

Different forms of Difference in Multi-level Governance for Sustainability: Connections between gender and complexity theory perspectives¹

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Abstract

Taken independently, political theory concerning (a) multi-level governance and (b) sustainability (sustainable development) are both concerned, in their own ways, with communication across multiple perspectives. When speaking about multi-level governance, the focus is on the different perspectives associated with the frames local, regional, national and international (European Union wide and wider. When speaking about sustainability, the focus is on the different perspectives associated with different aspects of sustainability issues. Relationships between individuals and groups with potentially competing and/or incommensurable political interests, ranging from those of business developers and financiers to those of deep-ecologists, homemakers, and future generations are of analytical interest. In considering the two together, under the frame of multi-level governance for sustainability, two somewhat finite sets of relationships, cross-referenced, produce a highly complex web of inter-dependencies and relationships. Taken up within this context, to next incorporate political theory concerning gender, might seem likely to tip the whole discussion into a chaotic mess. However, far from confusing the discussion, inclusion of a gender dimension actually helps to make the discussion more clear. While it does increase the complexity of the theoretical space, adding a gender perspective dimension also reveals a potentially helpful set of categories, which can be extrapolated to the multi-level governance and sustainability sets of perspectives through reference to partial system theory. This set of bounded, partial systems categories offers an interesting and potentially powerful heuristic for describing the structure and dynamics of the complex set of inter-relationships that comprise multi-level governance for sustainability.

1. Introduction

The aim of this article is to illustrate that situating

gender as one among multiple modes of difference creates not only increased complexity but also opportunities for increased order and coherence in the design of institutions supporting multi-level governance (MLG) for sustainability. Far from viewing gender mainstreaming as an ethical or moral good or a correction of past wrongs, this article will present gender mainstreaming as a concept and practice that may be helpful for better understanding and engaging with the organisational complexities of multi-level governance for sustainability.

Three types of 'difference', (1) across governance levels, (2) across sustainability perspectives or environmental values and (3) across gender, will each be considered in turn and then collectively. In order to provide working definitions for all three types of difference within one article, descriptions of their internal structure will be quite limited. Each category has its own rich discourse concerning these internal distinctions and sign posts toward these discourses will be included from time to time. However, the argumentation presented here will rely upon more rough and broad distinctions, hopefully helping to keep the focus on the differences between difference-types rather than on the internal distinctions within a given difference-type¹.

The article begins with a brief discussion of the character of difference in the context of multi-level governance, turning next to the character of difference in the context of political and political economy theory concerned with sustainability. Implications arising from the compounding of these two difference-types are then considered. In the final two sections, two additional difference-types, gender and part/whole are introduced and some formal representations of the relationships between different forms of difference are presented. Finally, potential for further development of political theory based on these regularised representations of different difference-types is considered, specifically with regard to design of institutions that might support democratically legitimate, gender aware, MLG for sustainabi-

lity.

Taken independently, political theory concerning (a) multi-level governance and (b) sustainability (sustainable development) are both concerned, in their own ways, with communication across multiple perspectives. When speaking about multi-level governance, the focus is on the different perspectives associated with the frames local, regional, national and international (European Union wide and wider). When speaking about sustainability, the focus is on the different perspectives associated with different aspects of sustainability issues. Relationships between individuals and groups with potentially competing and/or incommensurable political interests, ranging from those of business developers and financiers to those of deep-ecologists, homemakers, and future generations are all of analytical interest. When considering the two together, under the frame of multi-level governance for sustainability, what was originally two somewhat finite sets of relationships, are cross-referenced, to produce a highly complex web of inter-dependencies and relationships.

Taken up in this context gender mainstreaming (the aim of ensuring that all policies and practices across all institutions are gender aware and gender just) might seem likely to tip the whole discussion into a chaotic mess. However, far from creating confusion, including a gender dimension actually helps to make the discussion more clear. While it does increase the complexity of the theoretical space, adding a gender dimension also reveals a potentially helpful set of category structures that may prove useful for further development of political theory and design of institutions supporting multi-level governance for sustainability.

2. Difference in Multi-level Governance

The concept of multi-level governance (MLG) has been developed in various directions over the past decade, by a range of scholars employing a range of theoretical and methodological approaches. However, it is not the purpose of this article to review the structure and content of that discourse². Perhaps the most important definition to provide, concerning the concept, is to clarify what MLG is not: federalism. Where federalism is concerned with a given constitutional state structure, MLG can be described as a complex network of sub-state, state and inter-state structures and socio-economic dynamics that comprise a governance process, beyond the functioning

of any single government. The concept, if not the 'label' MLG, can be traced back to the Treaty of Paris (1951) which created The European Coal and Steel Community (ECSC), mid-wife to the institutional structures of the current European Union (see Warleigh 1999; 2002).

For the purpose of this article, Keating's (1988) description of a 'new territorial politics' provides a clear and grounded definition of multi-level governance, through which description of a MLG difference-type can be developed. The trans-state, sector based orientation of the Coal and Steel Community foreshadows precisely the kinds of 'new territorial politics' that Keating (1988) describes as emerging in the 1970s. He identifies two overarching, countervailing forces that can be understood to have operated consistently across all EU members, while nevertheless being differently mediated by the different cultural and political contexts at play within the different member states.

