UNDERSTANDING SOCIAL EQUITY IN AUSTRALIAN UNIVERSITIES AS A WICKED PROBLEM

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Abstract

Improving social equity in the Australian university sector is a complex and ill-defined problem that is underwritten by the diversity of values and interests inherent in our pluralistic society. It displays all hallmarks of being a 'wicked problem' (Rittel and Webber 1973), including having resisted resolution through federal policy initiatives for more than a quarter a century. This paper utilises the theoretical framework of 'wicked problems' to identify a gap in the current understanding of social equity in Australian universities and contribute to a re-framing of the conversation about social equity. Following Krause (2012), this paper proposes improving social equity in the Australian university sector as an ill-defined and under-theorised problem associated with high stakes, national policy-making and funding and theorises problem formulation as a critical generative process in problem resolution. Using discourse analysis this paper demonstrates how the problem of improving social equity in the Australian university sector has been formulated in an increasingly reductive way in contemporary federal higher education policies, from the Dawkins era (late 1980s) to the Bradley era (current). It explains how a one-dimensional understanding of social equity as the proportional representation of specific population subgroups has precipitated a limited approach to problem formulation and resolution. Correspondingly, it shows that the concept of social equity has been diminished through reductive reformulation of key concepts such as 'access', conceived in the Dawkins era policies as a means for the achievement of a fair opportunity for success but currently understood, in Bradley era policies, to constitute the sole provision of universities that is to be fairly distributed. Finally, this paper calls for the development a more comprehensive, complex and nuanced formulation of the problem of improving social equity in the Australian university sector and suggests re-framing (Jerneck & Olsson, 2011) as a tool capable of recognizing, acknowledging and addressing the pluralism and multiplicity which underwrite the 'wicked dynamics' (Krause 2012) of the problem.

Key words: 'social equity', 'wicked problem', 'university', 'Australia'

1. Introduction

In 2009 the Australian Government announced its intention to comprehensively reform the university sector in response to the findings the *Review of Australian Higher Education* (DEEWR, 2009). The reform agenda was headlined by the proposal of 'real action for real participation- attainment, access and engagement' to transform 'access to higher education through a major package designed to radically improve the participation of students from low socio-economic (SES) backgrounds in higher education and enhance their learning experience'(DEEWR, 2009, p. 9). This proposal was underwritten by two targets: the 'ambition for growth in higher education attainment, so that by 2025, 40 per cent of all 25 to 34 year olds will hold a qualification at bachelor level or above' (DEEWR, 2009, p. 12) and the 'ambition that by 2020, 20 per cent of higher education enrolments at undergraduate level will be people from low SES backgrounds' (DEEWR, 2009, p. 13). These targets were supported by policy initiatives that promised to improve funding support and boost retention, progress and (ultimately) completion rates for low SES students (DEEWR, 2009, p. 15). Some celebrated these policies as a sign that the problem of improving social equity in the Australian university sector had been reinstated as a central policy concern. For some the policies represented '…one of those rare points where morality and economic efficiency come together in a grand way…' (Craven in Trounson, 2011). Conversely, others saw the policies as product of the 'neo-liberal imaginary' that had rearticulated the problem of social equity in universities into primarily

quantitative, market based economic terms (Rizvi & Lingard, 2011).

Some prominent Australian policy scholars voiced concern about the likely outcomes of the *Review of Australian Higher Education* (Bradley, Noonan, Nugent, & Scales, 2008) and *Transforming Australia's Higher Education System* policies (DEEWR, 2009); colloquially referred to as the Bradley policies. Shortly after their release Marginson (2011a) claimed that implementation of the Bradley policies was unlikely to change the proportion of students from low SES backgrounds that undertake university education relative to that of other students who do so. He concluded that the Bradley policies would therefore be judged a failure in terms of their impact on social equity in Australian universities. Gale (2011) concurred that the Bradley policies were unlikely to resolve the problem of social inequity in universities, citing as evidence the lack of success achieved in the past by similar policy settings. He argued that:

> Equity, understood in 1990 policy terms as proportional representation, has not benefitted
> in the past from increases in the quantity of student places. The fact that Bradley proposed
> another quantum shift was not in itself a recipe for equity (Gale 2011, p. 13) .

