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3 **Making scenario interventions matter: exploring issues of power and**  
4 **rationality**  
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10 Running head: Making scenario interventions matter  
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## Making scenario interventions matter: exploring issues of power and rationality

### Abstract:

In this article, we consider prospects for long-term impact from scenario projects, specifically for sustained positive change. We outline scenario methods intended to actively engage scenario development team members who will be directly impacted by the ‘focal issue’ of the scenario exercise, in particular those who are remote and by and large excluded from the central decision making processes of the powerful. We consider possibilities for building capacity for them to envisage and enact alternative futures for themselves and their communities. However, we see a need to consider how current powerful actors might respond to the wishes and actions of less powerful stakeholders, positing that the potential for action by these less powerful groups may be disrupted by the rationality of the more powerful, where any intended action is against the latter’s interests. We argue that understanding and appreciating issues of power and rationality are central to how such participatory approaches might elicit coordinated and articulated action in response to positive scenarios. We discuss this issue by reference to contemporary interpretations of Aristotelian *phronēsis*, or ‘practical wisdom’. We outline steps involved in enacting an augmented scenario model that responds to this critique.

**Keywords:** scenario, power, rationality, agency, stakeholder, *phronēsis*

### 1. Introduction

In this article, we consider developments in scenario methods that are intended to actively engage those stakeholders who are directly involved with and, specifically, affected by the ‘focal issue of concern’ (Cairns & Wright, 2018) of the scenario exercise, but who are by and large remote and excluded from the decision-making arena. Scenario methods have proved popular in the field of strategic planning over decades – variously, engaging senior decision makers in large organizations (e.g. Gershman, Bredikhin & Vishnevskiy, 2016; Schoemaker & van der Heijden, 1992), governments (e.g. Rickards, Wiseman, Edwards & Biggs, 2014; Venable, Ma, Ginter & Duncan, 1993), and multi-organizational collaborations (e.g. Cairns, Wright, Fairbrother & Phillips, 2017; Kahane, 1998a, 2012).

From examples of high-profile scenario projects, the positive benefits for the Royal Dutch Shell group are much cited (e.g. Cornelius, Van de Putte, & Romani, 2005; Schoemaker & van der Heijden, 1992) and the model has retained its currency (e.g. Jefferson, 2012), while the Mont Fleur scenarios for a post-apartheid South Africa are widely reported (e.g. Kahane, 1998b; Van Der Heijden, 2000). In relation to the former, the company continues to ride high in the field of oil and gas (cf. Poole, 2018) and to use scenarios in its strategic planning (Shell Global, undated). However, in relation to the latter example, we would question the long-term benefits for the population at large in South Africa, as evidenced by the nation’s declining position in Transparency International’s corruption perceptions index (Conway-Smith, 2014) and its slide to 105<sup>th</sup> of 156 nations in the UN’s *World Happiness Report* – behind Somalia, Pakistan and China (de Villers, 2018).

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4 In terms of taking account of more remote stakeholder groups, there has been growing  
5 interest in the use of scenario methods as forms of ‘participative engagement’ (Bourgeois,  
6 Penunia, Bisht and Boruk, 2017; Oteros-Rozas, Martín-López, Daw, Bohensky, Butler, Hill,  
7 Martin-Ortega, Quinlan, Ravera, Ruiz-Mallén & Thyresson, 2015). We read participative  
8 engagement to be a process of active development of scenarios *with* the community that  
9 ‘owns’ the focal issue. To work truly with a community involves acknowledging their  
10 expertise, experience, beliefs, values and priorities and their notions of what is good and  
11 desirable. However, as we will discuss, this is not necessarily to prioritise these over others,  
12 nor is it to condone moral relativism where all ideas are considered equal. Rather, it is to  
13 ensure first and foremost that external expertise is considered in tandem with local,  
14 contextual knowledge of the affected community, not simply applied for them and certainly  
15 not ‘done to them’.

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19 Bourgeois et al. (2017) present case study examples of participative engagement, based  
20 on their work with “local actors at grassroots level” (p.178) in farming communities in India,  
21 Indonesia and the Philippines. They outline three programs that demonstrate a process of  
22 local engagement with the involved actors, using an action research (Ramos, 2006;  
23 Stevenson, 2006) approach. However, while local actions were noted as having been  
24 implemented in response to the exercises, the article states that, “it is too early for a thorough  
25 assessment of evidence of these local organizations as key players in a societal change shaped  
26 by the understanding of future challenges” (p. 185). In critically appraising examples of  
27 participative engagement, Oteros-Rozas et al. (2015, Appendix 9) revisited and analysed 23  
28 projects conducted between 2003 and 2014. They found evidence of long-term impacts  
29 beyond one year after completion in only two of these. Whatever the evidence of impact,  
30 these examples provide reports of real-world engagement and conversion of method to  
31 action.

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36 The approach termed ‘critical scenario method’ (CSM) (Cairns, Śliwa & Wright, 2010;  
37 Wright & Cairns, 2011) is designed to require consideration of the impacts of each of a set of  
38 scenarios on the ‘broad’ (Freeman & Reed, 1983) stakeholder constituency. However, CSM  
39 remains conceptual in nature, with no empirical evidence of its efficacy in practice. As such,  
40 while remote stakeholders’ potential interests and impacts of action on them are addressed,  
41 they are usually treated as subjects of research, not necessarily as active participants in the  
42 process.

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46 Developing consideration of the effectiveness of scenario methods as means of engaging  
47 multiple stakeholder groups, with diverse values and interests, we posit that it is essential to  
48 take account of issues of power, politics and the rationality of different arguments. We live in  
49 an era that is pervaded by reference to ‘alternative facts’ (e.g. Swaine, 2017) and ‘post-truth’  
50 politics (e.g. Montgomery, 2017; Suiter, 2016), where a prominent lawyer and U.S.  
51 Presidential advisor can claim that, “truth isn’t truth” (BBC News, 2018). As we will argue,  
52 failure to consider the potential of such alternative rationalities and truths and the likely  
53 actions, linked to particular viewpoints, by powerful stakeholders risks the failure of any  
54 scenario project.

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57 Based on extant examples, we cannot state that scenario interventions have *not* produced  
58 long-term, sustainable benefits for broad society and the environment, but find limited  
59 confirmation that they *have*. Such success, or lack thereof, would require retrospective review  
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3 of a broad sample of projects a decade or more beyond their completion. However, since  
4 scenarios are widely used as a strategic analytic tool in the practice arena, we seek to  
5 maximise the potential for future projects to promote sustained and positive change. In  
6 developing our model for such potential, we draw on Aristotle's philosophy and his  
7 'intellectual virtue' of *phronēsis* – thinking to inform action for the greater good – and on  
8 contemporary social science interpretation by Flyvbjerg (1998, 2001, 2003). While Aristotle  
9 establishes the philosophical foundations for consideration of what is 'good' and for whom,  
10 Flyvbjerg introduces issues of power and human rationality to critical discussion of how  
11 phronetic thinking might be enacted, or foiled.  
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15 From our deliberations, we develop six premises to underpin a conceptual model that we  
16 outline to support deep and ongoing engagement towards long-term impact for broad 'good'.  
17 We term our conceptual model 'Power-Rationality Scenario Analysis' (PRSA)  
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## 20 21 **2. Philosophical foundations for an enhanced scenario approach**