The first force he describes as "the collapse of the Keynesian consensus" (Keating, 1988:167) in the early 1970s. This 'collapse' and associated economic turbulence of the late 1960 / early 1970 (including Nixon's revocation of the gold standard) can be understood to have undermined the notion that regions have economies of their own, while at the same time having pitted regions against each other in international competition for inward investment. Today we would file these dynamics of inter-regional competition under the heading 'globalisation'. The second force Keating describes as, "European and international integration...both increasing territorial disparities in economic development and reducing the ability of the state to address these" (Keating, 1988:167), which can be understood to have undermined earlier conceptions of the role of the nation state. The arrival of these two different forces simultaneously in Europe can be understood (following Keating, 1988: 167-234) to have stimulated an iterative process of both opening and closing of member state boundaries during the early 1970s.

Keating is careful not to presume the demise of the 'nation-state', and it seems more appropriate to interpret his description of its changing role in this period as a reorientation. Taking up this reorientation as a reference point, it becomes possible to identify, from within Keating's early description, a rough set of broad categories delimiting different 'levels' of EU multi-level governance. The most immediately apparent set of 'levels' is those relating to the geographical categories local, regional, member state, EU international and global international, call this

Europeanisation (political). However, again working only from Keating's (1988) early argument, two additional intimately related modes of multi-level difference can be identified - intensity and sector of activity, call these globalisation (economic). The 'intensity' difference set reflects a form of centre/periphery distinction, with for example urban centres and industrial plants reflecting a centre/high intensity level and rural communities and provisioning economies reflecting a periphery/extensive level. The 'sector' difference set could be delimited into sub-categories in countless ways, each with its own supporting theories and reference data. However, the sector categories used to prepare the internationally standardized System of National Account offer a reasonable picture of the structure and role of this mode of difference within the wider MLG structures. Difference across sectors such as 'agriculture, forestry and fishery', 'mining' and 'chemical products' cuts across difference based on intensity level and/or geographical level, providing a third MLG 'level' category, not unlike the original Coal and Steel Community frame, where 'level' can be understood as a stage in a production/supply or a consumption/distribution structure.

3. Difference in Sustainability

Like the concept 'MLG', the idea of sustainability has many authors and many meanings, which of themselves are not the focus of this article. The broad description of sustainability employed in The Brundtland Report (Brundtland, 1987) - development that meets the needs of the present without compromising the ability of future generations to meet their own needs - sets out in a rough way some temporal and spatial boundaries within which it is possible to describe two more or less discrete difference-types relating to sustainability: temporal and spatial. The temporal difference-type is typically described with reference to the difference between the needs of present and future generations but it can also be understood more broadly, to reflect a difference in position relative to a causality relationship between those doing and those done to. Martinez-Alier (2002) draws attention to the complexities of this difference-type, where struggles of the poor, against environmental degradation and destruction may be presented rhetorically as identity based struggles, while fundamentally, they are struggles about 'livelihood', about the right and ability to be cause as opposed to consequence to do rather than to be done to.

The Brundtland Report definition also describes (at least implicitly) a spatial difference-type reflected in the concept of 'met needs', which are defined differently in different societies: i.e. living in a rural community in the mid-western United States, where basic social and physical provisions of ordinary community life may be distributed across hundreds of kilometres, access to private automobile transport could be described as a need rather than as a luxury. This spatial sustainability difference-type reflects a situation where there are various ways in which environmental problems are understood by different individuals and by different social groups, within and across states: "The spokespersons for nature speak in different voices" (O'Neill, 2001: 496) and "[c]onflicts sometimes exist [for example] between international conservation bodies speaking on behalf of the interests of nature seeking to protect 'natural landscapes' and the socially marginalized groups whose lives and livelihoods depend on working with them" (ibid: 497 emphasis added) revealing political dynamics mediated by the question of "whose knowledge claims count" (ibid). Smith (2003) refers to this as "value pluralism" (Smith, 2003: 7) and identifies two aspects: 1) conflicting values, where adherence to one value obviates adherence to the other and 2) incommensurable values which, while not necessarily conflicting, are expressed in different idioms and are therefore not directly comparable (ibid: 21)³.

