles that Mill provides in his autobiography, we find that Mill's words may have been unusual, but not so hard to believe:

> The first of my books in which her share was conspicuous was 'The Principles of Political Economy'. The 'system of logic' owed little to her except in the minutes matters of composition [...] The chapter of Political Economy which has had a greater influence on opinion than all the rest, that on 'the Probable Future of the Labouring Class' is entirely due to her: in the first draft of the book that chapter did not exist [...] She was the cause of my writing it and the more general parts of that chapter, the statement and discussion of the two opposite theories respecting the proper condition of the labouring class, was wholly an exposition of her thoughts, often in words taken from her lips.

(quoted in Hayek 1951: 117)
Hayek, too, was puzzled by this confession, but he refused to consider it the mere effect of love and delusion in a man with an 'eminently sober, balanced and disciplined mind' (Hayek 1951: 15). Therefore, unlike other historians who denied any influence of Harriet Taylor over Mill without attempting further inquiry, he investigated the matter and published the correspondence between Mill and Taylor that was available to him. The editing is, as usual with Hayek, extremely accurate. Hayek himself refrains from commenting on the new material he had found apart from a short conclusion attributing to Harriet Taylor's influence 'the rationalist element in Mill's thought' (ibid.: 17). Hayek, of course, had expected her to have stressed his sentimental side.

Pujol (1995) and Seiz and Pujol (2000) represent rehabilitation of Harriet Taylor as an original thinker ${ }^{5}$. Her originality lies precisely in the absence of gender prejudice. Unlike Mill, she did not oppose the participation of married women in the labour market. In an age when the virtues of the free market were extolled, Harriet Taylor saw the contradiction between the liberal standpoint which favoured competition in all sectors and the limited access of women to the better paid jobs and professions. She called the male control over the labour market a 'monopoly' and argued in her book Enfranchisement of Women (1851): 'so long as competition is the general law of human life, it is tyranny to shut-out one half of the competitors.' (quoted in Pujol 1995: 88). Taylor also recognized the ability of women to perform a multitude of tasks, required but not adequately rewarded by the market: 'the varied though petty details which compose the occupation of most women, call forth probably as much of mental ability, as the uniform routine of the pursuits which are the habitual occupation of a large majority of men.' (quoted in Pujol 1995: 90).

Various other partners of famous male economists have been investigated, for example, Sophie De Grouchy, the wife of Nicolas Condorcet. She was a friend of Thomas Paine and an advocate for the extension of political rights to all races, and to women. She translated Adam Smith's Theory of Moral Sentiments into French in 1798, during the Terror, when the issue of what can keep society together was of utmost importance, and added eight 'letters' on this subject, where, with the excuse of clarifying Smith, she expresses her own ideas (Forget 2003). Or, to move to more recent times, Mary Paley Marshall, Alfred Marshall's wife, taught economics for over 40 years to the women of Newnham College in Cambridge. Before her marriage she wrote a book with her future husband, The Economics of Industry, praised by Keynes who found it 'an extremely good book; nothing more serviceable for its purpose was produced for many years, if ever' (Keynes 1972 [1933]: 239). Marshall let it go out of print when there was still great demand for it, and decided to replace it with one bearing his name alone, probably when he 'came increasingly to the conclusion that there was nothing useful to be made of women's intellect' (ibidem: 241; see also McWilliams Tullberg 1992).

In the recent wave of feminist studies in HET attention has also been given to the popularizers of economics, with the aim of showing - successfully, in a number of cases - that they were original thinkers in their own right. We have essays on Jane Haldimand Marcet (1769-1858), who has been considered a popularizer of David Ricardo's Principles, although she published her most famous book Conversations in Political Economy, a dialogue between a Mrs. B and her pupil, in 1816, whereas the first edition of Ricardo's Principles appeared in 1817. It seems that her book launched the fashion of governesses acquainted with Political Economy. The book was praised by all the major Classical Economists, including Ricardo, Malthus and Say, and was the only book on Political Economy which became a successful bestseller, reaching the 14th edition. Her readership was large, and by no means confined to young people and women. She also wrote a short book for the working class, in the belief that knowledge could improve its lot; the landowners and employers who appreciated her optimistic attitude and denial of class conflict were
to buy it and distribute it among the poor, but the venture was not as successful as expected (Polkinghorn 1995: 75).