Rather than engaging in debates over the likely success or failure of the Bradley policies this paper argues that the problem of social equity in Australian universities is a 'wicked problem' (Rittel & Webber, 1973) that is inadequately formulated in the Bradley policies. This paper employs wicked problem concept as both an explanatory and a heuristic device. Following Krause (2012) it utilises the wicked problem concept to theorise this ill-defined, high-stakes problem and explore its 'wicked dynamics' (p. 286).

This paper uses discourse analysis to demonstrate how the problem of improving social equity in the Australian university sector has been formulated in an increasingly reductive way in contemporary federal higher education policies, from the Dawkins era (late 1980s) to the Bradley era (current). It illuminates the critical relationship between problem formulation and problem resolution in which the 'process of formulating the problem and conceiving a solution (or re-solution) are identical' (Rittel & Webber, 1973, p. 161) and thereby exposes how a one-dimensional understanding of social equity, as the proportional representation of specific population subgroups, has precipitated a limited approach to problem formulation and resolution that has underwritten policy failure. Finally, this paper calls for the development a more comprehensive, complex and nuanced formulation of the problem of improving social equity in the Australian university sector and suggests *re-framing* (Jerneck & Olsson, 2011) as a tool capable of recognising, acknowledging and addressing the pluralism and multiplicity that underwrite the problem's 'wicked dynamics'.

2. The wicked problem concept

In their now classic work, *Dilemmas in a General Theory of Planning,* Rittel and Webber (1973, p. 155) argued for the recognition of a category of social problems that are 'inherently different' (Rittel & Webber, 1973, p. 160) from the traditional 'tame' problems addressed in the natural sciences and that they named 'wicked problems'. The adjective wicked refers to the difficult and contentious nature of the problems and is not intended to infer moral judgment. As Rittel and Webber eloquently explain:

> ……we are calling them "wicked" not because these properties are themselves ethically
> deplorable. We use the term "wicked" in a meaning akin to that of 'malignant (in contrast
> to "benign") or "vicious" (like a circle) or "tricky" (like a leprechaun) or aggressive' (like
> lion, in contrast to the docility of a lamb) (1973, p. 160).

Wicked problems are ill-defined, complex problems that are underwritten by the diversity of values and interests inherent in our pluralistic society. The problems addressed in social policy are increasingly being recognised as wicked problems because they are situated within the dynamic, complex multifaceted functioning systems that constitute the social domain and are as a result inherently complicated and ill-defined. Further, social problems are frequently difficult to define and predict because they are embedded within webs of related social problems for which no system or

theory capable of analysing all of the data-points, variables and internal interdependencies embodied within them exists (Norton, 2012). Crucially, wicked problems also incorporate a plethora of issues that arise due to the diversity of values and interests held by individuals and groups within pluralistic societies (Rittel & Webber, 1973). Norton convincingly argues that the properties which distinguish wicked problems from tame problems can all be understood as arising from 'expressions of diverse and conflicting *values and interests*' (Norton, 2012, p. 450). Correspondingly, the Australian Public Service Commission reports that the erosion of previously existent boundaries that limited the movement of people, knowledge, trade and capital has increased diversity within society and that this has been a paralleled by increased identification of wicked problems (2007).

Another important feature of wicked problems is that they are impervious to traditional problem solving strategies that are based on rational-technical approaches (Rittel & Webber, 1973). The Australian Public Service Commission describes rational-technical approaches follows:

> The process would usually start by understanding and defining the problem. This involves gathering and analysing data and other evidence and consulting with stakeholders. Once the problem is specified, and the evidence and stakeholder views are analysed, options and a preferred option can be determined. Outcomes and outputs are identified, implementation plans are designed and performance targets specified. It is often thought that the more complex the problem is, the more important it is to follow this orderly flow (2007, p. 11).