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23 Our intent here is to support the mode of action research-based scenario engagement, while  
24 expanding the process to embed critical inquiry into issues of power and interest, agency and  
25 rationality. Specifically, we seek to promote critical assessment of the range of potential  
26 responses to proposed local actions by involved stakeholders from those external to the  
27 context, but who have power over how these actions might be resolved. These parties may act  
28 positively (*from the perspective of the 'local actors'*) or, more critically, negatively, to protect  
29 their own interests through reaffirmation of the status quo. Additionally, they may be overtly  
30 supportive of the local agenda in public, while working against it covertly within their own  
31 domain of power and influence.  
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35 From our discussion, we hope to enable committed scenario practitioners who aim for  
36 long-term beneficial impacts from their projects to be better prepared to engage with both the  
37 local and affected stakeholders and those at a higher level of authority and decision-making.  
38 Here, we must stress that resolution of any issue in terms of what is 'good' is not based on  
39 moral relativism, whereby all values are considered equal, but on deep thinking on the merits,  
40 or otherwise, of competing values and rationalities to establish a position of 'greater good'  
41 for the directly affected community of stakeholders. As such, in terms of the argumentation  
42 above, the proposed resolution of the focal issue may not be in terms considered 'good' by  
43 other sets of actors.  
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47 In developing our own line of discussion, drawing on the philosophy of Aristotle, we  
48 first outline his three 'intellectual virtues' that are specifically concerned with the nature of  
49 human knowledge. While the terms are common to other Greek philosophers, with some  
50 nuances in their definitions, we work with Aristotle's versions throughout. First, there is  
51 *epistēmē*, or scientific knowledge that is universal and demonstrable. Such knowledge is  
52 context-free and unchanging across time and space. A basic example would be  $2+2=4$ .  
53 Second, we have *technē*, or knowledge of production of a final object. Here, an example  
54 would be the knowledge of the cabinet maker or the cordon bleu chef, both of whom apply  
55 specialist knowledge in order to produce something tangible. Both *epistēmē* and *technē* have  
56 derivatives in contemporary language, in epistemology and technology and related terms.  
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4 In contrast to both *epistēmē* and *technē*, the third of Aristotle's knowledge virtues,  
5 *phronesis*, has no such legacy in modern languages. It is generally referred to in  
6 contemporary translation as 'prudence' (Aristotle, 1976/2004) or 'practical wisdom' (e.g.  
7 Dowie, 2000; Smith, 1999), neither of which to our minds captures the fundamental essence  
8 of the original. Aristotle (p. 150) refers to *phronēsis* as, "a true state, reasoned and capable of  
9 action in the sphere of human goods". "It is concerned with acts that are just and admirable  
10 and good for man (sic)" (p. 162). Hence, *phronēsis* is differentiated from *epistēmē*, in that it  
11 is not general and abstract, but is contextual and directed at action for the good of humanity.  
12 Also, it differs from *technē* in that it has no tangible output in terms of product.

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14 Here, we must further clarify that adopting an Aristotelian notion of good sits in contrast  
15 to the Platonic idea of a knowable, singular universal 'good' that can be unearthed through  
16 philosophical contemplation. Rather, for Aristotle, what is good is a contextual matter,  
17 subject to diverse interpretations that must be addressed through debate and dialectical  
18 inquiry. Our own thinking on the nature of phronetic inquiry and debate on the goodness, or  
19 otherwise, of different potential futures draws on Flyvbjerg's (2001) principles for 'making  
20 social science matter'. Flyvbjerg's consideration of this issue draws inspiration from his  
21 earlier study (Flyvbjerg, 1998) in which he undertook a retrospective analysis of a town  
22 planning program in Denmark. In this, he identified the paradoxical nature of arguments for  
23 and against particular proposals, presented as rational and coherent while the narratives of  
24 action were characterised by power, and post hoc rationalization presented as rationality. We  
25 consider that both Flyvbjerg's explication of Aristotle in the 21<sup>st</sup> century and his approach to  
26 analysis of long-term project impacts are of value in considering a further augmentation of  
27 scenario method that seeks to foster advancement of 'good' outcomes while requiring long-  
28 term reflection on whether or not this is being achieved.

29  
30 Flyvbjerg's (1998) longitudinal study of the planning process involved a narratological  
31 analysis of records and recollections from over almost two decades of the project. In using  
32 narratives – a form not unfamiliar to the scenario thinker – he acknowledges that narratives  
33 "not only give form to our past experience, they also help us envisage alternative futures" (p.  
34 8). He again refers to futures narratives in his later work on phronetic social science, stating  
35 that they can help us to "anticipate situations even before we encounter them, allowing us to  
36 envisage alternative futures" (Flyvberg, 2001, p. 137). However, futures are not an area that  
37 he develops beyond these statements, while his work was fundamental to the development  
38 and theorizing of the CSM approach (Cairns et al., 2011).

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40 Consideration of the nature and intent of *phronēsis* and its potential in the field of  
41 scenario analysis leads us to outline our first premise underpinning the practical application  
42 of the PRSA approach to scenario development and use, namely:

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44 *Premise 1: PRSA is grounded in phronetic social inquiry*

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46 The specific aim of the PRSA model is to provide a framework for structured research, analysis and critical  
47 thinking on the 'focal issue', to inform action that is directed at achieving a 'greater good' for the directly  
48 affected stakeholder community.

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50 While this premise sets out a broad philosophical foundation, it raises further questions  
51 regarding the nature of 'good', specifically whose definition of good should prevail, and  
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3 whether one good should be permitted to diminish or nullify another. We discuss this and  
4 other issues below.  
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### 7 **3. Considering issues of power and rationality in scenario analysis**

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10 Issues of power have been discussed in relation to scenario methods, specifically in the  
11 augmented intuitive logics method titled ‘critical scenario method’ (CSM) (Cairns et al.,  
12 2010; Wright & Cairns, 2011), with reference to Flyvbjerg’s (2001, 2003) contemporary  
13 interpretation of Aristotelian *phronēsis*.  
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15 Since *phronēsis* is concerned with moral-ethical thinking to inform action for the ‘good  
16 of man’ (sic), a key step in the CSM process is that each of the scenarios narratives is  
17 interrogated by application of Flyvbjerg’s (2001, p. 60) set of value-rational questions  
18 directed at phronetic inquiry, namely:  
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- 21 1) Where are we going?
- 22 2) Is this desirable?
- 23 3) What should be done?