In the same line Harriet Martineau (1802-1876) published tales to illustrate the principles of Political Economy by means of examples taken from everyday life. She, too, was extremely successful. The first volume sold over 10,000 copies, compared with Dickens's novels which rarely reached 3,000 copies. She was single, became economically independent and pursued a career as a scientific popularizer in many fields for the rest of her life. Marx despised her, like all other 'vulgar' economists who accepted the wage fund theory, but he adds sexism to his insults by choosing to call her an 'old maid' (Marx 1954: 594). In her case too, attempts at rehabilitation have been made (Levy 2003), but whether or not Jane Marcet and Harriet Martineau were original thinkers is beyond the scope of this chapter. What matters here is the importance they both attached to the diffusion of science and their belief that it contributed to the betterment of humanity. They grasped the political implications of the prevailing theories (which they accepted by and large) and did not hesitate to use simple language and easy examples to make themselves understood. How are we to account for the fact that it was two women - but none of the men involved in it - who carried out the task of explaining the results that the new science of Political Economy had reached? And they were not alone. Millicent Fawcett was another great popularizer. Joan Robinson, too, apart from being a theorist in her own right, was also to some extent a popularizer. Can we detect in these women a particular need for 'moral responsibility and social relevance' that we do not find in their male contemporaries, as has been argued (Polkinghorn 1998: x; Kerr 2006)?

## Strategies of survival

It would be very unfair, however, to depict the first feminist studies in HET as if they were concerned only with the question whether a woman was 'better' than her husband/partner, according to a measure of excellence which is the male norm. Indeed, as soon as systematic exploration of the history of economics was applied to the search for women pioneers in the discipline, the question changed from 'why so few?', as Baumol had asked in 1985, into 'how so many?', as Peter Groenewegen and Susan King could only wonder, after finding 222 articles ( $5.3 \%$ of the total) written by 112 women between 1900 and 1939 in the five most important journals in the English language of those years: the American Economic Review, Economic Journal, Economica, Journal of Political Economy and the Quarterly Journal of Economics (Dimand, R. 1995: 17). Thus attention shifted to the individual and collective strategies followed by women to survive in a hostile environment. It is noteworthy that the period covered by Groenewegen and King is that of the professionalization of the discipline, when political economy broke away from the moral sciences and turned from a subject investigated by philosophers and political scientists into an autonomous discipline, with its own academic curricula (the Tripos in economics was established in Cambridge in 1903), its scientific societies such as the American Economic Association
(founded in 1885) and the Royal Economic Society (founded in 1902), and its journals. This professionalization implied that the barriers women had to face rose even higher: not just prejudice, but limited access to academic positions, research funds and all that makes research possible even today.

The collective strategies pursued by women included the construction of networks and the mentoring of women by women. Perusing the biographies of women economists we find that behind every successful woman there is often another gifted woman (teacher, relative or friend) who provided encouragement and advice (see Thorne 1995). An attempt to reconstruct the networks of women economists before 1940 was ventured upon by Mary Ann Dimand (1995), but much more work is required. In particular, the role played by academic institutions for women has not been thoroughly investigated (here we have in mind historical institutions such as Bedford College in London, Girton College and Newnham College in Cambridge, or the famous 'seven sisters' in the US - Vassar, Barnard, Wellesley etc., to name but the most famous).

Individual strategies have been examined in an interesting essay by Evelyn Forget, who analysed the PhD dissertations in economics in all the PhD -granting universities in the US in the period 1912-1940, as listed in the American Economic Review. She notes that the percentage of PhD dissertations by women out of the total of dissertations in economics grew steadily to peak at 19 per cent in the early 1920s. The period after World War I was a golden age for women's education, since the war had taken its toll of lives of many young men and there were vacancies to be filled in the institutions of higher education. After that short period the percentage of PhD dissertations by women began to decline, 10 years before the downward trends in other fields, and was down to just over 5 per cent by the beginning of World War II (see Figure 1.1). It was only in the 1970s that it showed signs of picking up again. Why economics began to exclude women before other disciplines is still an unsolved mystery.

Moreover, Forget argues that at PhD stage women did not show a particular interest in 'women's issues' broadly defined, such as 'Women in the labour market' or 'Social Policy'. The slight difference between men and women in the choice


Figure 1.1 Percentage of PhD in economics by women in the US, 1912-1940 Source: Forget 1995.
of subjects to be seen at the beginning of the century had completely disappeared by 1935. Yet, in the same years, the publications by women in academic journals were disproportionately focused on areas of 'women's issues', which, by the way, remained popular among women well into the 1970s, when the whole discipline had turned its attention to other fields.

Forget explains this difference between the subjects of the PhD dissertations and those of the articles as a survival strategy pursued by women, and identifies different kinds of such strategies. The first strategy is subordination, i.e. accepting marginalization in second-rate jobs and/or institutions. For example, women's colleges provided a supportive environment and good work opportunities, although they could not offer research facilities of the same excellence as the leading research institutions.