Rational-technical approaches are widely understood as inadequate for addressing wicked problems and are cited as a primary contributor to policy failure. Common practices such as 'locking down the problem definition' (Australian Public Service Commission, 2007, p. 19) or 'carving off a piece of the problem' (Churchman, 1967, pp. B-141) so as to make a wicked problem appear tame are viewed as particularly problematic. These practices make the problem formulation and its supporting rationale appear objective and value-free however they ultimately prove unsatisfactory because contestation continues and the problem inevitably resurfaces.

Wicked problems have been identified in many fields including software development and design (Shum, 2003), cybernetics (Conklin 2006), political science (Fisher, 1993; Harmon & Mayer, 1986; Roberts, 2000) public health (Blackman et al., 2010) urban and regional planning (Innes & Booher, 1999) and natural resource management (Allen & Gould, 1986; Freeman, 2000; Levin, Cashore, Bernstein, & Auld, 2007). Practitioners and researchers in higher education have been slower to identify wicked problems (Bore & Wright, 2009), however, a recent spate of publications indicates that this may be changing (Krause, 2012; Southgate, Reynolds, & Howley, 2013; Trowler, 2012). The appeal of the wicked problem concept is two fold: it offers a powerful explanatory theory for the intractability and policy failure that characterises many modern social problems and it provides a number of critical insights upon which robust and rigorous theory can be constructed.

3. The problem of social equity in Australian universities as a wicked problem

The problem of social equity in Australian universities demonstrates the hallmarks of a wicked problem. It is an ill-defined, complex, uncertain and pervasive social problem that is underscored by divergent, contested and often conflicting values and interests. Furthermore, it has remained impervious to all attempts to resolve it through rational-technical problem solving practices.

The problem of improving social equity in universities is situated within complex webs of other issues related to the nature and purpose of a university education and the nature and purpose of social equity. Each of these webs is also complex therefore any attempt to understand the problem of social equity in universities by seeking to identify the problematic elements and their causality, or it redress it by formulating a resolution and predicting the outcomes of that resolution will involve a great deal of unravelling. Unfortunately, the extent and quantity of the complexity tends to mean that unravelling generates knottiness rather than clarity. For example, a university education is both public good and a private good (Marginson, 2011b). A public good because society derives social (improved social

cohesion) and economic (increased national productivity) benefits from an educated citizenry. A private good because the educated individual derives also derives social (status and social mobility) and economic (increased earning potential). In regard to the achievement of social equity understanding a university education as a public good implies that the role of the government is to ensure that attainment is fairly and freely distributed amongst the citizenry. Conversely, understanding a university education as a private good implies that the role of government is to ensure only that opportunity is fairly distributed while the onus of choosing and pursuing it is placed on individual citizens. Each of these understandings subsequently implies multiple potential access and funding arrangements and divergent outcomes regarding the aims and expectations of social equity policy. In each case what social equity would *look like* and *need to achieve* would be different.

The problem of social equity in universities is also pervasive and has constituted an enduring topic of debate within research and policy in most developed countries since the end of the Second World War. The magnitude and intractability of the problem is clearly documented within a vast body of literature both in Australia and internationally. It has been repeatedly identified and studied in many developed countries including United Kingdom (UK), the United States of America (USA), countries in Western and Eastern Europe and within East Asia (Shavit, Arum, & Gamoran, 2007; Shavit & Blossfeld, 1993) for more than fifty years. In Australia the problem of social equity in universities has remained unresolved despite more than quarter of a century of redress through federal policy. By the government's chosen measure, the proportional representation of population subgroups that have been historically under-represented within the university system, little has been achieved (Bradley et al., 2008; James, Blexley, & Maxwell, 2008; James & McInnis, 2007). The proportional representation of historically underrepresented groups, particularly people from low SES backgrounds, has not significantly altered in since the late 1980s when data collection began. People from low SES backgrounds have constituted 25 per cent of the Australian population but have consistently accessed only 15-16 per cent of domestic student places within the Australian university system (James et al., 2008). Further, people from low SES backgrounds have been profoundly under-represented in professional fields of study, post-graduate programs and universities where entry criteria are more competitive (James et al., 2008).

