

## **National Library of Wales Political Archive Lecture**

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### **Gender, Power and Knowledge in the Welsh Academy**

#### **Early days**

I moved from the West Country to Wales in 1973 to begin working as a young researcher in Glyncoed in the Upper Afan Valley, just after most of the coal mines had been closed down. I was astonished by how many kindly passers-by greeted me in the street. They asked me 'so, who do you belong to?' I felt unable to answer this question; I didn't really know what they meant. I guess they wanted to 'place' me? Was some sort of philosophical or religious response expected? Or did they want to know who I was going out with? I had no idea. I think I understand the question better now, but it's taken me a long time.

I had been working on this Home Office funded project made up of researchers linked to their local universities and 'action workers' linked to their local authorities. The plan was we would work together to identify problems the community was experiencing, and to conduct some research on it and come up with ideas for projects and policies. The action team would then leap into action, implementing the project. We would then evaluate the outcome. It was one of 12 such Community Development Projects in the UK, all based in (economically) poor communities. The idea was that sustained deprivation needed a well-researched, evidence-based approach to develop projects and then policies designed to reduce unemployment and poverty. The Governmental thinking behind the project appeared to be based in a deficit model about the residents. They needed to 'pull their socks up'. After some years attempting to address these issues using this 'action research' approach, some of the twelve teams came up with a rather different and

difficult conclusion for the Home Office. They declared that the situation in these communities was not the 'fault' of the residents. It was the inevitable consequence of the uneven outcome of the spatial redevelopment of a capitalist economy. Hence, as a result from all these years of action research in these 12 communities, a major recommendation was that the Government should abolish capitalism. Home Office (who incidentally for our meetings in London every few months with them, used to serve us chicken with wine (!) which we thought was quite wrong), quickly resolved that this was a not an appropriate, acceptable or implementable recommendation. And poverty persists, in all these 12 places, despite a sequence of policies designed to combat it.

### **My own agenda**

The experience of getting to know people in the Upper Afan Valley had a profound effect on me. I learned to appreciate that the community was rich in many ways if devastatingly poor in income, housing, access to amenities, educational, transport and many other dimensions. A couple of families had moved to Port Talbot to get jobs in the steel works, but they soon moved back to certain unemployment because they missed their extended families and long-standing friends. The members of the community 'belonged' to each other.

I'd had a sharply contrasted and to some extent privileged background in the West Country. This included a boarding school and university education, but I had not realised that in many ways this too had its restrictions. I knew little about community richness and less about the effects of poverty. In effect, in the Afan Valley, I grew up. I rather naively and perhaps somewhat arrogantly decided at that point to dedicate the rest of my research career to tackling poverty, inequality and discrimination and producing evidence based recommendations which I hoped would be implemented and would make a significant difference to people's lives.

I've now retired, and have conducted 45 years of funded research, many in Wales but mostly in the European Union but altogether in over 40 countries. The projects have all been within this rather broad framework. This lecture

seeks to summarise some of the main conclusions I reached and experiences I encountered in relation to gender, power and the academy.

This lecture has three main sections. Firstly, it draws on an approach to promoting gender equalities that I have been heavily involved in developing called gender mainstreaming. Secondly, it focuses attention on how gender mainstreaming could and can and does improve ideas about how to identify what is 'excellent'. Thirdly, it demonstrates (I hope) how gender mainstreaming is essential to improve the fair distribution of power and the construction of scientific excellence in our Academies (by which I mean Universities, learned societies, research funding bodies, awarding bodies the National Library of Wales, the National Museum of Wales, research sections of local authorities, government departments, the private sector and voluntary bodies and more besides).

I should add after working in the Upper Afan, I continued as an academic for all but a year of my working life. During that year, I was employed as a researcher, more at the frontline, in a local authority. I soon realised that policy making was a complex, serious and political process. Research findings were not always the end-product of a project. I was once handed the policy recommendation of a report before I was commissioned to carry write it! I hot-footed it back to university. I've worked on research from a range of organisations, mostly the European Union, the Economic and Social Research Council and Governments ever since. I've also advised some countries and companies as well as other organisations. Latterly I became a Pro Vice Chancellor at Cardiff University, and thereby was enabled to interfere far more in developing and amending ways of doing things - as a result of evidence based policies – at last!