24 and,  
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- 26 4) Who gains and who loses; by which mechanisms of power?  
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30 In CSM, the consequences of actions by decision making stakeholders for those who are  
31 largely powerless and excluded are considered for each of four scenarios produced in line  
32 with the ‘basic method’ (Wright & Cairns, 2011) of scenario development. The initial CSM  
33 approach has been further augmented by the incorporation of a numeric analysis (Cairns,  
34 Goodwin & Wright, 2016; Cairns & Wright, 2018), enabling quantification of the value  
35 attributes for achievement of different strategic options and outcomes for each stakeholder  
36 group.  
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39 While CSM is concerned with impacts on all stakeholders, it does not explicitly require  
40 participative engagement with those who own the focal issue of concern. As such, an exercise  
41 in applying CSM may end with a set of hypothetical actions proposed to specifically address  
42 normally-excluded stakeholders’ interests, with some critical reflection on how these *may* be  
43 enacted or impeded by other, more powerful actors. However, there is no certainty that action  
44 *will* be taken, that these excluded stakeholders will become aware of others’ thinking about  
45 them, let alone that proposed actions will have the desired outcomes.  
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48 The PRSA approach to scenario development and use that we present here embeds a  
49 step-by-step stakeholder identification and activation framework that builds on the aims of  
50 CSM (Cairns et al., 2010). It also draws on the work of Bourgeois et al (2017), specifically  
51 the enactment of scenario projects that did engage local stakeholders in remote regions. The  
52 case examples presented by Bourgeois et al. (2017) involve direct participative engagement  
53 with local communities, to address their own focal issue of concern. However, while there is  
54 clear presentation of the process of engagement and development of proposed strategic  
55 options for community betterment, these projects have not yet been subjected to long-term  
56 evaluation. What is considered ‘good’ is expressed in terms of the desires and values of the  
57 local communities and organizations that are included in the participative scenario process.  
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3 We would posit that long-term success, or otherwise, in building sustainable benefit for  
4 the involved communities will in part be determined by the thinking and acting of more  
5 powerful actors at higher levels of authority – regional, state, federal, national, global. We  
6 would also argue that these parties' responses may be either rational or based on a human  
7 rationality that defines reality in terms of its own self-interest. They may be explicitly  
8 supportive, but subversively destructive. Also, they may bring outcomes as a result of either  
9 action or failure to act. It is to such issues that we turn our attention.

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12 In developing our discussion here, and the model of inquiry derived of it, we will return  
13 to these questions and the principles underlying them to guide our thinking.  
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### 16 *3.1 Considering the nature of power relations within our context of thinking/acting*

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18 In considering issues of power in relation to the potential for successful co-elaborative  
19 scenario building and subsequent strategy making, we must first clarify how we define and  
20 interpret the term 'power'. While some writers (e.g. Marx & Engels, 1888/1967; Weber,  
21 2009) focus on power in relations of domination and authority, others (e.g. Foucault, Morris  
22 & Patton, 1979; Nietzsche, 1968) view power as a ubiquitous element of human interaction.  
23 Dahl (1967) argues against the elitist view of power and hierarchy, while Arendt (1970)  
24 proposes that power, "springs up whenever people get together and act in concert". Here,  
25 power is seen as offering potential for collaboration rather than being a purely conflictual  
26 element of human interaction. For us, building and evaluating scenarios requires that we  
27 consider both potential power relations of conflict and self-interest and of collaboration and  
28 mutual benefit. However, we suggest that conflictual power relations are unlikely to produce  
29 outcomes considered as mutual good by all parties. In line with Flyvbjerg (1998) and Vangen  
30 (Vangen & Huxham, 2003, 2012; Vangen, Hayes & Cornforth, 2015), we posit that positive  
31 outcomes for the future require first that stability of power relations be established between  
32 all involved and affected parties. Hence:  
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39 *Premise 2: Realization of a future improvement in the overall human condition can only be based on*  
40 *creation of stable power relations, rather than confrontations*

41 Successful enactment of a future that brings the maximum benefit to the greatest number can only be  
42 brought about under conditions of mutual respect and engagement between stakeholder groupings and lack  
43 of confrontation.  
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46 This may seem like a pipedream, particularly when looked at from the current  
47 perspective of international tension, religious and nationalistic extremism and conflicting  
48 beliefs in relation to matters ranging from climate change to what constitutes economic  
49 'good'. However, we would argue that the perpetuation of such conditions is not inevitable –  
50 c.f., the development of the European Union after World War II and, more recently, the  
51 context within South Africa when Kahane (2012) made the scenario intervention that we  
52 described earlier.  
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### 56 *3.2 Power, rationality and rationalisation*

57 In his earliest work considered here, Flyvbjerg (1998) presents an in-depth study of a  
58 project of urban renewal involving collaboration between a wide range of actors including,  
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3 but not limited to; “the business community, grass-roots organizations, political parties...[]  
4 trade unions, the police, various local and national consultants, interested citizens, the media”  
5 (p. 9) and a range of formal organizations at the local, national and international levels. This  
6 study covers a period of more than a decade, from project inception through various stages of  
7 design and redesign, partial implementation, and degrees of success and of failure. His  
8 sources include archival documentation from official, unofficial and media outlets and a set  
9 of in-depth interviews with key actors. Flyvbjerg concludes that, “the very language we use  
10 to understand reality – the written and spoken word – is itself characterised by rationality and  
11 coherence, whereas reality is often characterised by power and fragmentation” (p. 8). From  
12 this, we draw our third premise:  
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18 *Premise3: Stable power relations at the project level may be subject to alternative expressions of*  
19 *rationality at a higher level*

20 While a scenario project may be explicitly grounded in agreed collaborative democracy, there may be  
21 political, economic or social agendas for participant organizations at a higher level that are not  
22 commensurable with the bounded rationality of the scenario project.  
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24 While we argue for stable power relations (i.e., where there is no overt conflict between  
25 stakeholders who, perhaps, have different levels of power) and respect within those *taking*  
26 *part* as members of the scenario development project, we recognise that these may be  
27 underpinned by conflicting power relations at the national and international levels. At these  
28 higher levels, values, beliefs and legislative frameworks may favour: extant powerful groups  
29 and individuals at the national level; international institutions like the World Bank and  
30 International Monetary Fund (IMF), or; multinational corporations with an interest in either  
31 the markets or the resources – or both – on which their local representatives are reliant. These  
32 higher-level interests may be in direct conflict with the agenda of the local, affected  
33 community - including the local representatives of national and international organisations  
34 who may be part of a particular scenario project. Such higher-level interest, and so plausible  
35 active involvement, may act to de-rail local collaborative initiatives. For this reason, any  
36 scenario project should, in our view, seek to involve the most senior representatives of  
37 stakeholder groupings.  
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### 45 3.3 Power and reality

46 Flyvbjerg (1998) asserts that, rather than being a basis for uncovering and describing  
47 reality, power is itself the basis by which reality is defined. He states (p. 227) that, “power  
48 *defines* what counts as rationality and knowledge and thereby what counts as reality”  
49 (emphasis in original). Here, we might consider events that have unfolded in the two decades  
50 since this was written, such as the matter of ‘weapons of mass destruction’ in Iraq, and the  
51 current debates around what constitutes ‘alternative facts’ (Swaine, 2017) and ‘fake news’  
52 (Allcott & Gentzkow, 2017). In relation to scenario analysis intended to inform action for the  
53 good of society and humanity at large, the potential disruption by strong vested interests and  
54 their power networks cannot be underestimated or ignored. Such interests may not  
55 necessarily be outlined in terms of opposition to any other stance and they may not preclude  
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3 consideration of alternatives, but they inform the discourse and power relations of those  
4 committed to them.