Divergent, contested and often conflicting values and interests underscore the problem of social equity in Australian universities. Despite being identified consistently as a policy problem what constitutes social equity in Australian universities and the reasons that it should be pursued have remained ill-defined (Rizvi & Lingard, 2011). The overarching objective of equity to ensure that Australians from all groups in society have the opportunity to participate in higher education and its achievement by ensuring that the proportional representation of population sub-groups within the student population reflects that of the wider population has enjoyed wide acceptance. However, within this broad conceptualisation many critical definitions, such as the meaning of access, participation and attainment, remain contested (Gale 2006). Further, multiple rationales for pursuing social equity, ranging from moral, social and political imperatives to the requirements of efficiency and the economy (Rizvi & Lingard, 2011) have continued to jockey for precedence. Rizvi and Lingard (2011, p. 6) have previously identified this ongoing contestation and suggest that further exploration is necessary:

> In policy debates, social equity has (thus) been a highly contested concept, interpreted in a variety of ways. It has also been clear that it is impossible to define social equity in its own terms, in some generalised abstract manner. Important to consider are the specific ways in which the notion of social equity is performed in public policy – how it is linked to other values equally significant in education policy and to a broader set of conditions in which its meaning and significance are articulated.

An exploration of the ways in which social equity has been defined in the Bradley policies is undertaken in section five of this paper. Meanwhile, it is important to understand the ways in which values and interests shape problem formulation and therefore policy development.

4. The nature and importance of problem formulation and resolution

Perhaps the most profound insight offered by the wicked problems concept is that problem formulation is the central to understanding and resolving them. In Rittel and Webber's (1973, p. 161) own words: the 'formulation of a wicked problem *is* the problem!'. Foundational to this insight is the understanding that problem formulation is a constructive process.
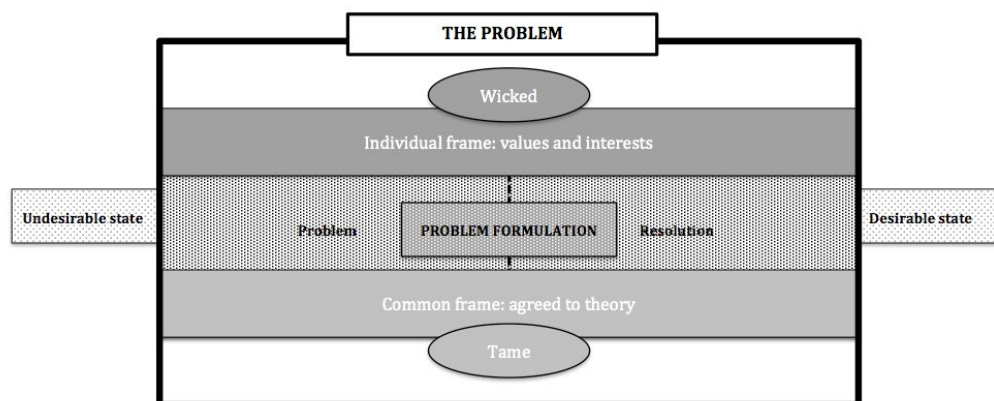

Figure. 1. Differences in the formulation of tame and wicked problems

A problem can be understood as the entity that exists between an undesired current state and a desired end state (figure 1.). For tame problems this entity is constructed within a framework of agreed theory that is held in common. The formulation of the problem is therefore accepted as definitive and objective. Recourse to agreed theory underwrites a mutual formulation of the problem and constrains the influence of perception, values and interests on the construction process. In short, a tame problem can be definitively formulated because observers agree about what constitutes the undesirable state and its causality. Contrariwise, a wicked problem cannot be definitively or impartially formulated because it exists in a domain in which agreed theory is limited. Therefore, each individual or group must construct meaning based on individual frameworks that are infused with specific values and interests. The end result is the existence of multiple and divergent formulations that describe what constitute the problem and its causality. Further, each formulation will be inescapably subjective and therefore open to being contested.