### **Gender mainstreaming**

Gender mainstreaming is not a very familiar concept here in the United Kingdom but is probably better known in Wales than it is elsewhere in the UK. The Act setting up the National Assembly of Wales included an article saying that sustainability and equality should be mainstreamed into all actions. There is, as a consequence, apparently, a different 'take' on new

ideas among Assembly civil servants compared with those in London. Gender mainstreaming has been integrated into legislation, systems and structures in Scandinavia and Canada for many decades. It is part of the European Union's 1997 Amsterdam Treaty, so all EU member states (including the UK at the moment!) are 'signed up' to combatting discrimination on the basis of it. Some countries are less familiar with it. Indeed, at the request of the European Commission, I spent some time advising various Governments on what it is and how it works when they wanted to qualify for joining the European Union but had to comply with the Amsterdam clause on equality. For example, the governments of Malta and Cyprus. They had a rather traditional attitude on who should do what job in terms of gender that needed to be addressed. I remember getting rather big headed at having to train the entire Cabinet of the Government of one of these countries, although their population I believe is not as substantial as that of Merthyr Tydfil.

So, what is it? Many of you I'm sure, will know. Many may think they know but do not, or at least, may subscribe to a version that is different from mine. Some may have never heard of it. And, of course there are competing versions of what it is anyway.

So, what do I mean by gender mainstreaming? It turns the attention away from individuals and their problems as victims, and their rights to "equal treatment". It also diverts us from the disadvantages experienced by some groups because of their characteristics and the need to address them through positive action measures. Instead it focuses us to pay attention on institutions and their policies, processes and procedures to understand their role (however inadvertently) in contributing to the gendered patterns we can observe and measure. Hence institutions need to reflect upon whether their procedures and policies are as "gender neutral" as they might imagine them to be. This involves using tools such as gender disaggregated statistics developed into equality indicators, gender proofing documents, conducting gender impact assessments of new policies. It means consulting rather than making decisions informed by assumptions based on gender stereotypes. In essence, it means seeing the androcentricity that underpins the thinking of

so many organisations and their cultures and their decision-making individuals looking through a gender lens, so that gender does not have such an impact on decision-making. This “visioning” work is hard to do as we are all cultural products, but it is essential if we are to modernise institutions rather than limiting them by using stereotypical assumptions about women and men.

In my view, ‘gender mainstreaming’ challenges our thinking about gender discrimination for women and for men. It explores how patterns of distribution of privilege and power are deeply embedded in systems, structures and cultures, in procedures and processes and in ways of thinking and doing. How does gender work in different power circles? What effect does this have for different groups? How does it affect decision making? Policies that may have a profound effect on the distribution of resources may obviously have gendered consequences, but they are rooted in the structural construction of an organisation and its culture. So, that’s clear.

And of course, this way of thinking is also useful for other categories. Disability, racial and ethnic origin, sexual orientation, age, religion and belief all benefit from an approach that questions whether these things should make a difference.

Much research has been done on gender mainstreaming internationally, including in Wales and the rest of the UK, and has been followed up in some countries by considerable action. The investment in countries such as China, South Korea, India and Brazil in developing scientists, including women scientists, is already showing dividends in appointments, citation records and league tables. South Korea, in particular, with its single-sex secondary schools for pupils that show an aptitude for science, already makes the lack of girls in many science subjects in Europe look old-fashioned.

Some of us ‘experts’ were invited by some of these countries to visit them for a few days to advise them on introducing gender mainstreaming in their education and working environments. We were selected by the UK Government to send over. However, in South Korea, I recall, where five of us were sent over following a request from their Government to ours, as

experts in the field, they were already making great progress. They were taking science seriously as a way of turning from a third world to a first world country, missing out intermediary stages. Their schools and universities were sex segregated. One of our number was the wonderful Dame Professor Jocelyn Bell Burnell (who should have been awarded a Nobel Prize in my view and the view of many others!). She is an excellent scientist and was invited to go and give a talk in a school for girls especially interested in science. The driver told her he was providing her with two body guards. She assured him she had spoken at many schools in many different countries and body guards had never been required; she'd managed perfectly well without them thank you. He repeated, he thought two would be enough. When she got back, she looked as if she'd been through a hedge backwards! What happened, we asked? 'Two was not nearly enough', she said. 'I've just had a Robbie Williams experience! All the girls were screaming with excitement! They wanted to touch the hem of my garment!'. We were quite taken aback by all this! And, I'm afraid to say, I'm not sure how many of our secondary school pupils, girls or boys, would be that familiar with her awesomeness, and if they were, whether they would express themselves in quite that fashion!