4. Relationships between MLG and Sustainability difference-types

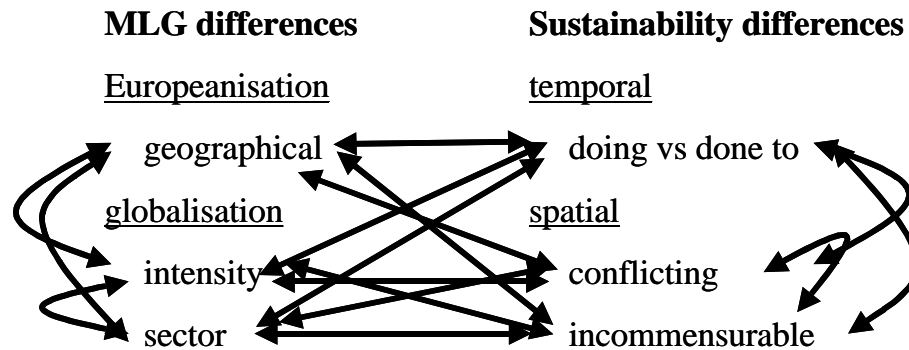
A parallel can be drawn between the two general modes of sustainability difference 'temporal' and 'spatial' and the two general MLG modes of Europeanisation (political) and globalisation (economic) outlined above and drawn from Keating (1988) discussion of the new territorialism associated with the rise of 'European integration' and 'the collapse of the Keynesian consensus' respectively. The traditional Europeanisation/political levels of MLG difference can be compared with the temporal sustainability difference-type concerning relations with future generations and others acted upon, while the intensity and sector MLG globalisation/economic difference-type can be compared with the two aspects of value pluralism described by Smith (2003), conflicting and incommensurable.

Individual relationship structures within this com-

When the focus of interest shifts from MLG or sustainability to MLG for sustainability, what had been two parallel sets of three comparable categories

becomes one single complex, integrated set of inter-related and interdependent compound categories as shown in Figure 1 below.

Figure 1: MLG for sustainability



plex can be considered as operational aspects of MLG for sustainability. For example, the environmental conflicts to which Martinez-Alier (2002) refers can be described with reference to relationships between the sustainability difference category of temporality and the three MLG difference categories, where issues of centre/periphery, international relations and economic sectors of production are all in play.

However, while this complex may help to describe the dynamics of the problem, it represents only a series of recursive and inter-dependant dynamics, with no starting point and no end. Who is ultimately responsible or accountable for a given injustice to man, woman, beast or babe or indeed for wider injustices such as ostentatious wealth accumulating in the face of profound poverty, is by no means clear. Lundqvist (2004) suggests that this difficulty with assigning accountability may be a problem implicit in MLG governance. Looking at the case of water resource management in Sweden he notes that "some of the interlinked layers of multi-level water governance lack clearly defined terms of authority and responsibility, and some are found wanting in terms of democratic accountability" (Lundqvist, 2004:421 emphasis original). Although not speaking about MLG specifically, Arendt described the related dynamics of bureaucratisation of governance as "the rule of an intricate system of bureaus in which no men, neither one nor the best, neither the few nor the many, can be held responsible, and which can properly be called rule by Nobody" (Arendt, 1970:38).

Describing ways in which it may be possible to attribute - in space or time - accountability and responsibility for given injustices to one or another actor or actors is an important and problematic feature of developing political theory concerning MLG for sustainability. While that is surely not a problem to be resolved in the length of one article, perhaps considerations presented in the following sections may open the door slightly toward some possible new conceptual frames.

5. Gender as a partial system boundary

When the descriptions shift from governance levels and sustainability viewpoints to gender, this is, in a way, moving to a descriptive frame that is more tightly oriented around the individual. By viewing MLG for sustainability through the lens of General Systems Theory (see below) it will be argued that, while adding a gender difference-type to this already complex structure does certainly increase the complexity of the institutional structures under consideration, it also provides an ordering function that makes it possible to describe and perhaps to design for simpler and more transparent relationships within and across MLG levels and sustainability values structures. In this respect, gender mainstream can be viewed not simply as 'the right thing to do' but also as a design tool for simplifying and ordering the complex space of MLG for sustainability. Perhaps developing integrated institutional supports for the gender difference-type may actually help reveal

ways that rule by Nobody can be transformed into rule by some bodies.

As was pointed out at the beginning of this article, the three primary categories described here - MLG, sustainability and gender - are far more involved than can be explored in a single paper and this is perhaps even more the case for the gender difference-type than for MLG or sustainability. The following treatment of gender difference is simplistic and somewhat naïve but not without purpose. It is developed with the aim of producing a manageable description of a gender difference-type that can be compared with the MLG and sustainability types described above⁴. This gender difference-type can be understood to consist of three discrete units, (1) male, (2) female and (3) not male or female, where transgender individuals, including elective sex change men and women and biological hermaphrodites fall into the category not male or female⁵. This difference-type is structurally different from the two preceding difference-types, which are continuous and multi-dimensional. Clearly it is possible and perhaps even more accurate to describe the internal structure of gender difference as continuous, honouring the feminine and masculine aspects that come together in each individual human being. However, the interest here is not so much these internal nuances but cross comparison between MLG, sustainability and gender difference-types.

Beginning with this simplistic definition, it is possible to lay these three difference-type categories against a frame of reference provided by von Bertalanffy (1950) in his work on General System Theory and by Simon (1959) in his work on bounded rationality. The fundamental argument from von Bertalanffy (1950), which will be expanded upon here, can be described as partial systems theory, which is itself a more specific implication of his wider General Systems Theory. Writing in 1950, von Bertalanffy presented his theory as an historical observation as much as a theoretical formalisation, noting a consistency in approach emerging across a range of life-oriented sciences⁶. While his own formalism is quite detailed and employs some mathematical argumentation, his overall approach can be described as an effort to document a new mode of scientific description arising at the time, which sought to describe organisms rather than objects, where "the laws governing the behaviour of the parts can be stated only by considering the place of the parts in the whole" (von Bertalanffy, 1950:147). Reflecting back on the implications of von Bertalanffy's theory, Koestler, in 1968, describes these insights as a

response to "the insufficient emancipation of the life sciences from the mechanistic concepts of nineteenth-century physics, and the resulting crudely reductionist philosophy" (Koestler, 1969:2).