The constructive process of problem formulation permits divergence a multiple points. Firstly individuals and groups may differentially observe the conditions of the undesirable state. They may see different aspects of the state as undesirable. Secondly where they see the same aspects as undesirable they may use different vocabulary to describe them. Thirdly, even where they see the same aspects as undesirable and use the same vocabulary to describe them individuals may ascribe differential meanings to both (Norton, 2012). This creates a complicated situation in which individuals may not only disagree about what constitutes the problem and its causality but also use identical words and phrases to represent dissimilar understandings and concepts. In this way the constructive process of problem formulation creates and perpetuates the wicked dynamics common to wicked problems (Australian Public Service Commission, 2007; Krause, 2012).

The subjective and divergent nature of the formulation of wicked problems gains added importance in light of the assertion that problem formulation and problem resolution exist in a concomitant relationship. Rittel and Webber (1973) argued that problem resolution and problem formulation occurred simultaneously, because they are in effect two sides of the same coin.

> The process of formulating the problem and conceiving a solution (or re-solution) are identical, since every specification of the problem is a specification of the direction in which the treatment is considered (Rittel & Webber, 1973, p. 161).

This understanding suggests that a shift in the focus of policy development away from seeking

problem solutions and towards better understanding of problem formulations may be fruitful. Bacchi (1999, 2000, 2009) provides support for such a shift through the development of her 'What's the problem represented to be?' approach to policy analysis. Bacchi's approach assumes that the way a problem is formulated presupposes what *can* and *should* be done to resolve it (italics added). Further, Bacchi (1999, 2009) argues that each policy represents an attempt to address a specific problem formulation and in this way positions the analysis of problem formulation as a vital part of policy analysis.

The understanding that problem formulation is central to problem resolution and policy analysis has received scant attention from policy developers and scholars. Instead the idea that problems exist as preformed, discoverable entities that arise as a consequence of specific conditions has prevailed and permitted the use of traditional rational-technical problem solving approaches that proceed from an initial step of problem definition. The wicked problems concept poses a clear challenge to this prevailing idea and the use of traditional rational-technical problem solving approaches. The existence of multiple competing problem formulations has generated three alternative outcomes to date. Some policy developers acknowledge the existence of multiple problem formulations and accept that the traditional problem solving-process cannot be used to work with wicked problems. Some disregard for the existence of multiple problem formulations and valorise a single formulation as if it were definitive. Some dissect of the problem into sub-problems and subsequently acknowledge only a single sub-problem that can be definitively formulated. The first alternative is unpopular because it forces recognition of an analytic void. The second and third alternatives are more commonly applied and are seen as 'taming' a wicked problem. Unfortunately, while appearing as viable alternative, taming a wicked problem is not without serious consequences.

Taming results in a diminished formulation of the wicked problem. The need to achieve a widely accepted formulation of the problem drives a reductive process in which contentious or complex elements of the undesirable state progressively ignored, simplified or polarised (Schon & Rein, 1994). Elements that were originally, nuanced, complex or divergent, come to be seen in increasingly simple and definitive terms. The resultant problem formulation is inevitably overly simplified and frequently articulated in terms of single normative dualism (Schon, 1979). Taming leads to the development of overly simplified, normative problem formulations in policy. These formulations tend to errantly precipitate resolutions that appear obvious and uncomplicated (Schon, 1979).

