

Poulain de la Barre and the Rationalist Analysis of the Status of Women

Chris Nyland*

In the second half of the seventeenth century, European liberals began constructing a theoretical foundation for what they believed were the "rights of man". By this phrase was normally meant the rights of men. In developing their case for political and social justice, however, a number of these individuals gave consideration to the status of women. This paper examines the writings of Francois Poulain de La Barre, an early contributor to this aspect of the debate on human rights. It is suggested that Poulain deserves a place in the history of economic thought because of the pioneering manner by which he applied the deductive method of analysis to the study of women's social position. He also deserves recognition by economists because his utilisation of deductivism enabled him to advance a number of important insights regarding the economics of women's status. Most importantly, he was able to highlight the fact that the claim that women are men's social subordinates, because they are naturally less productive, was in many cases merely a product of prejudice. He was also able to challenge the assertion that the biological differences between the sexes fixed forever the relative economic and social status of men and women. These contributions, it is concluded, justify his recognition as a pioneer both in the methodology of economics and in the development of the economics of gender and discrimination.

Poulain de la Barre

Poulain was born in Paris in 1647. He studied theology at the Sorbonne, an institution then dominated by the scholastic tradition. While a student, he joined a Cartesian study circle and was converted to the merits of Descartes' philosophy and methodology. After graduating he worked as a Catholic priest, but in 1688 converted to Calvinism and was compelled consequently to leave France for Geneva, where he remained until the end of his life in 1723.¹ Amongst his numerous publications, Poulain wrote three books dealing with the status of women. These were *The Equality of the Sexes* (1673), *Dialogues on the Education of Women* (1674) and *The Superiority of*

Men, Against the Equality of the Sexes (1675). The first work is widely regarded as the most significant of the three.

The scholastics, against whom Poulain rebelled, argued that women's inferior place in society was a consequence of God having decreed that wives must be the servants of their husbands. That this was God's desire, it was asserted, was proven both by Scripture and by the fact that females were less rational than were males. It was also noted that women's inferiority was attested to by such notable authorities as Plato and Aristotle. At the Sorbonne the scholastics sought to inculcate pupils with these ideas. Poulain reported that as a result, the latter tended to be highly contemptuous of women.

When I was a scholastic, I considered [females] scholastically, that is to say, as monsters, as beings inferior to men, because Aristotle and some theologians whom I had read, considered them so (Poulain 1674,327,331-334)

The depiction of women promoted by the scholastics was challenged occasionally by feminists. However, these critics of orthodoxy tended to confine their criticisms to disputing the meaning of Scripture, cataloguing the intellectual and moral virtues of women and pointing to examples of individual females who gave the lie to the claim women were incapable of wisdom or leadership (Kelly 1982; Armogathe 1985:18). Moreover, as Schiebinger has (1989,165-170) observed, the critics invariably employed traditional forms of argument and did not challenge orthodox tools of analysis. Methodologically, Poulain's work is distinguished from this critical literature by the fact that he based his contribution on the scientific method of Descartes. By so doing Poulain was able to develop an alternative explanation for women's status which foreshadowed much twentieth century discrimination theory. His argument asserted that apart from their reproductive attributes, there were no substantive natural differences between the sexes. Consequently, any divergence in the social position and productive capacities of men and women must be the product of social conditioning.

Rene Descartes

Descartes' contribution to the development of economics has been analysed by Mini (1974). The latter has highlighted the extent to which Descartes' methodology, with its reliance on axioms derived purely in the mind, the building of deductive superstructures upon these axioms, and the tendency to hypostatise concepts, has been a prominent characteristic of much economic analysis through the history of political economy.

Shaken by the collapse of such apparent truths as the immovable earth, Descartes rejected the proposition that knowledge of the material universe could be founded on the word of authorities or the use of the senses. He argued that the pursuit of knowledge must be based on the power of the human mind to derive axioms that our intuition tells us must be a true depiction of reality. These axioms are the raw materials of Cartesian analysis and deduction is the force which links concepts and carries them forward to a proof. Where the deductive process is halted by barriers which logic cannot overcome, Descartes argued we can do no better than imagine some combination of factors which might give rise to the phenomenon we wish to explain. In other words, such obstacles are to be mastered by using 'rational fictions', and once overcome, the process of deduction is to continue (Pribram 1983,57-58).

The work of the many social analysts who were influenced by Descartes tended to primarily reflect this influence in that they accepted that deduction based upon a few simple principles could explain the most complicated phenomena. Cartesian social analysts invariably began by laying down propositions which they believed to be axiomatic. These axioms commonly related to some claimed aspect of human nature. Appropriate theorems were then derived deductively from the axioms, the process being aided by the use of rational conjecture. The end result aimed for was a conclusion which was credible on the basis of the available evidence.

Whether Descartes believed his methodology produced a coincidence of thinking and being is not clear. What is clear is that this is what his followers believed was the result. His method tended to lead Cartesians to hypostatise their psychic creations, that is, what they merely derived in the mind they subsequently came to presume was real. Where this hypostatisation occurred, the result was all too often the very opposite of that which Descartes sought to achieve.