A contemporary of von Bertalanffy and Koestler, Simon's own work on bounded rationality also relates back to and employs this wholism approach, while drawing the analytical focus to the inside 'partial' system, in an effort to describe the 'place of the parts'. Take for example the following excerpt, which leads the reader into a detailed description of Simon's argumentation on bounded rationality and partial equilibrium:

"suppose we were pouring some viscous liquid - molasses - into a bowl of very irregular shape. What would we need in order to make a theory of the form the molasses would take in the bowl? How much would we have to know about the properties of the molasses to predict its behavior under the circumstances? If the bowl were held motionless, and if we wanted only to predict behaviour in equilibrium, we would have to know little, indeed, about molasses...If the bowl into which we were pouring the molasses were jiggled rapidly, or if we wanted to know about the behavior before equilibrium was reached, prediction would require much more information" (Simon, 1959:255).

The 'much more information' to which Simon refers occupies his attentions for the remainder of the article, where he moves on to discuss much more than molasses. The descriptions he develops and his rigorous and repeated attention to detailed specification of the relationship between features of a given context and associated features of a given part illustrates the descriptive approach referred to here as partial systems theory. This conceptualisation of physical and social organisms as multi-dimensional complex systems, exhibiting different structures and attributes at different levels of scale and scope translates well onto the MLG concept. Indeed complexity theory insights, developed through reference to these general and partial systems theory discourses, inform much of the MLG theory concerning networks and self-organisation (see Börzel, 1998, Geyer, 2003 and Farrell, 2004). Here partial systems theory can be understood as a fourth difference-type, describing a bounded, specifiable, movable but nonetheless clear distinction between that which is described as part and that which is described as whole, within a given descriptive and analytical context. Koestler offers the term 'holon', "from the Greek holos - whole, with the suffix on (cf. neutron, proton) suggesting particle

or part" (Koestler, 1969:197) to describe the "Janus-faced" (ibid) components that comprise this difference-type, where "wholes and parts in [an] absolute sense do not exist anywhere...what we find are intermediary structures on a series of levels in ascending order of complexity, each of which has two faces looking in opposite directions: the face turned towards the lower levels is that of an autonomous whole, the one turned upward that of a dependent part" (Koestler, 1969:192)⁷.

6. Dealing with Different Differences

Drawing some structure from partial systems theory it is now possible to turn to the final task of this article, an exploration of the implications of situating MLG, sustainability and gender difference-types within a single analytical frame. The role of the gender difference-type in this process is far from trivial, because the structure of the gender difference-type is, well, different from the other two. The MLG and sustainability difference-types described above are internally complex, reflecting temporal and spatial differentiations, with continuous gradations within modes of differentiation (e.g. I might work in the agricultural sector on my own farm, as a hired hand on a larger farm, at a distribution centre packing goods for a group of larger farms, etc.). However, differentiation with the gender difference-type described above is discrete (with only three available options), the difference-type itself is internally coherent, without cross-cutting inter-dependencies and the descriptive space covered under the type is all humans. While some given individual may or may not work in the agricultural sector of an economy, may or may not have children (for whom they may or may not have future generation compassion), may or may not be registered to vote, all human beings fit into one of the three gender categories - male, female, not male or female - defined here as the internal structure of the gender difference-type. This status as 'attribute assignable to all humans', situates gender as the highest order structure of the three, with a governing role in ordering the relationships between lower order structures such as those reflected in the difference-types MLG and sustainability values.

Figure 2 illustrates the ordering and heuristic usefulness of employing a whole-system difference-type, such as gender, as a primary analytical category. Because all other partial systems will relate in some way to this whole-system difference-type, it can serve as a theoretical scaffold for organising and des-

cribing relationships between and across other partial system descriptions.