The second strategy is separatism. Women chose to write articles in particular areas where they had a comparative advantage. By becoming the majority in a field, they had less male competition to face. These two tactics can be called 'realistic': they accept the prevailing stereotypes and division of roles between the sexes but try to exploit them with the aim of carving out a niche for women in the discipline. The third strategy is innovation, i.e. some sort of reaction to the constraints imposed upon women and to the traditional standards of success. (It must be noted that the distinction between separatism and innovation is subtle, since they are both based upon the revaluation of fields neglected by the majority of the discipline). It has been defined as an 'idealistic' strategy, (Rossiter 1982: xvii), sometimes openly confrontational. Identifying cases when it was practised in the history of economics is not easy, but it would certainly be worth investigating. As Forget observes: 'A slightly different perspective encourages us to ask whether women ever challenged the constraints directly and whether they had a measurable impact on the nature of the discipline itself' (Forget 1995: 36).

We have deliberately omitted a fourth strategy: super performance, i.e. outperforming the male colleagues. This is an effective way to gain success and recognition, but unfortunately it is open only to a few women with extraordinary talents. Joan Robinson is the most striking example in the history of economics. It is worth devoting particular attention to her case not only on account of her academic performance, but also in the light of her personal and intellectual life.

## A case study: Joan Robinson (1903-1983)

Joan Robinson, née Maurice, offers an interesting case study. She was the wife of an economist, Austin, but also the greatest female economist of all times, with over 400 items in her bibliography (Marcuzzo 2002b). She enjoyed a worldwide reputation, which led Kaldor to remark in her (anonymous) obituary 'that after Keynes, Joan Robinson would be widely regarded as the most prominent name associated with the Cambridge School of Economics' (King's College Annual Report 1984: 34). In fact, she was the first woman to be made Honorary Fellow of King's College, in the year (1979) when women became eligible for fellowships, although she was not a College member.

In the years prior to the First World War, in Cambridge, women were taught in separate courses, tutorials being given in the presence of a chaperone. Their presence in the classroom was experienced with discomfort even by someone like Keynes, who later staunchly supported Joan Robinson, but who in his first year of teaching in 1909, wrote:

> I think I shall have to give up teaching females after this year. The nervous irritation caused by two hours' contact with them is intense. I seem to hate every movement of their minds. The minds of the men, even when they are stupid and ugly, never appear to me so repellent.
> (J.M. Keynes to D. Grant, 16 February 1909, quoted in Moggridge 1992: 183-4)

The situation improved slightly in the 1920s when Joan Robinson was an undergraduate; however, still no more than 500 women could enter the university, and their exams were taken in separate rooms. It was only in 1948 that women could become full members of Cambridge University.

Soon after marrying Austin in 1926, Joan Robinson followed her husband to India, where he had been appointed tutor of the Maharajah of Gwalior, and stayed there as a young mem-sahib for three years, getting involved in a dispute between the local and the central government of India on a matter of taxation. Her background in economics, even with a modest 2.1 in the Cambridge Tripos of 1925, gave her leverage on the issues involved.

The role of economist's wife was short-lived for Joan Robinson. It lasted just a few months after her return to England (ahead of her husband), when she was looking for a place for them to stay in Cambridge and she busied herself making sure that Austin would be appointed to a lectureship. It surfaces in a few instances, as when she stepped down to allow him to give a seminar originally scheduled for her at the Keynes's Political Economy Club. ${ }^{6}$

On the other hand, people in Cambridge grew particularly conscious that she was Austin's wife whenever they felt that she might embarrass him with her outward behaviour and assertive views. Such was the case when, early in her career, she came under fire from her colleagues, because they felt she was too fervently advancing her own ideas when teaching, or in general because she was seen as excessively opinionated and stubborn in discussion (see for instance the opinions expressed by her male colleagues in the Faculty of Economics, C.R. Fay ${ }^{7}$, A.C. Pigou ${ }^{8}$ and J.R. Hicks ${ }^{9}$ ). Keynes stepped in to prevent a great injustice being made and she was allowed to teach the course of her liking (J.M. Keynes to C.R. Fay, 5 March 1935, in Kahn's papers RFK/14/99/209-14).

By the mid 1930s she had established herself academically with the publication of her first book (Robinson 1969 [1933]), and several articles which, at least in one case, aroused admiration and surprise that they were written by a woman. ${ }^{10}$ By the 1970s it was being rumoured that she might be a candidate for the Nobel Prize, which of course she was never awarded, in part at least because of her radical political views.