Descartes, the man who aspired to put human knowledge on a secure and firm basis, actually succeeded in encouraging the most unrestrained flights of the imagination. Thought turned megalomaniac in that it claimed to explain wider and wider aspects of reality starting from the narrowest basis. His obsessive doubting led to the most naive theorizing, his ingenious critique of knowledge to the most ingenuous constructs, all ending in tautology (Mini 1974:23).

Mini has observed that this is the methodology that underpins neo-classical and Keynesian, though not Keynes', economics. It was also the methodology that Poulain utilised in his analysis of the status of women. As regards women's place in society, a critical element in Descartes' metaphysics was his defining of matter and mind in a manner which meant they were totally separated. He depicted the mind as a spiritual substance which is not to be identified with the matter that constitutes the body. Consequently, the mind can have no sexual characteristics. This perspective left Descartes' followers with only one option with respect to the natural attributes of the sexes.

They could claim that women were superior or inferior to men only if their bodies could be shown to be superior or inferior to those of men in some specified respect (Clarke 1990,10).

It was not possible for Cartesians to gain guidance from Descartes as to whether this was the case. In his writings on the human body and its functions, the only differences in the sexes Descartes identified explicitly were those relating to the reproductive system (Descartes 1985; 1985a). As a result Cartesians were left free to believe almost whatever they wished about the respective natural attributes of men and women.

The Origin of Women's Subordination

Poulain chose to challenge the belief that women's innate capacities explained their subordinate social status. He insisted that, at least in his own world, where women had difficulty matching men's achievements this was invariably a consequence of their social conditioning.

If one finds that there is some fault or impediment in some women at present, or even that they do not all consider important things in the same way as men

do - something which however is inconsistent with our experience - that should be explained completely in terms of the external conditions of their sex and the education which they receive, which includes the ignorance in which they are left, the prejudices and errors they are taught, the example which they get from other women, and all the mannerisms to which propriety, restraint, reserve, subjection and timidity reduce them (Poulain 1990,121).

The women's question was taken up by Poulain because he wished to highlight the value of Descartes' methodology. He reasoned that refuting an assumption so widely accepted, as was the claim that women were innately inferior to men, would encourage scholars to recognise the need to reject beliefs based only on appearances or the word of authorities (Poulain 1990:45-46). Poulain began his analysis by discussing the origin of women's social subordination. In so doing he first responded to the scholastics' claim that scripture made it clear that God had decreed women were the natural subordinates of men.

In *The Equality of the Sexes*, he sought to avoid this issue by dismissing readings of the *Bible* which suggested it was God's will that wives should be the servants of their husbands. He asserted simply that if one read Scripture correctly it became clear that it had nothing definite to say as regards the natural equality of the sexes (Poulain 1990:44). Subsequently, however, Poulain accepted that, given the influence of the scholastics, he could not so easily avoid their reading of Scripture. As a result, in *The Superiority of Men* he challenged their interpretation of the *Bible*. His reply is not particularly illuminating seldom rising above the opposing arguments. One aspect of his case that is interesting, however, is his interpretation of the "curse" God supposedly pronounced against Eve at the time of the Fall. This was an important issue for liberal reformers because one of the primary arguments advanced by those who supported the absolutist state was that the King derived his power from Adam whom God had made absolute ruler of the world when he decreed that Eve was the latter's natural subordinate. To suggest that Eve shared Adam's right to rule in Paradise was hence to undermine regal absolutism in the present world. Poulain brings much casuistry to bear upon the words of the curse in order to undermine the notion that God's words should be interpreted as meaning that Eve was the servant of Adam. Why Poulain's stress on this point is of interest, in terms of the development of political economy, is because John Locke was to subsequently advance a similar interpretation of the curse in developing his secular and economic explanation for women's status (Nyland 1993).

Having denied that the origin of women's subordination was divine in character, Poulain realised that he had to provide an alternative explanation of how it was men had been able to obtain a position of dominance in all known societies.² It was not sufficient to claim men had attained their dominant status by discriminating against women. Such an assertion was question begging. It demanded an explanation of how it could be that if the natural attributes of the sexes were equal, men always managed to attain a position where they could discriminate. Poulain's means of dealing with this difficulty was to undertake an exercise in what he termed "historical conjecture". He sought in this operation to construct a rational argument which could explain how men who had no natural advantages, save their freedom from childbirth, might manage to attain a position of dominance in all cultures.

To develop his argument, Poulain first formulated a principle, the validity of which he considered was indisputable. Utilising deduction, he then built upon this

axiomatic foundation a conjectural explanation of how men might originally have obtained their dominant status. His axiom was that human beings will impose their will upon others given the opportunity and chance to benefit by so doing (Poulain 1990:54). Poulain believed that the truth of this claim was confirmed beyond doubt by the most casual observation of humanity. Taking the axiom as given, he deduced that, at some time in the past, men must have utilised their freedom from childbirth as a weapon to subordinate women in order that they might enhance their own wellbeing. Liberty from childbirth was capable of being transformed into a weapon because this freedom favoured men over women in that it provided the former with greater opportunity to undertake muscle building exercise. Poulain believed men's consequent greater physical strength was an attribute which males could and did utilise to impose their will upon females.