Figure 2: Difference within Gender, the many sides of Simona

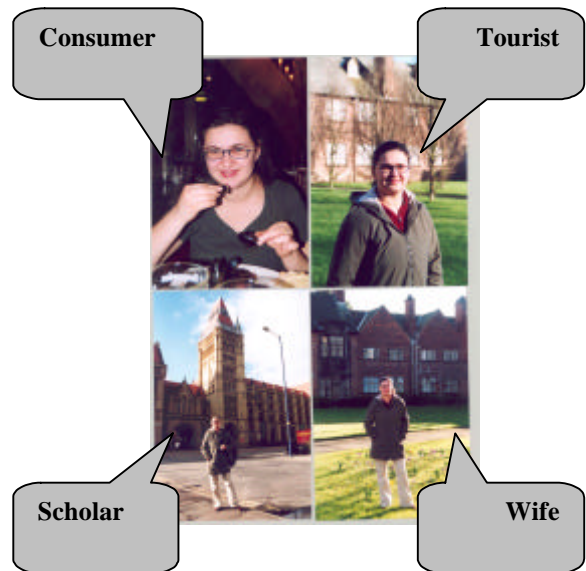


Photo Credit: Doru Davidescu

From a partial systems theory perspective, regularised differences between sets of actors in social systems can be described as similar, in that each regularised set constitutes a category assignment, which carves up the social space in a similar way. That similar way of carving is 'the description of an individual partial- or sub-system' which is presumed to overlap with other sub-systems. The gender difference-type introduced above can be described as a regularity of difference with a tertiary structure of male, female not male or female, represented in Figure 3 as the grey foundation layer, which depicts a partial system differentiation that cuts across all aspects of the larger whole system within which it is embedded. This whole-system referent can then serve as a base, across which further, differently structured partially systems, oriented for example toward geography, employment sector, environmental values and regard for future generations can be layered.

Each category assignment relies upon a bounded description, ruling some features in and others out. Within each category, rules for what can and cannot be said about and/or by the individual, including,

how things can or cannot be said, regulate the discursive, epistemological and experiential boundaries between actors operating according to these regularised differences, while actors may and indeed often do, operate simultaneously according to multiple rule structures. The highlighted space at the centre of Figure 4 thus represents the highly specified par-

tial system - London, nurse, bird watcher with children, which is a descriptive category against which it is possible to allocate some meaningful descriptors and against which it is possible to assign at least some expectations concerning access to power and modalities of agency.

Figure 3: putting the pieces together

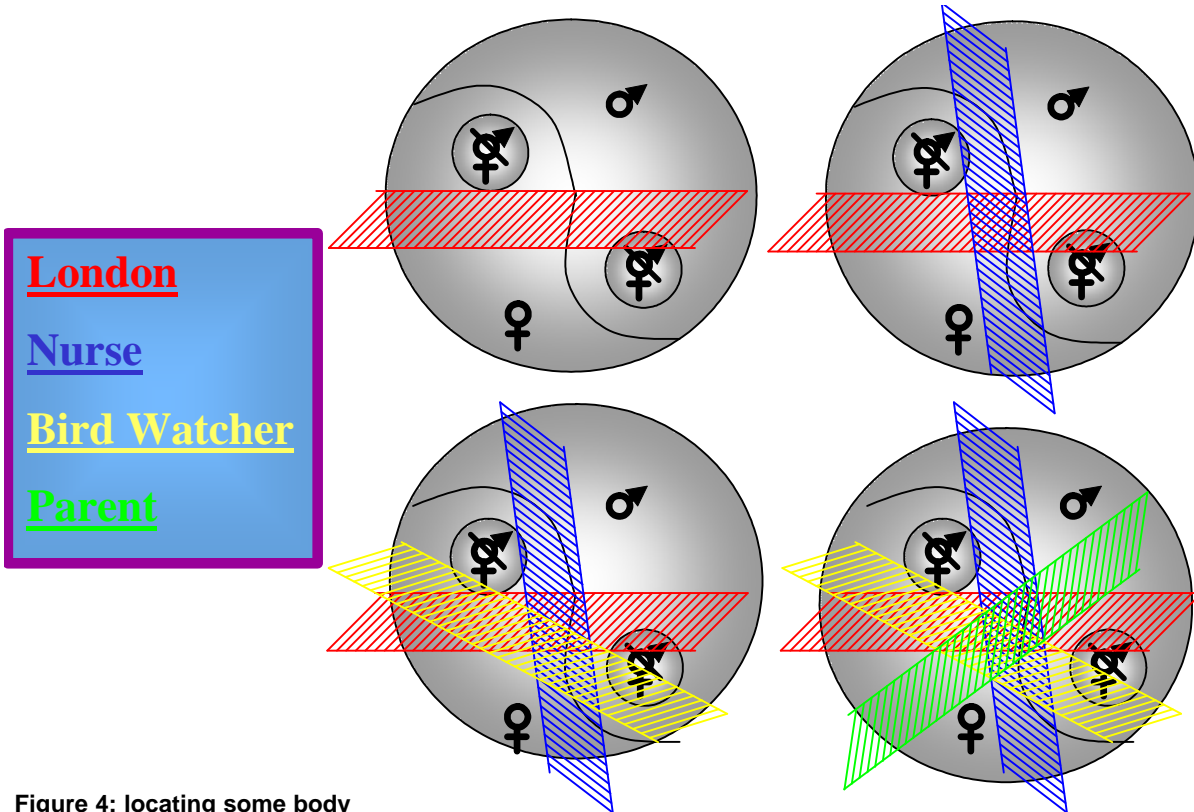
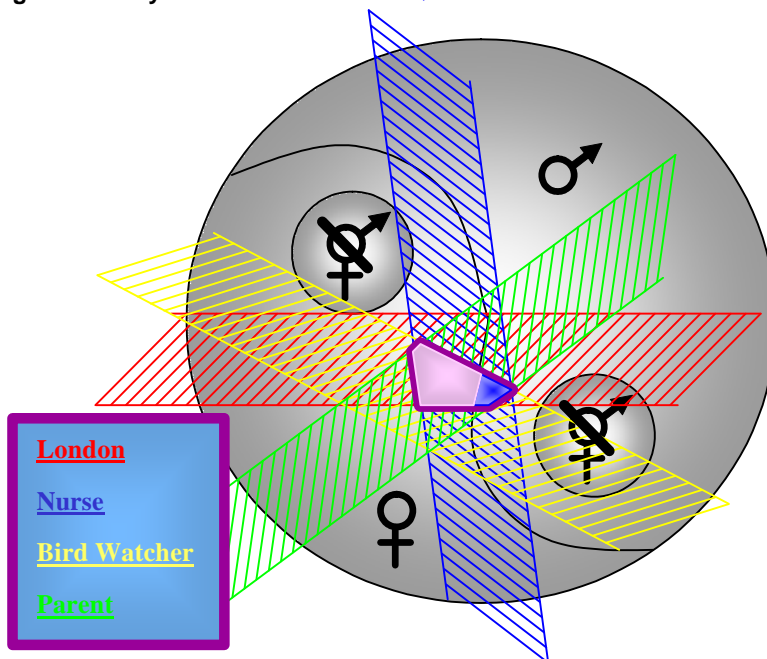