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6 As Flyvbjerg (1998) argues that reality is not based on a single rationality but, rather,  
7 that what is deemed reality is determined by power relations and a dominant rationalization  
8 presented as reality, so Beech and Cairns (2001) present four 'levels' of reality, based on  
9 discussion of case examples from their experience. These four levels consist of:

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13 1. Single reality – where every individual perceives the same 'reality'. These authors  
14 deem such a possibility rare – and transient  
15 2. Multi-layered reality – where different actors see largely the same reality, but with  
16 minor differences of perception and value attached to its characteristics  
17 3. Multiple realities – where a common set of terminologies and symbols are subject to  
18 very different interpretations and value attributions – realities may seem similar on the  
19 surface, but are underpinned by very different rationalities  
20 4. No-such-thing-as-reality – where even individuals play 'language games' and present  
21 different rationalities and 'reality narratives' in response to a single stimulus to  
22 different audiences.  
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27 While the scenario development team and the involved stakeholders may hope and act  
28 towards ensuring that the emergent reality is in line with what is seen as a desired scenario, it  
29 is likely that the reality that *does* unfold through the dominant power/rationality will inform  
30 retrospective judgement on whether such a scenario was in fact desirable – for example,  
31 interpretations of the outcome of recent Western interventions in Iraq (cf. Roth, 2004) and  
32 Libya (cf. Bellamy, 2011).  
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34 We would argue that the key challenge in building a successful and ongoing  
35 collaborative PRSA scenario program is to accept that there is no 'single reality', that there is  
36 a definite need to avoid falling into the politics and power games of 'no-such-thing-as-reality'  
37 and to accept and live with the realization that 'reality' is a multiple concept that lies  
38 somewhere in the realms level 2 or 3, depending on what the stakeholder constituency under  
39 consideration is, and how their power/rationality relations are constructed. We therefore  
40 advocate that scenario development is not a process bounded by time and informed by a  
41 specific rationality but an ongoing interaction between narratives of possibility and emergent  
42 reality. However, in line with Premise 1, above, the central aim must be to steer the future  
43 toward one that offers the greatest improvement in the human condition for the greatest  
44 number. Hence, we posit:  
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50 *Premise 4: A better future is not based on a single reality, but on acceptance of multiple realities*

51 Achievement of a better future outcome for the greater good requires recognition and acceptance of the  
52 multiplicity of values and beliefs that underpin individual and group thinking, and that inform different  
53 world views.  
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56 We offer no prescription, no panacea for resolution of the issues outlined to here, of how  
57 to develop stable power relations and to address the multiple rationalities and realities of  
58 different stakeholder groups. However, we posit that these must be addressed before relative  
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3 inequalities can be an accepted topic of inter-stakeholder debate – between advantaged and  
4 disadvantaged stakeholder groupings. In short, the facilitation of face-to-face inclusive  
5 dialogue between stakeholder groupings where the power relations are stable and senior  
6 participants (see Premise 3, earlier) have respect for each other (see Premise 2, earlier) is, in  
7 our view, the best foundation on which existing and future inequalities can be successfully  
8 debated. Only in such exchanges will each side be able to fully appreciate and understand  
9 each others' viewpoints, i.e., each others' alternative rationalities (see Premise 4, earlier).

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12 Having considered the nature of power relations between stakeholder groups and their  
13 role in determining what is considered rational and logical, and who will benefit in terms of  
14 their own 'good', we now turn to further elaboration of stakeholder identification and  
15 analysis.  
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#### 19 **4. Expanding and embedding stakeholder analysis and engagement**

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21 We would assert that stakeholder analysis should form an integral part of the scenario  
22 process, intended to ensure that thinking within a project is not confined to – or constrained  
23 by – consideration of the interests of only those with direct involvement. Adopting the  
24 'broad' stakeholder approach (Freeman & Reed, 1983) takes our thinking beyond only those  
25 who can directly impact the situation and those who will be immediately affected. It  
26 challenges us to consider third parties and beyond: those who may lie at the end of a long  
27 chain of cause and effect, and of whom we may not even be aware at the outset; and those  
28 who may be impacted in the future by decisions that are taken in the present.  
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##### 34 *4.1 Stakeholder identification*

35 In considering the broad view of stakeholders in relation to the issue at hand, we must  
36 take account not only of those with direct financial, employment or benefit interests – those  
37 who can affect the focal issue through their actions – but also those who have no effect on the  
38 situation, but who may be impacted or affected by its outcomes, both now and in the future.  
39 Stakeholder groupings can be defined in generic terms, such as 'management', 'customers'  
40 and 'media'. However, in order to engage meaningfully with stakeholder issues, it is  
41 necessary to think about sub-divisions within such groupings. In doing this, we will uncover  
42 those sub-groups who will have particular interests and different levels of power.  
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46 The power/interest matrix (Figure 1) promotes consideration of the level of interest  
47 different stakeholders have in what happens within a focal scenario, and their degree of  
48 power to influence the situation. Discussion should be constructed around joint consideration  
49 of who the various stakeholders are, and where they lie within the matrix at a given point in  
50 time. It is probably best to start with the present time as the context for this, so that issues of  
51 power and interest can be discussed in relation to what is currently known.  
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54

55 *INSERT FIGURE 1 ABOUT HERE*

##### 56 *4.2 Stakeholder activation*

57 It is crucial to consider that stakeholder relations are not fixed but are dynamic and can  
58 be influenced by numerous factors, from the rational to those grounded in a rationality of  
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3 expediency. Here, we might usefully consider whether a particular, radical course of action  
4 proposed by decision-makers ('players') will be supported by currently dormant 'context  
5 setters' or might provoke negative responses and challenge from them. Where discontented  
6 context setters move to become players to protect their own interests, might such a move  
7 provide opportunity for power-seeking 'subjects'? Is it possible and plausible to contemplate  
8 an alliance between these two groups to resist the proposed change? Remember that such an  
9 alliance might be either one of shared values and wishes with long-term potential, or one of  
10 political expediency for short-term gain.

11  
12 Application of the power/interest matrix allows us to consider not only who the obvious  
13 decision-makers are, but also who might be alternative power-brokers if their dormant  
14 interest in business-as-usual is aroused and converted to active interest under some other  
15 scenario conditions. Finally, it enables us to identify those stakeholders with high levels of  
16 interest in a situation, but who lack power. In relation to this group, the introduction of CSM  
17 provides a vehicle for consideration of issues of 'winners' and 'losers' within different  
18 scenarios through interrogation of their trajectory, and of the desirability or otherwise of their  
19 outcomes for different groups. It enables us to compare and contrast alternative forms of  
20 action within various scenarios and requires us to address the issue of power – who holds it,  
21 how they use it, and what impact it has on others. Figure 2 sets out our conceptualization of  
22 stakeholder activation.

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29 *INSERT FIGURE 2 ABOUT HERE*

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33 There are a number of key issues that should be considered in implementing full  
34 stakeholder analysis. First, the relationship between stakeholder analysis and scenario  
35 narrative is symbiotic, in that understanding of stakeholder power relations and areas of  
36 interest can inform the building of scenario narratives (see Chapter 3 of Cairns and Wright,  
37 2018, for a step-by-step method for incorporating the scenario team's *current* views of  
38 anticipated stakeholder reactions to unfolding scenario outcomes into scenario storylines). At  
39 the same time, the publication or circulation of developed scenario narratives may serve to  
40 inform stakeholder thinking and, thereby, their *future* degrees of interest and thus the nature  
41 of emergent power and interest relations. Stakeholder analysis can alert us to possible  
42 political activity, whereby disempowered 'subjects' might try to unite with disaffected  
43 'context setters' to challenge the status of current 'players'. Second, it has the potential to  
44 alert us to genuinely disadvantaged subjects whose interests are ignored at present.