Not surprisingly, taming a wicked problem is widely considered to be unwise and even dangerous. Churchman (1967) issued the chilling admonition that taming a wicked problem is as foolhardy and immoral as training a vicious dog not to growl. He noted that just as the dog will continue to bite, but without the forewarning of a growl, so too the wicked problem despite its invisibility will remain unresolved and inevitably resurface. Besides being dangerous taming a wicked problem is obstructive and unproductive. Taming generates 'misunderstanding' of both the problem and the resolutions it may be possible to develop. (Bore & Wright, 2009, p. 245). Further, when simplified formulations precipitate obvious solutions the opportunity for thoughtful analysis of the values and interests that are in conflict is eliminated. This means that critical exploration into how divergent values arise and are protected is denied and meaningful redress of the wicked problem is confounded.

5. The formulation of the social equity problem in policy

The problem of social equity in Australian universities is a wicked problem that has been tamed in government policy. The most prominent indicator of taming is that the problem has consistently been formulated in policy as an obvious and uncomplicated normative dualism: exclusion-inclusion. Since the 1980s Australian policy makers have identified certain population sub groups as the 'targets' of social equity policy. The social equity problem has been formulated as the exclusion of the sub-group(s) and the resolution has been identified as the inclusion of the sub-group(s). From late 1980s, when the national equity framework was established, six population subgroups were identified as policy targets within the university system: people from low SES backgrounds, people with disabilities, people from non-English speaking backgrounds, people from remote or isolated areas,

Indigenous people, and women wanting to study in male dominated fields (DEET, 1987). During this period the problem was formulated as one of exclusion resulting from 'disadvantage' and the solution was to reform the system so as to increase the opportunity for 'disadvantaged' people to participate successfully in universities by 'changing the balance of the student population to reflect more closely the composition of society as a whole' (DEET & NBEET, 1990, p. 2). Since 2008 the Bradley policies have identified only three population subgroups as policy targets within the university system: people from low SES backgrounds, and to lesser degree, Indigenous people and people from regional and remote areas (Bradley et al., 2008; DEEWR, 2009). The reduction in the number of targeted population subgroups was rationalised through an argument that simultaneously claimed low SES backgrounds as common to the majority of people with disabilities, people from non-English speaking backgrounds, people from remote or isolated areas and Indigenous people and endorsed the idea of addressing need based on functional rather than demographic categories (Bradley et al., 2008). In the Bradley policies the problem has continued to be formulated as exclusion resulting from 'disadvantage', particularly socioeconomic disadvantage that has lead to insufficient educational attainment, little aspiration and the need for financial assistance. Accordingly, the solution is to reform the system so as to grow higher education attainment and ensure that 'by 2025, 40 per cent of all 25 to 34 year olds will hold a qualification at bachelor level or above' (DEEWR, 2009, p. 12) and the 'that by 2020, 20 per cent of higher education enrolments at undergraduate level will be people from low SES backgrounds' (DEEWR, 2009, p. 13).

A second indicator that problem of social equity in Australian universities is a wicked problem that has been tamed in government policy is that formulation of the problem undergone a reductive process. The problem was first explicitly articulated in policy in *A Fair Chance for All* (DEET & NBEET, 1990). In this policy social equity was understood as both a fair chance to participate and a fair chance to succeed. Policy articulated its intention to 'ensure that Australians from all groups in society have the opportunity to participate successfully in higher education' (DEET & NBEET, 1990). The problem was formulated as a lack of opportunities for access and opportunities for success. Furthermore, the relative positioning of these two elements implied that the fair distribution of access was seen as a *means by which* the fair distribution of opportunities for success was to be achieved. In contrast, the Bradley policies articulate a reduced formulation of the problem. In agreement with previous policies the Bradley policies identified that:

> Australia has not provided equal access to all groups from society. People from lower socio-economic backgrounds, those from regional and remote Australia as well as Indigenous Australians are under-represented in higher education compare to their incidence in the general population. (Bradley et al., 2008, p. 27).