Figure 4: locating some body



Mouffe describes this conceptualisation of a complex political actor "not as a unitary subject but as the articulation of an ensemble of subject positions, constructed within specific discourses and always precariously and temporarily sutured at the intersection of those subject positions" (1992:237). Approaching the question of difference in democracy from a different theoretical perspective, Young (2000) nonetheless offers a similarly plausible caption for Figure 4: "People differently positioned in social structures have differing experiences and understandings of social relationships and the operations of the society because of their structural situation" (Young, 2000:98).

7. Insights and Implications

Returning to Lundqvist's (2004) concerns regarding accountability and legitimacy in MLG, the highly specified partial system represented in Figure 4 may offer some insights into how accountability might be ascribed across the MLG for sustainability political space. While the relationship between authority and legitimacy - the consent to be ruled - is an enduring subject in political theory, it is hard to find a clearer articulation of the issue than that put forward by Machiavelli (1998[c.1520]) in *The Discourses*, where he points out the essential relationship between legitimacy and the ability to exercise authority, through an exploration of how and why states of certain types are formed. In discussing the social transformations leading the inclusion of a democratic component in the Roman state with which he was so interested, Machiavelli argues that, "when the Roman nobility became so overbearing...the populace rose against them, and they were constrained by the fear that they might lose all" (Machiavelli, 1998[c.1520]:111). Today, in our complex societies where rich and poor are neatly separated into different regions, the risk of such forms of direct overthrow may seem remote. However, the need to relate effective authority with legitimacy remains. Perhaps, in this context, sporadic acts of terrorism can be seen as a consequence of a legitimacy gap in the global governance systems of our complex world. More down to earth and in the context of multi-level governance for sustainability, perhaps, as I have argued elsewhere (Farrell, 2004), implementation problems, where policy and practice are found to directly contradict one and other, can be understood as a manifestation of a legitimacy gap in a complex system.

Contrasting Figure 1 and Figure 4 (shown one above

the other in Figure 5, below), these two images both represent the same political system of multi-level governance for sustainability. The first major difference between the two is the inclusion of the gender difference-type. The second major difference is that within the lower image it is possible to identify a focus, a point from which power might be exerted and against which accountability and responsibility might be assigned. This focal point is revealed through the layering of multiple partial systems,

"Before each General Election five panels are formed, of candidates having knowledge and practical experience of the following interests and services respectively:

- i. Cultural and Educational Panel - National language and culture, literature, art, education, law and medicine;
- ii. Agriculture Panel - Agriculture and allied interests and fisheries;
- iii. Labour Panel - Labour, whether organised or unorganised;
- iv. Industrial and Commercial Panel - Industry and commerce, including banking, finance, accountancy, engineering and architecture; and
- v. Administrative Panel - Public administrative and social services, including voluntary social activities" (Seanad Éireann, 2004:22)

ordered within a total system. In the total system representation provided here, the ordering function of gender, as a category is essential because it provides a totality, a whole, within which the partial systems can then be embedded. While such representations are surely a long way from constituting rigorous theory, they do carry with them some interesting if tentative insights concerning what kinds of new institutional structures might be needed to help support gender aware MLG for sustainability.

One way forward might be to theorise different representative structures, targeted to cut across different relational structures that might be identified as particularly powerful or important for MLG for sustainability. Gender quotas, which are employed in some states, reflect one approach to representation aligned with this difference-type. Moving deeper into the MLG structures, we might also consider, for example, representation aligned with scientific knowledge, which is an important and powerful force in describing the structure of sustainability problems and solutions. I have argued elsewhere

that, "combining multi-level governance with complexity theory makes it possible to describe levels of governance based on social structures and epistemological positions (e.g. biologist, physical scientist, expert, citizen)" (Farrell, 2004:471), because in the context of systems theory local pertains more to the focus being located with a given partial system, to which one might be referring, rather than to an explicitly geographical dimension.