#### 4.3 *From stakeholder analysis to stakeholder engagement*

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52 Moving beyond simply identifying stakeholders and considering their degrees of power  
53 and interest from afar, here we are concerned with how to bring them into the process of  
54 participative engagement. The first step is to consider each of the stakeholder types and to  
55 identify all identified stakeholders with interest and power in respect of the focal issue of  
56 importance to the scenario development team. The second step is to consider each  
57 stakeholder's current level of interest and power and identify suitable actions for the scenario  
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3 project team – in terms of monitoring, collaborating, defending and persuading. Table 1 sets  
4 out this identification/action process in detail.  
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7 *INSERT TABLE 1 ABOUT HERE*  
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10 The activities set out in Table 1 are, in our view, most relevant in scenario projects where the  
11 many stakeholder groups are external and so *not part* of the team involved with the scenario  
12 development process. Bourgeois et al. (2017) present case studies where affected  
13 communities become the scenario developers themselves – the ‘local actors at grassroots  
14 level’ that we refer to above. In contrast, Kahane (1998b, 2012) presents studies where all  
15 involved and affected stakeholders *are part* of the scenario development team, rather than as  
16 in the Bourgeois case – where only the grouping of the less-powerful are the scenario  
17 developers. In Kahane’s work in South Africa in the era of white rule, one scenario – named  
18 ‘Icarus’ – was very negative, and instrumental in all the stakeholder groupings realizing that,  
19 by their articulated actions, they could seek to avoid a future where a social spending spree  
20 led to balance of payments problems and currency depreciation after the transition to black  
21 majority rule. Kahane’s (2012, p. 75) approach is to get the full range of stakeholder groups  
22 involved in the scenario development process such that, “(t)he contribution of the scenario  
23 project is not that it has gotten actors to act, this is what they have been doing and continue to  
24 do. Instead its contribution is to help actors to act with broader, deeper and more aligned  
25 understandings, relationships and intentions, with greater wisdom”. As we noted earlier, in  
26 Section 3 above, such face-to-face engagement between stakeholder groupings is ideal but, in  
27 our experience, unusual in practice.  
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#### 35 *4.4 From scenario analysis to action – fostering stakeholder relevance and response*

36 Rickards et al. (2014) argue that multi-agency participants in a scenario development  
37 project need to perceive the common scenario intervention to be rigorous, salient and  
38 legitimate – the latter taken to be the fair and unbiased treatment of diverse views and  
39 interests. Bryant and Lempart (2010, p.35) note that the “diffuse and heterogeneous nature of  
40 public agencies’ objectives and interests may make it impossible for them to come to a  
41 consensus about the meaning of scenario axes.” Rickards et al. (2014, p. 653) also state that  
42 other reasons why “(s)enario planning can struggle to inform adaptation decision making in  
43 an evidence-based policy environment” include; i) the lack of an organizational champion to  
44 foster continuing interest once the initial scenario development is complete, and ii) lack of  
45 immediate opportunity to implement strategic change within existing planning cycles.  
46 Kahane (2012) is clear that ‘action’ was difficult to engender in his discussion of scenario  
47 exercises that were meant to challenge and change the future of countries – South Africa and  
48 Columbia. His prescription is for the scenario development team to ‘seed’ country-wide  
49 discussions: in the South African ‘Mont Fleur’ scenario intervention that we introduced  
50 earlier, he notes that:  
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57 (W)e distributed 20,000 copies of our full 80-page report, 10,000 copies (in five  
58 languages) of a 32-page summary report, and 2,000 copies of a 30-minute video; we ran  
59 more than 100 workshops for political, business, non-governmental, and community  
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3 organizations in every province and every major city; we created five weekly inserts in a  
4 national chain of newspapers (with 2 million readers) and six weekly televised debates.  
5 (p.70)  
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7

8  
9 In the case of our own scenario intervention, with others, in North West Tasmania  
10 (Cairns et al., 2017), the process was trusted by the multi-agency stakeholder groupings, was  
11 politically backed, was not threatening to vested interests, was well-facilitated, and involved  
12 appropriate participants. However, there was no one single individual or organizational  
13 ‘champion’ – as there usually is within a single organizational-level intervention (cf. Wright  
14 and Cairns, 2011) – nor was the opportunity for a subsequent single (major) action clear. For  
15 this reason, the benefits of Kahane’s ‘seeding’ approach to activating dormant context setters  
16 resonates with us in our critical reflection on our regional – rather than country-wide –  
17 scenario intervention. Building on these examples, we would argue that stakeholder  
18 identification and activation is not a once-only engagement but an ongoing and unfolding  
19 essential element of the scenario process.  
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#### 23 24 4.5 *Engaging stakeholders as a long-term commitment*

25 Most presentations of the outcomes of scenario projects involve development of scenario  
26 narratives within a particular time frame, ranging from a few hours to many months.  
27 Thereafter, the scenarios are presented in terms of evidence of – or assumptions about – how  
28 they have informed developing strategy, policy or planning. However, in our practical  
29 experience and from our literature searches, we find no evidence of this type of longitudinal  
30 engagement with, and evaluation of, what actually unfolds after the formal project is  
31 completed. In our analysis, the unfolding reality will be strongly influenced by the power  
32 relations and dominant rationalities, rather than the prospective hopes of a reality that is  
33 derived from the best-case scenario and initial actions from within the scenario development  
34 team.  
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40 *Premise 5: Scenario outcomes that result from the actions of stakeholders (either external to or part of the*  
41 *scenario project team) can be part of long-term extended activities, rather than being one-off or short-*  
42 *term*

43 While many scenario project reports outline engagement over extended periods, with multiple iterations of  
44 scenario development, there is a need for extended monitoring and engagement with stakeholders after the  
45 scenario development exercise is concluded – as strategies, policies and actions are implemented.  
46  
47

#### 48 4.6 *Ensuring an inclusive stakeholder input – where engagement is not possible*

49 The fundamental basis of Bourgeois et al.’s (2017) participatory engagement model is  
50 based on an action learning approach along with affected stakeholders. This is relatively easy  
51 where those stakeholders involved in the scenario development process are, solely, the local  
52 community and local organizations, so long as there is both a desire and a commitment to  
53 active engagement by all parties. However, here we require that stakeholder analysis is  
54 extended to include the ‘broad’ community of stakeholders – “any identifiable group or  
55 individual who can affect the achievement of an organization’s objectives or who is affected  
56 by the achievement of an organization’s objectives” (Freeman & Reed, 1983, p. 91). For a  
57 complex project that aims to address some societal issue with the aim of improving the  
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3 human condition, the list of such stakeholders will likely be extensive, and encompass a vast  
4 geographic area. As we have argued, ideally all stakeholders should be engaged in the  
5 scenario development team (c.f., Kahane's approach and work, discussed earlier) but  
6 practicality will likely exclude the possibility of such general engagement. Rather than then  
7 moving to a state of exclusion of some stakeholders, we advocate the use of role-play of  
8 those who are unable to participate by some of those in attendance. Green & Armstrong  
9 (2011) demonstrate empirically that those that role-play others make accurate decisions about  
10 how these others might think and act than if they merely 'role-think' their possible responses.