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Was her case an example of that individual strategy that Evelyn Forget describes as 'out-performing male colleagues'? For Joan Robinson it was a very tough game, John Maynard Keynes and Piero Sraffa - two of the greatest economists of all times - being the economists with whom she had constant contact, and occasional contrast. However, she also enjoyed the close collaboration of another great economist, Richard Kahn, warm ties of affection playing an important part.

These three economists were associated with her in the three major revolutions occurring in Cambridge between the late 1920s and 1960s (imperfect competition, effective demand and capital theory); some idea of what it may have meant to her to be a woman economist may, perhaps, be gained by looking more closely into her relations with them.

There has been much speculation on the nature of the collaboration between Kahn and Joan Robinson on The Economics of Imperfect Competition (EIC). In the opening paragraphs of her Preface she acknowledged Kahn's contribution:
[...] I have had the constant assistance of Mr. R.F. Kahn. The whole technical apparatus was built up with his aid, and many of the major problems [...] were solved as much by him as by me. He has also contributed a number of mathematical proofs which I should have been incapable of finding for myself.
(Robinson 1969 [1933]: xiii)
Kahn reacted strongly to the suggestion that he co-authored her book. He wrote to her:

You are attributing to me very much more than I am responsible for. What I did was to read what you had written. Most of my attempts to do constructive work (e.g. in regard to Discrimination and Exploitation) ended in failure and it was almost invariably you who found the clue.
(R. F. Kahn to J. V. Robinson, 30 March 1933, quoted in Rosselli 2005a: 262)

Having made a thorough investigation of their correspondence we are in a better position to assess the matter. As one of us wrote:
[Kahn's] contribution in the initial phase of drafting, when efforts concentrated on a rigorous result, was indeed enormous [...] However, once the result was demonstrated, the exposition and the capacity to raise new questions lay entirely in the domain of J. Robinson, who acquired growing confidence vis- $\grave{a}$-vis Kahn as the EIC was drafted.
(Rosselli 2005a: 262)
The relationship between Joan Robinson and Kahn lasted throughout their lives, as witnessed by the amount of letters passed between them which number in to
the thousands over the years. They spent much time together, shared common intellectual and personal pursuits, and together built Cambridge economics as it stood until the 1960s. This relationship appeared as a case of her outperforming him, but it was he who - as a caring and protective partner - provided her with strength and confidence.

The relationship with Keynes was of course entirely different. Joan Robinson's acquaintance with him began slowly and was facilitated by her association with Kahn, who was Keynes's favourite pupil. She was a member of the 'Circus', the discussion group that led Keynes from the Treatise to the General Theory, the proofs of which she was asked by Keynes to read, along with Harrod, Hawtrey and Kahn. Again on the basis of the correspondence we have a good understanding of their relationship:

Keynes trusted Robinson's judgment, was appreciative of her work and took account of her opinion. For her part, J. Robinson, always respectful of Keynes's authority, was rarely intimidated by him and often held her own position without giving ground... At times she would try to lead him to a line other than the one he had chosen, and on several occasions attempted to get Keynes to change his mind on specific issues.
(Marcuzzo and Sardoni 2005: 189)
Joan Robinson is rightly considered as the torch-bearer of the Keynesian revolution - perhaps the economist (together with Kahn) most identified with it. Interestingly, however, although she was perceived as single-minded and sectarian by outsiders, within Keynes's closer circle she stood up as a critical and independent mind.

The most interesting and intriguing of her relationships with male colleagues was that with Sraffa. She and Kahn attended his lectures in the academic year 1928-29, and Sraffa's 1926 article was a major source of inspiration for her first book. While writing The Economics of Imperfect Competition she was apprehensive of Sraffa's criticisms, and indeed she never persuaded him of it.

In the following years their relationship became much closer, but only after the war did Sraffa's work again have a major impact on her, in the critique of neoclassical theory and the ensuing capital controversy. A letter from Joan Robinson to Sraffa following upon publication of his Production of Commodities by Means of Commodities (Sraffa 1960) reveals the characteristics of this relationship as it had evolved over the years:

Dear Piero: all the work that I have been doing the last 10 years has been very much influenced by you - both our conversations in the old days and by your Preface [to Ricardo's Principles]... Since, quite apart from worldly success, I have had a lot of fun I have a deep feeling of gratitude to you. The fact that you reject it does not affect the case at all.
(J.V. Robinson to P. Sraffa, 18 June 1960, quoted in Marcuzzo 2005: 447)