In suggesting how men might have attained their position of dominance, Poulain did not utilise the historical record. Rather, he situated his analysis in a hypothetical primitive world in which there was no government and human beings enjoyed an abundance of material resources. It was assumed that even in this environment the respective reproductive capacities of the sexes would have produced a sexual division of labour. While women remained unencumbered by children they would have worked equally with men in the undertaking of productive activities.

I imagine that men were like children, that any advantages they had were more like those one finds in a child's game; both men and women were simple and innocent then, and they spent their time equally on the cultivation of the earth or in hunting just as savages do still. Men participated in their way and so likewise did women; whoever did best was most esteemed by all the others (Poulain 1990,54).

However, women's ability to match men's contribution in the production of economic goods would have been undermined by their role in reproduction.

The inconveniences of pregnancy and its consequences diminished the strength of women for periods of time and hindered them from working as they had before, so that the help of their husbands became absolutely necessary, and even more so when they had children (Poulain 1990,55).

The respective role of the sexes in reproduction, moreover, would have compelled women to remain at home in order to care for their children. Consequently, a division of labour would have been created which reflected these basic needs with women taking "care of the home while the men, who were more free and robust, took care of things outside the home". (Poulain 1990,55)

Poulain deduced that women's economic dependence on men thus produced would not have provided males with any greater esteem while the economic resources available to the family remained abundant. In an environment of economic abundance Poulain could conceive of no rational reason why the sexual division of labour should lead to men gaining a position of dominance over women. The factor which he assumed must have undermined this egalitarian situation was population growth. This 'rational fiction' was a critical assumption, for its adoption enabled Poulain to transform his hypothetical world of peace and economic security into one of conflict and scarcity. As per capita resources became scarce the value accorded the means of subsistence and the attributes and goods required to attain the material

needs for survival would have tended to be enhanced. This development in turn would have heightened the propensity for humans to exploit others where they could gain materially by so doing. Conflict would consequently have been generated in both the home and the wider society. Within the family, individuals would have manifested a greater inclination to use physical force as a means of ensuring they attained what they believed was their rightful share of the family's property. In such a situation women's strength disadvantage and their fecundity induced economic dependence would have become both more important and more noticeable.

A factor of even greater importance that would have transformed the social significance of women's dependence on men, Poulain deduced, would have been the tendency for population growth to induce conflict between communities. He suggested that once competition for the available economic resources reached the stage where communities were compelled to fight for the right to utilise these resources, we have the beginnings of warfare, slavery and the social subordination of women.

[The propertyless] seeing themselves completely without any property, they looked for ways of acquiring some. Since there was no way of doing this except by taking some from others, they seized whatever property was nearest to them and, in order to protect their new acquisitions, they also seized the proprietor to whom the goods belonged (Poulain 1990, 55-56).

Why these developments would have especially disadvantaged women, Poulain deduced, was because women's reproductive activities would have rendered them less capable of being warriors than were men. As intercommunal struggle over resources became common, this relative disadvantage would have become of great social significance. Women would have become reliant on the warriors for their immediate physical security, their freedom from slavery and their ability to attain their subsistence. Moreover, not being involved actively in conquest and the defence of the community women would have been accorded a lesser say in the government of the society. From here it would have been an easy step for men to convince themselves that women did not have the intellectual or spiritual capacity to rule. Indeed, they would have found it easy to believe that, apart from the ability to give birth, women's capacities were generally inferior to those of men.

Such a strong preference for one sex over the other resulted in the women being even less esteemed than before; since they were far removed from war and carnage by their natural disposition and their duties, they were considered to be incapable of contributing to the protection of kingdoms except by helping to populate them (Poulain 1990:57).

In time, this prejudice would have become so ingrained in custom and law even women would have accepted that the natural inferiority of females was a self-evident truth.

Poulain's conjectural reconstruction has a number of attributes that are significant in terms of the development of economic theory and methodology. His argument suggested that where economic resources are available in abundance the differing natural attributes of the sexes will be an irrelevancy as regards the respective status of men and women. In communities where resources are in short supply, on the other hand, these differences will tend to become of major significance in the shaping of gender relations.

For political economy, the importance of Poulain's relativism lies in the emphasis it places on both the economic environment and the extent to which changes in the availability of the wherewithal of life can transform the social importance of natural differences between the sexes. His analysis can justifiably be considered a stages theory of economic development based on a mechanism of population pressure impacting on subsistence. It is interesting to note in this regard that in his work Poulain identified the four basic economic stages that Meek (1976) has shown were to subsequently play a critical part in the history of political economy. In his conjectural history he assumed early human societies attained their subsistence either by hunting or by agriculture. Later in *The Equality of the Sexes* he discusses in detail the place of women in societies characterised by the commercial mode of subsistence and in *The Superiority of Men*, he identified pasturage as a fourth basic stage of development (Poulain 1675, part II, p. 109).

The economic element in Poulain's exercise in historical conjecture has been missed by the philosophers and feminists who have studied his work. These analysts have tended to accept that Poulain believed the origin of the subordination of women was based on a political rather than an economic foundation. Faure (1985), for example, has suggested that Poulain believed women's role in the family had no natural foundation and that the origin of the sexual division of labour was merely a product of men's political power within the family. Likewise, she suggests Poulain believed the decision to create the state was primarily a political act. What this interpretation of Poulain's analysis fails to recognise is that his explanation for both the origin of men's power in the family and the creation of the state were founded on a base which was biological and economic in character. In short, as has been shown, the causal direction was recognised to be from economics to politics, that is from the material to the cultural.