11  
12 In their underpinning research, Green and Armstrong's (2011) focus was on 'forecasting'  
13 the actual decisions made in real, but historic, conflict situations - with participants instructed  
14 to indicate, "which decision you think that each party in the situation would prefer to be made  
15 and how likely is it that each party's decision will actually occur" (p. 73). An example  
16 conflict situation was that of angry nurses increasing their pay demand and threatening  
17 further strike action after specialist nurses and junior doctors received a big pay increase.  
18 Participants in the role-thinking were asked to predict the outcome of negotiations between  
19 the stakeholder groupings after having read role descriptions of each grouping. The role  
20 descriptions detailed recent context and actions. However, the directive to participants to  
21 engage in 'role-thinking' resulted in forecasts that were no more accurate than guesses. In  
22 contrast, when students were required to become more engaged with the conflict situations -  
23 by 'role-playing' or simulating the interactions between participants in the conflicts - the  
24 predictive accuracy of the role players' in-role decisions reached 90%. In the role-playing  
25 simulation, each student was assigned a single role and the role-players interacted with each  
26 other in a similar way to actors on a stage.

27  
28 Somehow, role-playing brought out the best from the university students - in that their  
29 simulations of conflict situations resulted in resolutions of the conflicts that were close to  
30 real-life resolutions. Green and Armstrong's (2011) students could not be expected to have  
31 strong technical or domain knowledge about each, or all, of the conflict situations. Intuitively,  
32 an understanding/enactment of stakeholder motivations/behaviour seems more fundamental  
33 to predicting/resolving the actual outcomes of conflicts than either technical or domain  
34 knowledge. Intuitively, it would seem that one's own experiences of the past resolution of  
35 conflicts - perhaps as recalled or previously experienced and including personal as well as  
36 non-personal conflicts - would be a strong guide to the prediction/resolution of the outcomes  
37 of conflicts, since Maslow's hierarchy of needs underpins all of human behaviour. Thus, it  
38 seems intuitively reasonable that only when individuals are enmeshed in role-play  
39 simulations will the relevance of this experience become obvious - since Green and  
40 Armstrong's conflicts will, initially, have been seen as outside the domain of this experience  
41 at a superficial, face-content, level.

42  
43 While we strongly advocate for full and direct stakeholder involvement, we acknowledge  
44 that this may not always be possible, particularly where the focal issue is multinational in its  
45 reach. Hence:

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58 *Premise 6: Stakeholder engagement should be direct and involving wherever possible. Alternatively,*  
59 *stakeholder reactions to unfolding events around the focal scenario issue should be understood by role-*  
60 *playing simulation if their direct involvement cannot be achieved.*

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3 Those stakeholders who 'own' the focal issue and will be directly impacted by its outcomes *must* be  
4 engaged as active participants in the scenario process. All other stakeholders who can impact the issue,  
5 particularly where currently lacking interest, should be engaged if possible, but must be actively role-  
6 played if not.  
7

8  
9 Having set out six conceptual premises on how a PRSA approach to scenario  
10 development and use should be framed in order to maximise the potential for meaningful and  
11 successful participative engagement by all stakeholders, we now consider the methodological  
12 implications for the scenario process.  
13  
14

## 15 **5. Building a conceptual model for PRSA implementation**

16

17  
18 Volkery and Ribeiro (2009) consider the use made of scenario insights to be problematic  
19 within multi-organizational contexts. They note that, "(e)ven well- constructed, thoroughly  
20 analyzed scenarios can be of little use and relevance, if the organizational capacity to absorb  
21 them is poor, if there is no political backing or if relevant specifics of the policy-making  
22 process have not been taken into account" (p. 1199). These authors argue that participants  
23 need to 'trust' the constructed scenarios – here trust is defined as: trust in those who develop  
24 the scenarios; reliability of information within the scenarios, and; methodological credibility.  
25 Also, they note that scenario interventions can clash with the established routines of political  
26 decision making and may 'touch upon' vested interests about policy priorities. Apart from  
27 these political factors, they go on to note problematic issues to do with the skills of the  
28 facilitators, and the level of involvement of participants with the scenario process.  
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### 34 *5.1 Trust in participation and reliability of information*

35 Kahane (2012, 2017) stresses the fundamental importance of strong facilitation and  
36 putting aside differences to focus on areas for potential shared benefit, in line with Flyvbjerg  
37 (1998) and Vangen and Huxham (2003, 2012). In the context of the South Africa project, the  
38 success of such an approach led to all key decision-making stakeholders being involved and  
39 embedded in the process and committed to collaborative working to build the 'greater  
40 wisdom' to which Kahane (1998, 2012) refers, with subsequent deep impacts on the country  
41 both internally and internationally. However, if there had been no such commitment  
42 established at the outset, we must then contemplate what might have happened in South  
43 Africa had a range of divergent and conflicting values led to presentation of alternative  
44 'rationalities' – these defined by different power relations and forming the foundation of  
45 alternative 'realities' that were incommensurable, each underpinned by a different  
46 rationalization presented as rationality. In such contexts, it would be difficult to get the  
47 powerful to take part in a common scenario development process to aid their understanding  
48 and appreciation of differing perspectives on an unfolding future.  
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54 As we have posited in our six premises, the likelihood of success in moving from  
55 mutually-agreed scenarios and related actions to long-term benefit for the immediately  
56 involved community, that is not negated by powerful external actors, must be grounded in  
57 stable power relations and trust between parties, but with acceptance that there will be  
58 differences of values, beliefs and resultant presentations of what counts as rationality and  
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3 reality for different groups. As such, trust between parties must include acceptance of these  
4 different world-views, while belief in the reliability of information must be built upon open  
5 critical discourse about the bases and merits of competing rationalities. Herein lies the most  
6 challenging aspect of building the foundations for a successful scenario program.  
7

8 Kahane's (1998, 2012) South Africa project offers a vision of what a successful  
9 participatory engagement scenario project *might* look like. However, it does not in itself offer  
10 a generalizable 'formula' for such an approach, only an illustrative example that is entirely  
11 context- and actor-dependent for its particular outcomes. His later work (Kahane, 2017)  
12 offers some broad guidelines for addressing facilitation in the face of strongly conflicting and  
13 entrenched values. For us, however, the question remains, what kind of general guidelines  
14 might be offered for a PRSA approach that is *more likely* – than any current model of  
15 scenario development, but not guaranteed – to lead to an Aristotelian phronetic outcome for  
16 the 'good of man' (sic)?  
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## 22 **6. Augmenting scenario method through a Power-Rationality Scenario Analysis (PRSA)** 23 **model**