In considering how such representation might be operationalised, there are some promising precedents from which examples can be drawn. The Legal Aid Society of New York was founded in the 19th Century and now has peer institutions throughout the US and internationally. It relies upon legal professionals to operate a rotating pro-bono legal service for citizen's who cannot afford to purchase legal advice on the open market. Most lawyers are members of Bar Associations and are obliged under a code of professional responsibility to provide pro-bono legal services as part of their good professional conduct. While this is not a 'licensed' system but a voluntary one, legal aid service is a common practice. Clearly there would be differences between how the pro-bono provision of legal representation operates and how a proposed deliberative representation of scientific knowing might work. Nonetheless it does offer an indication that within the society of physical scientists, it may not be beyond the realm of possibility that a system could be developed, which would enable those individuals 'elected' by their peers (constituency) to be supported, encouraged or facilitated in serving as representatives.

Looking to some of the bigger picture questions requiring longer planning and foresight, we might imagine one representative process, along the lines of the Legal Aid model, oriented toward highly specific tasks and a different one for 'big sky', social purpose issues. Here we can draw inspiration from Ireland's unique upper house of commoners - Seanad Éireann. Like the UK, Ireland has a bi-cameral unitary system of governance, however, where the UK upper house is one of Lords, with hereditary seats and appointments, the Irish upper house is an elected representative house, structured around social categories. Seanad Éireann, first established in 1922, was originally quite similar in composition to the UK House of Lords, with strong representation of landed (not incidentally protestant) gentry. However, with the formal establishment of Ireland as an independent state the composition this upper house changed in ways that are particularly interesting in the context of the difference-type relationships

discussed above. When, after a period of unicameral government "[t]he new Constitution of 1937 provided for a reversion to a bicameral legislature [t]he second chamber was based, in large part, on the then popular idea, supported by Catholic social thinking, of vocational representation" (Seanad Éireann, 2004:20). This vocation representation can be understood to reflect differentiations that would fit under the sector aspect of the MLG difference-type where:

In total 43 members are elected to Seanad Éireann, from the five panels, through a selection process that makes reference to the views of the members of the Oireachtas (Ireland's lower house) and a series of registered nominating bodies including social partnership associations and graduates of Trinity College, Dublin. The temporal the Seanad, as a permanent sitting upper house makes it a suitable representative context for addressing meta-purpose questions: where is the country as a whole heading? Who do we wish to become?

8. Conclusions

The aim of this article has been to reveal some potentially useful new ideas concerning how MLG for sustainability might be organised institutionally, while integrating gender mainstreaming not as an after thought or an obligations but as one mode of difference among many. It has been demonstrated that situating gender difference in this ways creates not only increased complexity but also opportunities for increased order and coherence in the describing the relationships between different institutional structures comprising the MLG for sustainability political space. While they are surely tentative and hypothetical, two potentially innovative modes of representation have been proposed that may increase our ability to cross-reference and situate power relationships distributed across and operating within this complex political space. Based on the preceding arguments it seems that an approach that 'down plays' gender difference as merely one mode of difference among many holds potential for further development of political theory concerning the design of governance institutions capable of supporting democratically legitimate, gender aware, MLG for sustainability.

References

Arendt, H. (1970) *On Violence* Harcourt Brace & Company, London.