Underlying ideas about gender are those about power. How do we work out who is the most important person in the room? We tend to assume it a male. For example, Valian's research in the US shows how where someone is sitting in a committee room indicates how important they are. The Chair tends to be at the end of the table and can see everyone. When subjects (male and female) are given photos and asked to identify who is the most important person in the room, chairing the meeting, they will specify 'it's the man at the end of the table'. If it is a woman sitting there, they (men and women) will rethink and specify a man in the middle of one of the sides of the table. The mind reverts to 'normal' expectations.

The bread winner/home maker model of families can be supported by human resource and other formal policies but also assumptions underlying the organisation of work. In Sweden, the parental rights to leave specified that either partner could take all or some of the time off. However, it

overwhelmingly tended to be the mother who claimed all the leave. The Government changed the regulations. Both partners should claim a third of the leave, but they could share the rest as they liked. But if one of the partners didn't want to take their share, the couple lost it. Some new fathers wondered about the risk of taking the leave on their career prospects, but they decided to take it anyway. When they returned to work, their employers noticed they had performed better in a range of skills. They were better able to allocate an appropriate amount of time for a task. They worked more effectively in managing their time. They were better at prioritising time to tasks. And so on.

In Malta, when a woman wanted to go on maternity leave, she would have to go back to the beginning of the promotion ladder upon her return, even if she had previously been promoted. As a largely Catholic country, some women took several breaks, and would therefore keep slipping down to the bottom of the ladder, notwithstanding their academic record. There were no women professors in Malta then, but a couple since the policy was changed. Length of service is easily measurable in promotion criteria but it is not the same as measuring merit. Changing this practice has made quite a difference.

The bread winner/home maker model of the gender contract still rests in our heads although it has only ever applied to a small minority of heterosexual families. But it informs the construction of the gender pay gap even till now. This remains a highly significant problem even now. The most recent project I was involved advising called (WAVE) Women Adding Value in the Economy (run by Alison Parken), was funded by the EC and entailed working with public sector employers to address this issue. We found for example that case study employers tended to hire women, but on a part time basis 'because they prefer that'. We analysed the pay role data from each section and found these part time women were in fact working a considerable number of hours – even for the same employer! A local authority for example had some who worked all day. Maybe as a lolly pop lady, then an office cleaner, then in dishing up school dinners, then working in the library etc. They had to take so many jobs because they were paid the minimum

wage or not much more. The employer had not realised this. After hearing the results, they committed themselves to addressing this, and with the help of professional help supplied through the project, they started rethinking the organisation of their workforce, involving employee focus groups.

### **The gendered construction of scientific excellence**

How is it decided who should be promoted, or awarded a grant or be admitted to a learned society? We think of science as being objective, dispassionate and level headed in its decision making. But gender plays a strong role. It is a significant variable in the allocation of a range of choices, such as subject choice at school, college, apprenticeship or university, the employment sector chosen, the jobs that are pursued and level reached in the career structure. The extent to which gender has a role to play in all this, relates to the socio-cultural environment in that country. For example, we think of girls as not being as good as boys at maths. But Vidal's study of 300,000 adolescents in 40 countries showed 'the more the socio-cultural environment is favourable to male-female equality, the better the girls score in maths tests. In Norway and Sweden, the results are comparable. In Iceland the girls beat the boys, while the boys outperform the girls in Turkey and Korea.'

Rats and mice used in experiments tend to be male. In clinical testing many experiments are only conducted on men in case women 'get pregnant' and would need to drop out of the trial. The difficulty is that the results are then also applied to women. For example, early research work on the impact of an aspirin a day for the avoidance of heart disease was based on 28,000 participants - but they were all men. The results of the research led to the advocacy of an aspirin a day to all patients. Hence it was prescribed to both sexes. However, heart disease is different between men and women. It manifests itself in different ways. Some women died as a consequence of taking this prescription. Research has taken this on board and as a result is now safer (I was assured when I was prescribed a rather fancy aspirin). The prescriptions are better suited to both sexes, apparently. But medical research where drugs are tested on one group but prescribed to everyone



remains a dangerous field. We have the history of thalidomide as a cruel reminder of the application of a drug to a category of patient, pregnant women, on whom they had never been tested but were prescribed.