Once again Joan Robinson occupies a special position, being the only economist of the Cambridge group who attempted to integrate Keynes's approach with Sraffa's. Although the attempt has had very mixed results, it is noteworthy of the role she played in that group. A revealing clue is given by her own assessment of her work. In the midst of her third nervous breakdown, ${ }^{11}$ in November 1952, she wrote to Kahn:

I have realized more than ever after this do how much one's whole personality is involved in one's 'purely intellectual' work. I think the reason I have done so much more with a much weaker brain than any of us is because of my extremely simple minded attitude.
(letter of 3 November 1952 in RFK Papers, 13/90/5/352-5, quoted in Marcuzzo 2003: 558)

In conclusion, it seems to us that the closest we can get to characterizing Joan Robinson as a woman ${ }^{12}$ is her role as mediator and facilitator in conveying different views and modes of thought, without however reneging her individual standing. She is reported as saying 'It's much easier being a woman. You can be so creative having a child'(Narasimhan 1983: 218). But the urge to be intellectually 'creative' - in a milieu of such outstanding male achievers - never abandoned her.

## Is there a way of 'doing economics' that is specific to women?

After considering the contributions of so many female economists, one may naturally wonder whether the history of economics shows that there is a way of 'doing economics' that is specific to women. However, it is a question that would probably lead us to a fruitless search. All female economists have faced barriers so high, their freedom of expression have come up against so many limitations, that it is too hard to distinguish what was done out of necessity and what out of choice. Not to mention the risk of identifying as 'truly feminine' what is only the product of the present process of construction of a gender identity. One thing most women economists seem to have in common, however, is they have proved less likely to be blinded by prejudice where 'women's issues' were concerned, unlike the majority (though not all) of their fellow male economists, who have often shown no hesitation in contradicting the principles of their discipline in order to reassert the privileges of their gender.

Let us take a couple of examples of the latter phenomenon. The first goes back to the years of the French Revolution. Throughout the eighteenth century a 'scientific' explanation of the universal subordination of women was developed which took the place of the justifications grounded on religion and passages from the Bible. The Enlightenment proclaimed that the life of people is shaped not only by Nature but also by cultural habits, economic organization and political institutions. But if the transformation into servitude of women's alleged innate inferiority was a human action, how could one get away from the logical conclusion that a change was possible? Two women above all saw this contradiction and advocated for
their sex the same freedom available to men, including sexual freedom. They were Mary Wollstonecraft, the wife of Godwin, and the above mentioned Sophie Condorcet. As Chris Nyland argues (2003: 123-125), it is surely significant that Malthus wrote the first edition of his famous Essay on Population to criticize the views of Condorcet and Godwin. Being a gentleman, he could not attack women, and addressed their husbands instead. But he did attack their claims, providing a useful argument to deny women the same freedom as men. Population explosion is inevitable - says Malthus - if women are not constrained by social control and have the means to support their children. Single mothers must be banished from society; women must be dependent on men for their survival. The double standard of morality for men and women is a necessary evil to avoid an even greater evil, a rate of population growth naturally exceeding the rate of growth of the means to feed it. As we know, Malthus's view became prevalent among the Classical economists.

The second example is reconstructed by Pujol (1984, 1992). The question of women's lower wages was at the centre of the economic debate between the end of the nineteeth century and World War I. The explanations provided by the profession were grounded on the lesser needs of women, who always had a husband or a family to support them, on their lower productivity, the lower price of the goods they produced or their alleged absenteeism. However, in 1857 Barbara Bodichon had already provided a perfect explanation. She wrote:

There are fewer paths open to women, and these are choke full. We are sick at heart at the cries that have been raised about distressed needlewomen, and decayed gentlewomen, and broken down governesses... There is no way of aiding governesses or needlewomen but by opening more ways of gaining livelihoods for women. It is the most efficacious way of preventing prostitution. At present the language practically held by modern society to destitute women may be resolved into Marry - Stitch - Die - or do worse.

Her call for the end of male monopoly in the labour market went unheeded. No better fortune attended later attempts, by Millicent Fawcett and Ada Heather Briggs, to explain the lower wages of women with the segregation existing in the labour market (Millicent Fawcett and Ada Heather Briggs). The prevailing theories remained strongly influenced by the dominant ideology which saw the proper place for women in the home. Edgeworth, Marshall and Pigou, as Pujol shows, gave these theories the force of their authority, neglecting contradicting evidence. Marshall, who was usually very cautious when it came to identifying a causal relationship, firmly maintained that working mothers increase infant mortality and the 'degradation' of the working class.

The history of economics offers many examples of how prejudice creeps into even the greatest minds, and it reminds us that gender prejudice is one of the strongest.