- Bache, I. and Flinders, M. (2004) *Multi-level Governance* Oxford University Press, Oxford.
- Brundtland, G.H. Ed. (1987) *Our Common Future: The World Commission on Environment and Development* Oxford Paperbacks, Oxford.
- Börzel, T.A. (1998) 'Organising Babylon - on the different conceptions of policy networks' *Public Administration* 76:253-273.
- Butler, J.P. (1990) *Gender trouble: feminism and the subversion of identity* Routledge, London.
- Camus, A. (1953[1951]) *The Rebel* Hamish Hamilton, London.
- Davis, A. (1982) *Women, Race & Class* The Women's Press Ltd, Namara Group, London.
- Farrell, K. N. (2004) 'Recapturing Fugitive Power: epistemology, complexity and democracy' *Local Environment* 9(5):469-479.
- Foster, J. Ed. (1997) *Valuing Nature? Ethics, economics and the environment* Routledge, London.
- Funtowicz, S.O. and Ravetz, J.R. (1997) 'The Poetry of Thermodynamics' *Futures* 29(9):791-810.
- Geyer, R. (2003) 'European Integration, the Problem of Complexity and the Revision of Theory' *Journal of Common Market Studies* 41(1):15-35.
- Giampietro, M. (2004) *Multi-scale Integrated Assessment of Agroecosystems* CRC Press, London.
- Giampietro, M. and Mayumi, K. (2001) 'Integrated assessment of sustainability trade-offs: Methodological challenges for Ecological Economics' Paper for the EC High Level Scientific Conference: Frontiers 1: Fundamental Issues of Ecological Economics organized by the ESEE, Cambridge, UK 4-7 July, 2001.
- Harding, S. Ed. (1987) *Feminism and Methodology*, Open University Press, Milton Keynes.
- Keating, M. (1988) *State and Regional Nationalism: territorial politics and the European state* Havester Wheatsheaf. London.
- Koestler, A. (1969) 'Beyond atomism and holism' in Arthur Koestler and J.R. Smythies Ed *The Alpbach Symposium 1968: Beyond Reductionism, New perspectives in the life sciences* Hutchinson & Co. Ltd. London.
- Koestler, A. and Smythies, J.R. Eds. (1969) *Beyond Reductionism: New perspectives in the life sciences (The Alpbach Symposium of 1968)* Hutchinson & Co. Ltd., London.
- Lundqvist, L.J. (2004) 'Integrating Swedish Water Resource Management: a multi-level governance trilemma' *Local Environment* 9(5):413-424.
- Machiavelli, N. (1998[c.1520]) *The Discourses* Penguin Books, London.
- Marks, G., Scharpf, F., Schmitter, P., and Streeck, W. (1996) *Governance in the European Union* Sage, London.
- Martinez-Alier, J. (2002) *The Environmentalism of the Poor*. Edward Elgar, Cheltenham.
- Mouffe, C. (1992) 'Democratic Citizenship and the Political Community' in Chantal Mouffe Ed. *Dimensions of Radical Democracy*, Verso, London.
- Mouffe, C. Ed. (1992a) *Dimensions of Radical Democracy*, Verso, London.
- O'Neill, J. (2001) "Representing people, representing nature, representing the world" *Environment and Planning C: Government and Policy*, 19:483-500.
- Ravetz, J.R. (1971) *Scientific Knowledge and its Social Problems*, Clarendon Press, Oxford.
- Røpke, I. (1999) 'Prices are not worth much' *Ecological Economics* 29:45-46.
- Seanad Éireann (2004) *Report on Seanad Reform: Seanad Éireann Committee on Procedure and Privileges, Sub-Committee on Seanad Reform*, Government Publications Office, Dublin.
- Simon, H. (1959) 'Theories of Decision-Making in Economics and Behavioural Science' *The American Economic Review* XLIX(3):253-283.
- Smith, G. (2003) *Deliberative Democracy and the Environment* Routledge, London.
- Toulmin, S. (1990) *Cosmopolis: the hidden agenda of modernity* Free Press, New York.
- von Bertalanffy, L. (1950) 'An Outline of General System Theory' *British Journal for the Philosophy of Science* 1:139-164.
- Warleigh, A. (1999) *The Committee of the Regions: Institutionalising Multi-level Governance?* Kogan Page, London.
- Warleigh, A. (2002) *Understanding European Union Institutions* Routledge, London.
- Young, I.M. (2000) *Inclusion and Democracy* Oxford University Press, Oxford.

i Concepts and arguments presented in this paper have benefited greatly from the comments from and conversations with colleagues attending the Liphe4 Scientific Society Summer School on Integrated Analysis of Sustainability Scenarios, Deutschlandsberg, Austria, 20-27 August 2004 (www.liphe4.org for information on Liphe⁴ and the 2004 Summer School.)

The arguments presented in this paper have been developed through a series of invited interventions on the FP5 Sustainability Strategy Thematic Network (TNWSS): critical commentary on post-normal science methodology, provided during the network's meeting at the Free University in Berlin, Germany, 8-10 October 2003; an intervention on gender and complexity, presented at the networks' Multi-level Governance for Sustainability Workshop, March 17-19, 2004, Technical University of Vienna, Vienna, Austria; and an intervention on integrating different perspectives, presented at the network's Sustainability Governance and Enlargement Workshop, September 17-18, 2004, Warsaw University, Faculty of Economic Sciences, Warsaw, Poland.

- 1 For a discussion of the place of types in describing partial systems and their relationships to each other see Giampietro, 2004.
- 2 Readers interested in reviews of the multi-level governance discourse may wish to consult Bache and Flinders (2004), Kohler-Koch and Eising (1999) and Marks et al (1996) and also to see the archive of papers for the conference Multi Level Governance - June 2001 University of Sheffield, UK (<http://www.shef.ac.uk/~perc/mlgc/papers/>).
- 3 See Foster (1997) for a review of the structure and history of the value pluralism discourse in political theory concerning environment and sustainability.
- 4 See Butler (1990) for an exploration of the fluidity of male/female distinctions and the social construction of sex and sexuality and Davis (1982), Harding (1987) and Mouffe (1992a) for an introduction to the western academic discourse on gender and politics.
- 5 As an author and a woman I am aware that this categorisation may seem crude and offensive to individuals who have undertaken the amazing journey of gender reassignment and to individuals whose birth anatomy might better be described through a category of both male and female. This choice of categories has been made in order to make clear an argument that encourages the honouring of difference. It is hoped that those who might take offence can appreciate that motivation.
- 6 While it could be argued that Einstein's 1905 paper on the special theory of relativity marks the beginning of this shift, the wider social and methodological implications of this line of enquiry appear primarily in the second half of the 20th century and are marked by contributions such as von Bertalanffy's (see Camus, 1951, Ravetz, 1971 and Toulmin, 1990 for a more detailed analysis of this progression).
- 7 See also Giampietro, 2004; Giampietro and Mayumi, 2001 and Funtowicz and Ravetz, 1997.

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