Poulain's awareness of the extent to which changes in the economic context can transform women's social position was unique in the seventeenth century. Indeed, his economic relativism was not to begin to be replicated by other analysts of women's status until Montesquieu systematically developed this notion in his magnificent, *The Spirit of the Laws*, in the mid eighteenth century.

A second aspect of Poulain's 'history' of the origin of male domination that deserves recognition by the analyst of economic thought, is the extent to which it constituted an early example of 'conjectural or theoretical history'. Dugald Stewart has observed, in his *Account of the Life and Writings of Adam Smith*, that Smith utilised this form of enquiry to a "peculiar degree" in all his different works (Stewart 1980, 292). When explaining what was meant by conjectural history Stewart observed that when analysts compare the achievements of modern society with those of primitive communities they are invariably led to wonder about the steps taken to bring about such a momentous transition. He observed that history provides few clues as regards the transitional process because many of its constituent important steps must necessarily unfold long before humans learn to write. Confronted with a want of direct evidence it is necessary to replace fact by conjecture.

In this want of direct evidence, we are under a necessity of supplying the place of fact by conjecture; and when we are unable to ascertain how men have actually conducted themselves upon particular occasions, of considering in what manner they are likely to have proceeded, from the principles of their

nature, and the circumstances of their external situation. In examining the history of mankind, as well as in examining the phenomena of the material world, when we cannot trace the process by which an event *has been* produced, it is often of importance to be able to show how it *may have been* produced by natural causes (Stewart 1980,293).

Writing in 1793, Stewart asserted that this form of history was "entirely of modern origin". By modern he appears to have meant the second half of the eighteenth century. As Poulain's conjectured history of men's rise to domination over women was published in the early 1670s the latter's contribution must surely challenge this assertion.

Finally in assessing the value of Poulain's suggested origin of male domination it should be noted that his work deserves recognition as a contribution to the development of economic deductivism. Klein has observed that early eighteenth century French theorists have not received the acknowledgment they deserve for being forerunners in the development of the methodology of the deductivist tradition within economics (Klein 1985, 51). Precisely because he did adopt this method of analysis, Poulain was able to transcend the methodological and ideological boundaries that had previously constrained feminist critics of the schoolmen. Given he did so in the late seventeenth century Poulain surely deserves to be accorded the same acknowledgment Klein grants to the economic deductivists of the early eighteenth century.

The Hypostatisation of Women

Poulain's utilisation of deductivism to demonstrate how men's freedom from fecundity might enable the male sex to attain a position of dominance over women should be perceived as an early example of the creative capacity of this method of analysis. However, it should also be recognised as an example of the dangers inherent in a methodology which is not founded on axioms derived empirically from the material world. Assuming the only natural difference in the respective attributes of men and women was a freedom from childbirth, then analysing the relations that would exist between these abstractions in an imaginary economic context was a valid method of analysis. At least, it was so long as Poulain sought merely to suggest a possible means by which men's freedom from childbirth might have enabled them to obtain a superior social position. What was not valid was his decision to accept as given that there is an equality in the natural attributes of the sexes when seeking to explain women's status in modern, commercial societies. When undertaking this latter aspect of his argument, Poulain succumbed to the danger inherent in the abstracted rationalism of Descartes. He did not merely assume that the sexes were equal in terms of their natural attributes, he accepted that this was the case in reality. In short, he hypostatized the beings who were his psychic creation and took what was merely a product of his mind as being a true depiction of the material world.

Amongst the natural attributes that Poulain maintained were identical in both sexes were the mental and muscular capacities of males and females. The former claim he justified on the grounds that the minds of both sexes are identical and the mind is separate from the body. The latter assertion he did not bother to support with evidence despite the fact such an assertion does not find justification in Cartesianism. It needs to be added that this claim also does not find justification in

modern empiricism. While empirical research has found no great difference in the mental capacities of the sexes, it has provided strong support for the belief that men have a large, natural muscular strength advantage. Women have, on average, only two-thirds the strength of equally trained men. Moreover, in those areas of the body important for the use of tools and weapons there is very little overlap between the strongest women and the weakest men.³

Poulain's denial that men had any natural relative advantage, apart from their freedom from fecundity, led him to adopt an extreme form of cultural determinism when explaining the social position of women in modern, commercial nations. He accepted that in such societies, women's role in reproduction could not by itself explain men's superior social position. Reproductive attributes being accepted as the only natural difference between the sexes Poulain deduced that it followed that women's subordinate status must be a manifestation of the prevalence of ideas, laws and customs left over from the warrior stage of human development. In short, Poulain claimed that belief in men's natural superiority was a social determinant so powerful it was capable of maintaining the dominance of males even after the material element which had enabled men to originally obtain this dominance had been superseded as a consequence of the development of the means by which humanity attained its means of subsistence.