It also works the other way. Mammogram equipment for testing for breast cancer is designed for the average height of women, making it difficult for average height and tall men to be tested comfortably. Tamozifen, a drug often given to women with breast cancer, is also prescribed to men with it, although it has never been tested on them.

Testing on one sex but prescribing to both can be problematic. Our bodies have many similarities, but they also have many significant differences. As the United States General Accounting Office reported, most of the withdrawn drugs had greater health risks for women. Medicine currently applied to women is less evidence based than that applied to men.

But the problems of not gender mainstreaming it is not just in medicine and bioscience. For example, in car design, cadavers used to test models in the design of cars in laboratory crashes were male. Airbags were originally designed for male passengers and would immediately kill the foetus of any pregnant front seat passenger. You can see the illuminated signs in new cars indicating how to turn the airbag off if the passenger is pregnant. Car seat belts have never fitted smaller people, such as women until recently, again in new cars where they are adjustable. Now that women are major purchasers of cars, more attention has been paid in their design to these issues.

The examples are endless. The presumptions about the two sexes and gendered lives influences how 'knowledge' is constructed and influences products and services. While there are some improvements in some countries and in some sectors, lack of attention causes difficulties, and sometimes death.

## Political arithmetic

Who are the senior people in the world of making decisions about the constructing of knowledge? How do they get to those positions of decision-making? What role does gender play in all this?

In 1998, the European Commission set up a European Technology Assessment Network (ETAN) on women and science to identify key issues and make recommendations. The members were from a variety of countries and from academic disciplines, companies and politics (including a Minister!). I was the only social scientist. But everyone on the group was committed to be led by the evidence. Our rather brilliant report (if I may say so), *Science Policies in the European Union: Promoting Excellence through Mainstreaming Gender Equality* (Osborn et al. 2000) focused on the lack of reliable statistics; why so few women are recruited, retained and promoted in science and the lack of transparency in processes of recruitment, promotion and appointment to senior decision-making bodies and committees. Crucially, how do those who decide what is "excellent" get selected? The report highlighted how men were disproportionately selected in every discipline, in every country and at every rank. Indeed, the academy in Europe could be described as medieval in many of its practices. The report then made proposals as to how the European Union, the member states, funding bodies and the universities, indeed the whole architecture of the academy can improve through modernisation. The report recommended implementing or further developing gender mainstreaming throughout the academic infrastructure and in the research process.

We included a 'political arithmetic', which measures and publishes figures of gender distribution in these roles. It revealed interesting but predictable patterns. In our report, we produced the first, and therefore rather rough and ready barometer. We included a gender breakdown of members of research funding bodies, learned societies and prize giving committees. There were few women among these thousands of names!

Most of the recommendations made were implemented. These included as a first step addressing the political arithmetic. Annual publications of women and men in the academy, by subject, country, rank etc were published by the Commission. Member States were obliged to provide accurate data annually. Another was that an EC organisation should be set up to be responsible for producing and working with these figures and for commissioning relevant research on gender more generally. The latter took a while to establish. It is called (in English) the European Institute on Gender Equality (EIGE). The statistics are now very thorough and detailed, a useful tool for all the member states.

### **Decision-makers**

But the question is not just who makes the decisions that leads to these outcomes, it is how did they get into those decision-making positions in the first place? Equally, how is it decided who should serve on editorial boards or in the recruiting of academic colleagues for promotion, to learned societies. What mechanisms are applied? To what extent is it the result of competitions with specified criteria? What role does the operationalisation of contacts and networks play? How much transparency is there in the system?

Much progress has been made on this agenda. There is more specificity on what is required, which is good for everyone and saves time in selection. I managed to reduce the length of time of Cardiff University's promotion board by providing clear instructions about what is required to candidates for each academic level. We operationalised concepts such a 'national' or 'international' reputation. This doesn't just mean going to a lot of foreign places! What does 'having an international reputation for your research' really mean, what indicators could you use? Referees were then really worked hard by our asking them to apply the criteria to the candidate's application. Notes like 'yes, he's one of us, promote him' which I had received in the past, were no longer adequate. After all this, because of the transparency of what was required and how it was measured, many more women applied, and although there were relatively few of them, they had a

100% success rate. Many should have applied years before. And of course, good men have nothing to fear from robust systems of recruitment!