They accordingly identified a need:

> to re-establish sector-wide targets for participation of the groups which are still under-represented as was done originally in *A Fair Chance for All* (DEET & NBEET, 1990)"
> (Bradley et al., 2008, p. 44).

Based on this need they articulated parallel aims:

> That by 2025, 40 per cent of all 25 to 34 year olds will hold a qualification at bachelor level or above' (DEEWR, 2009, p. 12)
> That by 2020, 20 per cent of higher education enrolments at the undergraduate level will be people from low (SES) backgrounds (DEEWR, 2009, p. 13).

These statements formulate the problem as a lack of opportunities for access. Despite rhetoric within the policies about 'real action for real participation- *attainment*, access and *engagement*' and the intention to 'radically improve the *participation* of students from low socio economic (low SES) backgrounds in higher education and *enhance their learning experience*' (DEEWR, 2009, p. 9) (italics added), the core aims of the policies are silent with regard to the distribution of opportunities for success or other outcomes derived from participation. In the Bradley policies' the problem has been

formulated only in terms of access to enrolment. Therefore, rather than providing a *means for* the achievement of a fair opportunity for success, access has come to *constitute* the sole problem that needs to be resolved.

As discussed in section four, the principal driver of taming is contestation between diverse of values and interests. After a problem has been formulated in a tame way in policy it can be difficult to identify the contestation or even the underlying diversity of values and interests. This is in part because the process of taming makes the problem appear as obvious, uncomplicated and normative. However, taming frequently leaves residual traces of contestation that can be identified within a policy's 'assemblage of a diverse body of ideas, values, historical settlements and a particular understanding of the current conditions and political possibilities' (Rizvi & Lingard, 2011, p. 8). Such traces can be found in the Bradley policies. At the macro level the Bradley policies have been constructed according to the ideology of human capital theory. This construction values higher education for its ability to 'fuel(s) economic development, productivity and high skilled jobs and support(s) Australia's role as a middle power in the region' (DEEWR, 2009, p. 5). Its interest is in producing graduates as resource that is 'needed by an economy based on knowledge' (DEEWR, 2009, p. 5). Substantial evidence of conflicting values and interests can be found, albeit less cohesively arranged, through out the policy. For example, drawing on social democratic notions the policy claims to put 'students clearly at the centre of its reforms' and acknowledges that the 'nation must provide educational opportunity for all, not just a the few' (DEEWR, 2009, p. 5)

Beyond its frequent incongruent assemblages of ideas, values and interests the most telling evidence of underlying tensions between divergent values and interests is evidenced in Bradley policies' focus on aspiration building amongst students from low SES backgrounds. This focus highlights a significant difference between the values and interests of people from low SES backgrounds and those of the government. Within the Bradley policies people from low SES backgrounds are seen as having 'low' aspirations if they do not plan to access higher education. Further, the policies formulate 'low' aspiration as a problem to be addressed through raising the 'targets' groups' 'awareness of the long-term benefits of higher education' (Bradley et al., 2008, p. 27). Seeing the desire to access higher education as a higher aspiration than its alternatives reflects a value judgement predicated on the understanding of what constitutes success and the 'good life' (Sellar, 2010). That the government constructs this difference as a problem attests to underlying contestation between the divergent values and interests of the government and people from low SES backgrounds.

6. The role of framing and re-framing in problem formulation

Analysing how problems are formulated is important because it permits us to uncover the narratives that individuals and groups use construct their understandings of the problem. Within these narratives it is possible to identify the values, interests and other conceptions that underwrite the individual construction processes. In turn, identifying and acknowledging the diverse values and interests that underwrite specific problem formulations unlocks new ways to discuss, understand and potentially accommodate a diversity of values in policy.