Poulain's avocation of this idealist perspective constituted a major shift in his economics. More specifically it constituted a shift in the respective weighting and causal direction his analysis gave to material influences and to ideas. In his conjectural history of the origin of male domination, explanatory emphasis was placed on the relative abundance of the material wherewithal of life and on women's innate attributes. Increasing population reduced the per capita economic resources available to the population and the consequent conflict over the means of subsistence induced changes in the skills required for survival and people's ideas regarding women's capacities and their status. In other words, changes in the economic environment induced corresponding changes in society's received notions regarding women's capacities and their natural relationship to men. In this analysis economic factors are clearly perceived as being the prime determinant. In the modern world, however, the causal direction of Poulain's argument is reversed. It is no longer material factors which determine women's abilities and status. Rather, it is ideas and the customs associated with these ideas that are seen as being the prime determinants shaping women's abilities and their economic and social position within society. All non-cultural factors are considered to be irrelevant and hence it is concluded that it is ideas that determine women's place in the material world.

Poulain provides no justification for this reversal in the causal direction his economics accorded material and cultural factors. He was aware, however, that his explanation for the origin of women's social subordination did contain one critical element that was difficult to avoid. In his reconstruction of how men might have attained their position of dominance, he had acknowledged that men's greater physical strength would have influenced the sexual division of labour in primitive societies. Given this concession, he needed to refute any suggestion that men's greater capacity to undertake manual activities might be the critical material determinant underpinning their continued dominance of women in modern economies.

Poulain chose to evade rather than confront this problem. His means of so doing were twofold. First, he structured his argument in a manner which situated his

hypostatised women in a hypothetical, middle-class world in which the economic advantage men enjoyed as a consequence of their greater physical strength was ignored. He did this by confining his comparison of the capabilities of men and women to intellectual and moral activities. Thus, he focused his discussion on emphasising the fact that given an equal opportunity to attain the required skills women could match men in the occupations of lawyer, academic, historian, administrator, politician, etc. In so doing he pointedly avoided the respective ability of the sexes to undertake those manual occupations where physical strength was a critical factor determining the productivity of labour. For example, when assessing women's ability to be soldiers he restricted his comments to a consideration of their potential to act as generals and ignored the question of whether they could match men in physical combat. By situating his hypostatised women in an imaginary world, where physical strength was an economic irrelevancy, Poulain was able to deduce that the difference in the muscular capacities of the sexes could not possibly be a contributing factor explaining women's status.

Poulain's second device for obtaining acceptance of his argument was an appeal to the class prejudices of the intellectual elite for whom he wrote. He asserted that physical strength tends to be accompanied by low intelligence and was primarily an attribute of the labouring classes and hence could hardly be a source of social status.

[I]t is not physical strength which should distinguish men. Otherwise beasts would be better than men and, among men, those who are more robust would be regarded more highly. Indeed it is known from experience that those who have a lot of strength are rarely fit for anything else except manual work, and that those who have less physical strength usually have more brains. ... It is therefore useless to rely so much on bodily make-up rather than on the mind in order to explain the differences which can be seen between the two sexes (Poulain 1990, 117-118).

Poulain's failure to consider the status implications of the differing muscular capacities of the sexes deleted from his analysis a human attribute that influenced significantly the material wellbeing of the overwhelming majority of the population of the pre-industrial, agricultural society in which he lived. The importance of physical strength lay in the fact that muscular capacity influenced greatly the productivity of manual labour and hence the income of most families. Being a determinant of labour productivity, the muscular strength of the labourer was also a factor of interest to those property owners who purchased labour-power. This was because strength greatly influenced the magnitude of the potential economic surplus that could be extracted from employees and tenants. In short, for most people in Poulain's pre-industrial world, status and material rewards were greatly dependent on how effectively individuals could labour at tasks which required muscular strength. This meant most adult males had a relative advantage in an area of economic life that was a fundamental source of status and material wellbeing. This was a fact that Poulain chose to simply ignore in order to highlight the oppressive discrimination and prejudice women were compelled to endure. His decision to do so marks the point where he abandoned science for polemics embracing an idealist perspective which anticipated developments in much twentieth century analysis of gender relations.

Modern economic analysis of women's status is widely characterised by the assumption that women's social position is a function of their conditioning, the

discrimination they experience and the choices they make as regards the accumulation of skills. The difference in the physical strength of men and women is seldom perceived as being a factor contributing to the relative status of men and women or even of being an issue of relevance to the division of labour. This is despite the fact that where analysts have undertaken empirical studies of the link between physically demanding work and job segregation, they have produced results which suggest that the strength factor may still be of major economic significance.

In the United States, for example, the Committee on Occupational Classification and Analysis matched the 12,099 job titles in the *Dictionary of Occupational Titles* to the 591 three-digit occupational categories designed for the 1970 census. They then compared the attribute scores with wages and female representation by occupation. It was found:

The only job attribute variable that has a high correlation with female representation in an occupation is the physical demands index; jobs requiring greater physical demands are concentrated in male-dominated occupations (Raisian, Michael and Welch 1988,187).

The notion that the difference in the muscular capacities of the sexes is an economic irrelevancy has become so ingrained in the modern literature many analysts fail to accord the strength issue any explanatory significance even when analysing male-female relations in pre-industrial society. A measure of the prevalence of this perspective is the fact that none of the modern analysts who have studied Poulain's work have questioned his failure to give any serious consideration to the extent to which physical strength influenced relations between the men and women of his society. Nor have any of these analysts challenged his assertion that differences in the physical strength of the sexes is purely a product of social conditioning. Indeed, Armogathe has suggested that Poulain's assertion that the difference in the physical strength of the sexes is purely a product of the respective degree of exercise undertaken by men and women was one of the newest and most exciting of his ideas. It is an idea, moreover, she appears to believe is completely valid (Armogathe 1985,21).