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25 As might be gathered from the title of this section, what we now outline is not a new  
26 approach to scenario development. Rather, it is a novel and innovative integration of several  
27 extant modes of inquiry and analysis, with key foci on the nature of power and power  
28 relations between stakeholders, and on the essential consideration of time – specifically  
29 change over time – as a key influencer of these relations. The model that we offer is general  
30 in its broad nature but is entirely context-dependent in terms of its implementation and,  
31 thereby, its likelihood of bringing about meaningful and long-term change for human  
32 betterment.  
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36 The premises we have set out above offer no detailed 'menu' or 'roadmap' on how to  
37 build a practical model of what we term Power-Rationality Scenario Analysis (PRSA). The  
38 six key premises outline the fundamental essence of such a model, but we accept that a  
39 practical framework that is to be successful needs to be constructed both from the top down –  
40 in terms of fundamental principles and aims – and from the bottom up, in relation to being  
41 contextually grounded, engaging with and for all stakeholders, and addressing individual and  
42 group objectives, values and beliefs. Below, we proffer some practical suggestions on steps to  
43 be taken to enact PRSA by a grouping of less-than-powerful stakeholders.  
44  
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47 We set out the model in terms of a set of stages of analysis, synthesis, implementation  
48 and reflection, where these are iterative rather than strictly linear.  
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50

### 51 ***Stage 1: Focal Issue Determination:***

52 *Define the 'focal issue' in as few words as possible, but with clarity of shared meaning for all*  
53 *participants; e.g. 'Provision of sustainable public transport for all citizens, with zero*  
54 *emissions by 2030'.*  
55

56 The first stage in building a scenario program is crucial, in terms of setting out the key  
57 focus of the investigation. Literature on inter-organizational collaboration (Vangen &  
58 Huxham, 2003, 2012) argues the need for a very clear and specific shared focus, to which all  
59 participants are committed. The example provided here defines what is a complex,  
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3 multidisciplinary problem that will be impacted by the full range of PESTEL factors. It may  
4 be contested in terms of political and economic priorities, technological realisation, etc. Yet,  
5 it is stated in few words, summarising four key performance requirements (which we assume  
6 have been established and committed to by the affected stakeholders), namely: public (not  
7 private) transport; for all community members (not a limited set); zero omissions by a set  
8 date and; first and foremost, sustainable (not time-limited).  
9  
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11

### 12 **Stage 2: Scenario Method Selection:**

13 *Select the most appropriate method to meet timescale of participants and purpose of*  
14 *exercise; exploratory, investigative, analytic, testing, etc.*

15  
16 The selection of the most appropriate scenario method is dependent on resource  
17 availability, including time from key participants, the nature of understanding of the current  
18 status of the problem and the purpose of the exercise. In the above example, there may be a  
19 call for exploration of alternative transport forms – trains, trams, buses, bikes – or of the  
20 means of implementing just one, such as an agreed tram network. The context of current  
21 political and economic commitments may be settled and supportive or may be uncertain and  
22 contested. Selection of method must be based on contextual need, not imported expertise. If  
23 the focal issue has not yet been defined in concise and agreed terms, there may be a need for  
24 a short, investigative scenario exercise (cf. Cairns & Wright, 2018). Exploration of a well-  
25 defined issue may be undertaken using a range of methods, as appropriate: La Prospective  
26 (cf. Godet, 1982, 1986) to elicit and examine a desired positive future; BLM (cf. Wright &  
27 Goodwin, 2009) to formulate and interrogate extreme futures, both positive and negative; or  
28 one of the ‘augmented’ IL methods (cf. Cairns & Wright, 2018) to build a range of scenarios  
29 from the present into the future.  
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### 36 **Stage 3: Stakeholder Identification:**

37 *Determine the full range of stakeholders who will impact and/or be impacted by the focal*  
38 *issue over the scenario timeframe. Plot current status of stakeholders as in Figure 1.*  
39 *Consider relationships with focal issue.*

40  
41 Starting with an overview of the present situation, elicit ideas from all participants on the  
42 ‘broad’ stakeholder constituency – all who can affect or be affected by the focal issue, both  
43 now and into the future (cf. Freeman & Reed, 1983). Ensure that all relevant sub-sets of  
44 generic forms (e.g. politicians, media, businesses) are identified, particularly where  
45 differences of values, priorities and power relations might prove crucial to how one future or  
46 another might unfold or be inhibited.  
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### 51 **Stage 4: Scenario Development:**

52 *Develop the relevant number of scenario storylines in accordance with the selected method,*  
53 *ensuring testing for plausibility and possibility through critical discussion; including role-*  
54 *play, Devil’s advocacy challenge, etc.*

55  
56 Here, participants should follow the selected scenario method. While external expertise  
57 in scenario facilitation may be sought and be useful, it is essential that the involved and  
58 affected stakeholder owners of the focal issue be engaged and embedded in the program of  
59 scenario building. However, it must also be noted that their views on any topic may be  
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3 bounded by a particular rationality and that this rationality may not be shared by others,  
4 particularly external and powerful parties. It is crucial that the logic and plausibility of  
5 scenarios be rigorously tested through critical analysis using methods such as role-play and  
6 Devil's advocacy challenge (cf. Cairns & Wright, 2018).  
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10 ***Stage 5: Strategy Development and Testing:***

11 *Develop a set of strategies for response to the full set of scenarios, to meet the defined needs*  
12 *of the community of stakeholders that 'own' the focal issue of concern.*

13  
14 As we have argued elsewhere (Wright, Bradfield & Cairns, 2013), scenarios are not in  
15 themselves plans for action. They are ways of understanding how the future might unfold that  
16 can inform the development of appropriate strategic planning approaches to be prepared,  
17 proactive and resilient in the face of whatever might reasonably happen. This article is not  
18 concerned with the strategic planning process per se, but we argue that scenarios and  
19 strategies have a symbiotic relationship, where each informs and is informed by the other,  
20 and both must be considered in an iterative process of development, testing, refinement and  
21 ongoing review.  
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26 ***Stage 6: Stakeholder Impact/response Assessment:***

27 *For each of the developed strategies, consider the involvement and impact for each*  
28 *stakeholder group, with reference to Figure 2. Produce a stakeholder mapping (Table 1) for*  
29 *each strategy/scenario combination. Note that stakeholder positions will vary across*  
30 *scenarios, are not necessarily static over time, and are linked by relations of power and*  
31 *interest.*  
32  
33

34 Stage 6 should not be considered purely sequential, to follow Stage 5. Having  
35 constructed an initial stakeholder matrix at Stage 3, that model should become a dynamic tool  
36 for application along with Stage 5. As different futures are considered and strategies  
37 development, the role of powerful stakeholders becomes central to testing the logic of the  
38 narratives and likely success, or otherwise, of strategic choices, where success is considered  
39 in terms of these stakeholders. However, when it comes to consideration of phronetic 'good'  
40 for all stakeholders, thinking must be expanded beyond what the powerful may or may not  
41 do, to consider what the likely impacts of any strategic choice will be for the powerless, the  
42 excluded, and future generations.  
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47 ***Stage 7: Develop Policies and Plans to Meet Strategic Response to Focal Issue:***

48 *Develop clear, unambiguous policies and plans that respond to the range of scenarios, that*  
49 *meet the strategic needs of the key stakeholders who own the focal issue, and that define what*  
50 *actions are to be taken by whom and with what resources. Importantly, consider and define*  
51 *actions that are necessary to engage powerful stakeholders whose interests do not align with*  
52 *the focal issue owning community.*  
53  
54