Frame theory posits that the conceptions and systems of conceptions that individuals and groups use to bring structure and meaning to observed states constitute cognitive frames (Jerneck & Olsson, 2011). Cognitive frames are organisational structures that allow people to order and systematically ascribe meaning to their experiences and observations (Goffman, 1974). Moreover, frames are conceptual scaffolds that shape and support the constructive processes of cognition, such as thought and language (Lakoff Jerneck & Olsson, 2011). Frames therefore are the apparatuses through which people construct and communicate their meaning and also understand and make meaning from the communications of others. Frames are of critical importance to problem formulation because they support and constrain cognition in ways that boundary and filter all aspects of understanding and communication. Beyond shaping how individuals or groups formulate problems frames constrain what each individual or group is able to see and understand. Frames function to both inform and occlude thinking and communication.

Understanding the role of frames in the process of problem formulation is fruitful because it presupposes the reciprocal understanding that it is possible to change the way a problem is formulated by changing the frame used to observe the undesirable state. Just as a photographer can construct alternative images by re-framing a scene, so it is possible to construct alternative problem formulations by re-framing our observations of an undesired state. This realisation suggests a potentially fruitful way to focus on problem formulation and in doing so begin to address the wicked problem of how to improve social equity in Australian universities. It is worth noting at this point that the fundamental purpose of re-framing is to foreground multiple formulations of the problem so as to identify and acknowledge the fullest range of values and interests possible. In the first instance there is no attempt to assess the relative value or merit of any particular framing. It is only after the constructions of all stakeholders have been explored that the relative value and usefulness of the specific problem formulations should be assessed. I envisage that stakeholders would jointly construct the criteria for such an assessment, however a detailed description of this process is beyond the remit of this paper.

Deliberately reframing the problem of social equity in Australian universities will create a space in which all those who understand the current state as undesirable can mindfully and purposefully explore alternative systems and structures of concepts, language and cognitions (Jerneck & Olsson, 2011, p. 258). Gale and colleagues (Gale & Densmore, 2000; Gale & Tranter, 2011) have previously suggested recognitive justice based on the notion of *epistemological equity* (see Sefa Dei, 2008) as an alternative frame for understanding the problem. This frame assumes that everyone has an equal right to participate and contribute within a democratic society, because all ways of knowing are accepted as valuable and integral. In a similar vein Marginson (2009, 2011a) has suggested a capability-based justice building on Sen (2009). This frame is based on the core claim that all people are equally entitled to achieve well-being, where well-being is understood in terms of what the individual values and aspires to. The application of these, and other frames, will facilitate construction of problem formulations that previously been discounted, or rendered invisible, as a result of previous problem formulations being tamed. In this way multiple, diverse problem formulations may be advanced and developed.

The approach being suggested here is reflective of that suggested by Bore and Wright (2009) in which multiplicity and pluralism are accepted and harnessed so that the undesirable state is observed through a lens that is more akin to a compound eye than a magnifying glass. Instead of seeking to tame the problem by viewing it through a single lens the compound eye allows information from each lens to be integrated into the construction of a more complex and comprehensive problem formulation: a formulation that will inevitably precipitate more productive policy solutions.

7. Conclusion

To break the cycle of chronic policy failure associated with the problem of improving social equity in Australian universities it is necessary to shift the focus of policy development away from problem solving and towards better problem formulation. Formulating the problem in a more comprehensive, complex and nuanced way will naturally precipitate more productive resolutions. The first step of this progression is to acknowledge the inadequacy of the current problem formulation. The problem of social equity in Australian universities is a wicked problem that has been tamed within policy. This process has resulted in an impoverished problem formulation that represents the problem in dualistic terms as a problem of inclusion and exclusion. The second step is to undertake the task of re-framing the way the problem is observed. Re-framing offers a generative space filled with discourse in which all assumptions can be challenged and alternative values and interests are voiced and investigated. By honouring the pluralistic nature of this wicked problem it may be possible to construct a formulation of the problem that is sufficiently complex and comprehensive that it precipitates a productive policy solution.

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