Fraisse (1985:30) has correctly observed of Poulain's contribution to the study of the status of women that: "Today alone his text corresponds with our times." By this she means that it is only in recent decades that his pioneering ideas regarding the rights of women are coming to be fully accepted. Her comment, however, also applies to his analysis of the cause of women's subordination in the modern world. It is only over the last quarter century that the singular emphasis he placed on cultural influences has come to have any significant degree of acceptance.

The validity of this assessment is attested to by the fact that prior to the 1960s even liberal feminist economists generally accepted that the strength differential was necessarily an important variable in any viable explanation of women's status (Goldin 1990). The predominant perspective accepted by this school was that advanced by J.S. Mill. It has been suggested by Fraisse (1985,39) that Poulain can be described as the J.S. Mill of the seventeenth century. Any such conclusion, however, must be considered of dubious validity. While Mill believed it was not possible to know precisely the nature of women's innate capacities his idealism was limited by the fact that he accepted that one area where men did have a relative economic advantage was the "physical one of bodily strength" (Mill 1989,184). It is also of

interest to note that like Poulain, Mill emphasised the greater muscular strength of men when explaining the origin of male social dominance.

[T]he adoption of this system of [sex] inequality never was the result of deliberation, or forethought, or any social ideas, or any notion whatever of what conduced to the benefit of humanity or the good order of society. It arose simply from the fact that from the very earliest twilight of human society, every woman (owing to the value attached to her by men, combined with her inferiority in muscular strength) was found in a state of bondage to some man (Mill 1989,123).

Conclusion

In assessing a scholar's place in the history of economic thought two primary criteria ought to be considered. The first relates to the quality of the contribution and considers to what extent the individual presented new techniques of analysis, new concepts or new propositions. The second criteria relates to the influence exerted by the scholar's work on his or her contemporaries and successors (Groenewegen, 1985,585).

Of the first of these criteria, it should be noted that the systematic and secular manner by which Poulain challenged the arguments and prejudices of the schoolmen was without precedent in the study of women's status. Indeed, so unique was his work it can be concluded that Rosso's (1977,60) belief that he provided the first ever "rational explanation for the inferior condition in which women were held in relation to men" is not an unreasonable assessment. His use of economic deductivism and conjectural history to explain the origin of women's subordination partly fulfils the first aspect of the originality criteria in that the use of these tools certainly amounted to the utilisation of new techniques of analysis. His notion that changes in the economic environment can transform the material value societies place on specific human attributes and his application of the notion of stages of economic development further partly fulfils the criteria. Finally, his proposition that women's capacities and society's understanding of these capacities was severely limited by the prejudice and restricted access to resources women were compelled to endure, while not entirely new, was advanced with an unprecedented degree of rigor.

As regards the second criteria, the most comprehensive of the studies of Poulain's influence is that provided by Stock (1961). She reports that his writings on the status of women enjoyed a degree of immediate success but that this was short lived. However, in 1690 a new edition of his works was published and this appears to have had a more substantive and long lasting impact on both popular discussion and on the published literature. As far as economics is concerned the two most important individuals whom Poulain appears to have influenced were Montesquieu and Rousseau. The former read *The Equality of the Sexes* and made much of this work considering it a "truly philosophical" contribution to the study of women's status.

Not the least of the many aspects of Poulain's work that would have attracted Montesquieu would have been the former's relativism. This appears not only in *The Equality of the Sexes* but also in *Education of Women*. In this latter work Poulain (1674,71) points out that standards of correct behaviour vary in different countries and in different centuries while in *The Equality of the Sexes* he suggests grounds for why this should occur.

Different effects are produced on individuals by exercise, changes in temperature, food, and environment. So with whole nations: manners, customs, and laws are the result of such conditions as geographical position (latitude, proximity to the sea), physical features (mountains, rivers, forests, configuration of the terrain), fertility of the soil, and opportunity for trade with neighbouring countries (Stock 1961,201).

These were general causes shaping ideas, customs and laws which would very much have appealed to Montesquieu. Indeed, they include many of the factors he was to emphasise to powerful effect in his own contribution to the economic analysis of the status of women.

The case that Stock was able to compile regarding Poulain's influence on Rousseau was circumstantial in character. It focused primarily on common acquaintances in Geneva and on textual similarities in the work of the two men. Of these latter particular note is taken of the similarity of their ideas regarding effect of the development of the arts and sciences on human progress and the origin of economic and social inequality. It is also observed that Rousseau utilised the technique of historical conjecture in a manner similar to that of Poulain. Further, he utilised this technique, as did Poulain, to suggest that humanity had once lived in an idyllic 'Golden Age' that had now been lost and replaced by the 'Iron Age of Servitude'. Finally, it was noted that Rousseau was acquainted intimately with the literature relating to the debate on the status of women. In the years preceding his writing of his two *Discours* he was employed by Mme. Dupin. At the time of his employment she was gathering material for a book in defence of women and had undertaken extensive research on the subject. One of Rousseau's duties was to search out and note the necessary documents. It is highly probable, therefore, that he would have been aware of Poulain's work and this possibility is further heightened by the fact that Montesquieu was a very close friend of Mme. Dupin.