When I joined the Board of the then new Learned Society of Wales, I was asked to prepare with other colleagues a paper to ensure we were following good practice on this transparency. Fortunately, I was addressing a conference stuffed full of people from learned societies from all over Europe and beyond in Vilnius at that time and took the opportunity to seek advice from the attendees about their learned societies. The paper we produced was (I thought) state of the art! All the 18 recommendations were introduced. So, one of the instructions was that people must not put themselves forward – it is nominators who do that. But this has not stopped several male academics approaching me to ask me to nominate them!

### **Unconscious bias**

Universities and companies are now becoming much more aware of the threats to good judgements that can come from unconscious bias. Short courses on it have become quite popular. I've been an adviser on this in several Universities to the top senior management team, including the Vice Chancellor. I would rehearse the research on this by presenting research results, graphs and statistics and robust, grounded research. I would show how women would be just as susceptible to, that is, guilty of harbouring unconscious bias as men. The participants seemed quite taken by all this 'science', but I clearly hadn't set them on fire with indignation. I was asked If I had ever felt victimised through unconscious bias. So, I started giving examples. They were outraged! This meant something! So rather than show you all the evidence from research on this slippery subject, I thought I would share with you one or two personal examples of how I have experienced this.

Most recently, I was meeting a UK Government Environment Minister from a train to show him on the University's boat where the Severn Barrage might operate. I stood on the platform with a young male administrator, who was ready to be useful. The Minister disembarked and approached us. I put my hand out to shake his, but he ignored me and grappled to get hold of that of

the young chap. 'Thank you so much for meeting me, Pro Vice Chancellor!' he said to him, ignoring me and my withering hand. The poor lad looked terrified and pointed at me. The Minister dropped his hand and turned to me... but I was not pleased. Assumptions about gender had clearly overpassed those about age!

In a similar vein, a very senior woman on the Board of a major British company went to greet a major American businessman arriving at a Board meeting, as she was nearest the door. She put her hand out to shake his hand. He threw his coat over her arm and strode past her to meet the men.

I've been asked to do some photocopying, fetch water and point the way to gents' toilets by men at many big international conferences, even when I was there to give the plenary lecture, and didn't know how to do these things.

These are everyday occurrences. And we all, men and women, make gender-based assumptions.

Anytime a group of senior women academic leaders get together, there tends to be a downloading of recent experiences of the effects of unconscious bias. They can be amusing as well as therapeutic sessions.

### **Concluding remarks**

In the US, Schiebinger charted the shift in focus on women and science from "fixing" women as the "problem", to "fixing the culture" of scientific and engineering institutions, to the current concern with "fixing the knowledge", that is, ensuring researchers benefit from the potential "gendered innovations" that can result from applying a gendered imagination to research. We can see parallels in developments in the European Union. The 1980s were characterised by positive action projects, co-funded by the EC through Structural Funds, designed to lure girls and women into science and convince them that engineering was not just about oily rags. This could be described as a "blame the victim" or deficit model of understanding the issue.

There is now growing recognition of the need to address the dimension of gender in knowledge and research. There are examples of both American and European research funding bodies that are now stipulating that gender aspects of research should be considered; it is a criterion in the evaluation. Equally, some publishers of academic journals are now specifying that contributors should indicate the number of men and women among subjects of studies which encourages. A small group of us from the ETAN group wrote a letter to The Lancet, which they published, asking them to make such a requirement, which they then did. The Spanish Government passed legislation to promote the inclusion of gender in research, and to promote a better gender balance of researchers in funded projects. This radical approach also addresses the need to integrate awareness of the gender dimension into the undergraduate curriculum and for research organisations to develop gender action plans. The EC is partially driven in its moves by the global competitive position of science in Europe compared with other parts of the world.

Of course, gender isn't the only equality dimension that has been neglected in the social construction of who counts, who produces and how they contribute to what is regarded as 'excellent'. It is complex, but not nearly as complex as other equality dimensions. But much progress has been made through gender mainstreaming.