The evidence that Stock amassed as regards Poulain's influence is certainly substantive. This is true even of her claim that Montesquieu and Rousseau were influenced by Poulain. The latter is not sufficient to justify an unqualified endorsement of Armogathe's (1985,24) claim that Poulain provided Montesquieu with his inspiration for *The Persian Letters* or the assertion advanced by Fraise (1985,29) that Poulain was "the secret power which appears to have influenced Montesquieu and Rousseau". Nevertheless, the evidence is sufficient for one to conclude Poulain was certainly a significant influence helping to shape the debate on the status of women that took place in the eighteenth century in France. It can be concluded, therefore, that Poulain also meets the second criteria analysts should utilise when seeking to assess the value of a scholar's ideas. The fact that the economic element in Poulain's work has not previously been recognised is not because there is little economic content. Rather, it is because those who have analysed his work have not been economists and because historians of economic thought have given little attention to the history of the economic analysis of the status of women. It is time both these omissions were remedied.

* Department of Economics, University of Wollongong, PO Box 1144, Wollongong, NSW 2500

Notes

- 1 For details of Poulain's life see, Marie Stock (1961) *Poulain de la Barre: A Seventeenth Century Feminist*, unpublished Ph.D. thesis, Columbia University.
- 2 That male dominance is a universal phenomenon is challenged occasionally on the grounds that there have existed societies where male rule is not obvious. However, as the anthropologists Coontz and Henderson (1986,26) have observed, these exceptions invariably "come from relatively isolated simple societies" and hence cannot be accepted as significant exceptions.
- 3 In a review of nine studies reporting static and dynamic muscle strength measurements, Laubach (1976) reported mean sex differences as follows: (a) women were 55.8 per cent as strong as males in upper extremity strength; (b) 71.9 per cent as strong in lower extremity strength; (c) 63.8 per cent as strong in trunk strength; and (d) 68.6 per cent as strong in dynamic strength. It is true there is some cross-over, that is, some women are stronger than some men. However, the magnitude of this overlap is not great. Celentano and Noy (1981) have calculated that in a number of the areas of the body, critical to the use of tools and weapons, 5th percentile strength values for males exceed the 95th percentile values for females. The extent to which the measured differences in muscular strength are a result of socialisation has also been tested. Bishop (1987) compared the physical strengths of male and female collegiate swimmers with identical long-term training histories. Swimmers were chosen because the training is the same for males and females, begins at a young age, is year round and involves all-over body activity. A comparison group of non athletes was also tested. It was found that mean strength differences between sexes were 51.5 per cent for swimmers, and 64.4 per cent for non-athletes, indicating that while differential socialisation does enhance this sex difference it is a minor determinant compared to biological factors.

Bibliography

- Adams, Robert Merrihew 1975, 'Where do Our Ideas Come From? - Descartes vs. Locke' in Stephen P. Stich (ed.), *Innate Ideas*, University of California Press, pp. 71-87.
- Armogathe, Daniel 1985, 'De l'egalite des Deux Sexes, "la Belle Question"', *Corpus*, Volume 1, Number 1, pp. 17-26.
- Bayle, Pierre 1984, *The Dictionary Historical and Critical of Mr Peter Bayle*, B. Feldman and R. Richardson (eds.), Garlan Publishing, New York.
- Bishop, P., K. Cureton and M. Collins 1987, 'Sex Difference in Muscular Strength in Equally Trained Men and Women', *Ergonomics*, Volume 30, Number 4, pp. 675-687.
- Badinter, Elisabeth 1985, 'Ne Portons pas trop Loin la Difference des Sexes...', *Corpus*, Number 1, pp. 13-15.
- Clarke, Desmond M. 1990, 'Introduction' in Desmond M. Clarke (ed.) Francois Poulain de la Barre, *The Equality of the Sexes*, Manchester University Press, Manchester.
- Coontz, Stephanie and Peta Henderson 1986, *Women's Work, Men's Property: The Origins of Gender and Class*, Verso, London.
- Celentano, E.J. and L. Noy 1981, *Development of Occupational Physical Selection Standards Canadian Forces Trades: Performance Considerations*, Department of National Defence, Ontario.
- Cumming David C. and Robert W. Rebar 1983, 'Exercise and Reproductive Function in Women', *American Journal of Industrial Medicine*, Volume 4, Number 2, pp. 113-125.
- Descartes, Rene 1985, 'Treatise on Man' in John Cottingham, Robert Stoothoff and Dugald Murdoch (eds.), *The Philosophical Writings of Descartes*, Cambridge University Press, Cambridge, pp 99-108.
- Descartes, Rene 1985a, 'Descriptions of the Human Body and of all its Functions' in John Cottingham, Robert Stoothoff and Dugald Murdoch (eds.), *The Philosophical Writings of Descartes*, Cambridge University Press, Cambridge, pp. 313-324.
- Firestone, Shulamith Firestone 1970, *The Dialectic of Sex*, Bantam Books, New York.

- Frisse, Genevieve 1985, 'Poullain de la Barre, ou le Procès des Préjugés', *Corpus*, Volume 1, pp. 27-42.
- Frisch, Rose E. 1987, 'Body Fat, Menarche, Fitness and Fertility', *Human Reproduction*, Volume 2, Number 6, pp. 521-533.
- Goldin, Claudia 1990, *Understanding the Gender Gap. An Economic History of American Women*, Oxford University Press, Oxford.
- Groenewegen, Peter 1983, 'Turgot's Place in the History of Economic Thought: A Bicentenary Estimate', *History of Political Economy*, Volume 15, No. 4, pp. 585-616.
- Hine, Ellen McNiven 1973, 'The Woman Question in early Eighteenth-Century French Literature: The Influence of Francois Poullain de La Barre', *Studies on Voltaire and the Eighteenth Century*, Volume 116, pp. 65-79.
- Kelly, Joan 1982, 'Early Feminist Theory and the *Querelles des Femmes*, 1400-1789', *Journal of Women in Culture and Society*, Volume 8, Number 1, pp. 4-28.
- Klein, Daniel 1985, 'Deductive Economic Methodology in the French Enlightenment: Condillac and Destutt de Tracy', *History of Political Economy*, Volume 17, Number 1, pp. 51-71.
- Laubach, L.L. 1976, 'Comparative Muscular Strength of Men and Women: A Review of the Literature', *Aviation, Space and Environmental Medicine*, May, pp. 534-542.
- Laqueur, Thomas 1990, *Making Sex. Body and Gender from the Greeks to Freud*, Harvard University Press, Cambridge Massachusetts.
- Lemons, J.S. 1973, *The Woman Citizen; Social Feminism in the 1920s*, University of Illinois Press, Urbana.
- Magne, Bernard 1968, 'Une Source De La Lettre Persane XXXIII', *Revue d'Histoire Littéraire de la France*, Mai-Aout, pp. 407-414.
- Meek, Ronald L. 1976, *Social Science and the Ignoble Savage*, Cambridge University Press, Cambridge.
- Mill, J.S. 1989, 'The Subjection of Women' in Stefan Collini (ed.), *John Stuart Mill On Liberty and Other Writings*, Cambridge University Press, Cambridge, pp. 117-218.
- Mini, Piero V. 1974, *Philosophy and Economics: The Origins and Development of Economic Theory*, The University Presses of Florida, Gainesville.
- Magne, Bernard 1964, *La Féminisme de Poullain de la Barre, Origine et Signification*, Unpublished Ph.D thesis, University of Toulouse.
- Nyland, Chris 1993, 'John Locke and the Social Position of Women', *History of Political Economy*, Summer.
- Nyland, Chris 1993a, 'Adam Smith, Stage Theory and the Status of Women', *History of Political Economy*, Winter.
- Nyland Chris and Diana Kelly 1992, 'Beatrice Webb and the National Standard for Manual Handling', *The Journal of Industrial Relations*, Volume 34, Number 2, pp. 307-334.
- Perry, Ruth 1985, 'Radical Doubt and the Liberation of Women' *Eighteenth Century Studies*, Volume 18, Number 4, pp. 472-493.
- Poullain de la Barre, Francois 1990 (1673), *The Equality of the Sexes*, Translated and edited by Desmond M. Clarke, Manchester University Press, Manchester.
- Poullain de la Barre, Francois 1674, *De l'Education des Dames*, Jean du Puis, Paris.
- Poullain de la Barre, Francois 1675, *De l'Excellence des Hommes Contre L'egalite des Sexes*, Jean du Puis, Paris.
- Raisian, J., Michael P. Welch and R. Finis 1988, 'Implementing Comparable Worth' in G. Mangum and P. Phillips (eds), *Three Worlds of Labor Economics*, Sharpe, New York, pp. 183-200.
- Pribram, Karl 1983, *A History of Economic Reasoning*, John Hopkins University Press, Baltimore.
- Richards, S.A. 1914, *Feminist Writers of the Seventeenth Century*, David Nutt, London.
- Rosso, Jeannette G. 1977, *Montesquieu et la Féminité*, Librairie Goliardica Editrice, Pise.
- Schiebinger, Londa L. 1989, *The Mind has no Sex?: Women in the Origins of Modern Science*, Harvard University Press, Cambridge, Massachusetts.
- Seidel, Michael A., 1974, 'Poullain de La Barre's *The Woman as Good as the Man*', *Journal of the History of Ideas*, Volume 35, Number 3, pp. 499-508.

- Stewart, Dugald 1980, 'Account of the Life and Writings of Adam Smith, L.L.D.' in I.S. Ross (Ed.), *Adam Smith Essays on Philosophical Subjects*, Clarendon Press, Oxford, pp. 269-352.
- Stock, Marie Louise 1961, *Poullain de La Barre: A Seventeenth-Century Feminist*, Unpublished PhD thesis, Columbia University.
- Sophia, A Person of Quality, 1739, *Woman not Inferior to Man*, Brentham Press, London
- Thomas, Antoine 1781, *An Essay on the Character, the Manners and the Understanding of Women in Different Ages*, J. Dodsley, Pall Mall, London.