55 In the same way that scenarios are not plans, strategies are not necessarily set out in  
56 terms that lead to easy translation to action. While they establish the broad aims and  
57 objectives of the organization or community, there are likely key unanswered questions  
58 relating to: what needs to be done; when it must be done, and; who is responsible for making  
59 sure that it happens. This is the domain of policy and planning. When dealing with complex  
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3 and ambiguous issues with broad social, economic or ecological impacts – for the  
4 immediately affected stakeholder community and beyond – there are likely policy  
5 implications that must be pursued at the appropriate legislative level. If key policies are not  
6 put in place, other competing priorities may well take precedence. For those responsible for  
7 operationalising strategic objectives, there is a need for planning, with clearly defined actions  
8 to be undertaken and lines of responsibility and reporting for ensuring this happens.  
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12 ***Stage 8: Ongoing Critical Assessment of Progress and Refinement of Process:***

13 *Have a clear program of continual assessment of progress in implementation of policies and*  
14 *plans, and identification of deviations from and blockages to progress. Be prepared to*  
15 *undertake minor refinement as work progresses, or to return to any of the above stages if*  
16 *deviation/blockage occurs.*  
17  
18

19 Whatever scenarios are developed, and whatever strategies, policies and plans are put in  
20 place to respond to them and to the focal issue, the future remains uncertain and  
21 unpredictable. No matter how broad and inclusive our thinking, there will always be the  
22 chance of some ‘black swan’ (Taleb, 2007), high impact and unpredictable event. All the  
23 stages outlined here must be considered dynamic and iterative, not fixed and linear. As we  
24 proceed to implement plans to respond to the initial focal issue, we must consider the  
25 possibility that even the issue itself has waned in importance. For example, what is the  
26 significance now of a drop-off in tourist numbers post-911 to an island nation faced with  
27 rising sea levels and storm surges as a result of climate change (particularly when the issue of  
28 climate change itself is contested by the most powerful decision makers on the planet)? The  
29 future, whatever it may be, must be a context for ongoing vigilance, reappraisal of the recent  
30 past and willingness to redesign responses to the future that is unfolding.  
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36 **7. Summary, conclusions and limitations**

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39 Our key aim in developing this paper and the PRSA model outlined is to respond to what  
40 we see as a lack of critical evaluation – both formal and long-term – of scenario  
41 implementation projects, particularly with regard to their relationship with those stakeholders  
42 who are not directly involved in the process. As we have discussed, non-involved  
43 stakeholders may be of a variety of forms.  
44

45 First, they may be those that are remote and excluded from consideration, but who may  
46 well be impacted by any emergent decisions and actions over time. With these groups and  
47 individuals, our concern is for the possibility that they may be negatively impacted by such  
48 actions, whether deprived of resources, income or opportunity. In our model, we seek to  
49 ensure that the values and interests of such stakeholders are considered from the outset.  
50  
51

52 Second, those stakeholders that are not directly involved may constitute a latent  
53 power/rationality threat to the well-intentioned decisions and actions that emerge from the  
54 involved actors’ scenario work. Where a local/regional project is undertaken to identify a  
55 ‘best case’ alternative future to that indicated by a trajectory from recent past through present  
56 to unfolding future, this future may well be counter to the interests of external stakeholders,  
57 but with strong interests in the future in the context of analysis. If these parties’ interests –  
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whether financial, political, or some other form – are threatened, they are likely to mobilise their own power relations in order to disrupt or derail the program.

As we have highlighted with reference to the almost two-decade study by Flyvbjerg (1998), such powerful actors may readily construct alternative narratives to those of the local best-case scenario. Their own ‘best case’ may well be underpinned by an alternative rationality – a rationalization of appropriate facts, ideas, opinions, ‘alternative facts’ and ‘false truths’ presented as ‘reality’ to underpin and drive their own case. While we have argued that likely success in building long-term positive outcomes from a scenario program requires, first, the establishment of stable power relations, we recognise that this may be a very difficult, if not nigh impossible aspiration. However, we consider that entry into any program where there are unresolved conflictual power relations, and divergent rationalities that remain covert and unaddressed is most likely doomed to failure from the outset.

While we can offer no panacea for addressing self-interested parties, we hope that the practical step-by-step realisation of our conceptualisation that we present, and the six premises that underpin it will provide a framework for more transparent and inclusive scenario analysis. We hope that it will encourage opening up of critical debate on the multiple ‘realities’ that exist across diverse stakeholder groups, and on the potentially competing rationalities that underpin them. Specifically, we hope that it will prompt thinking on Aristotle’s intellectual virtue of *phronēsis*, thinking to inform action for the good of humanity at large. Finally, we hope that it will encourage ongoing engagement and collaboration with all stakeholders over an extended time period, to provide the greatest chances of long-term success in achieving phronetic outcomes.

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## Making scenario interventions matter: exploring issues of power and rationality

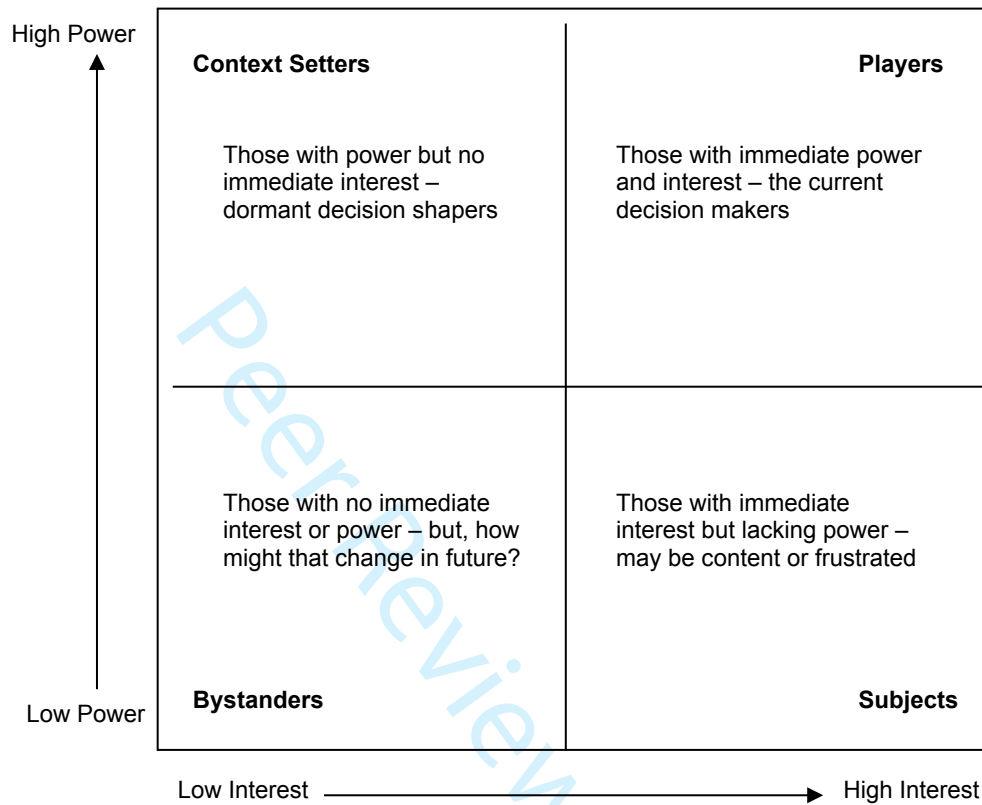
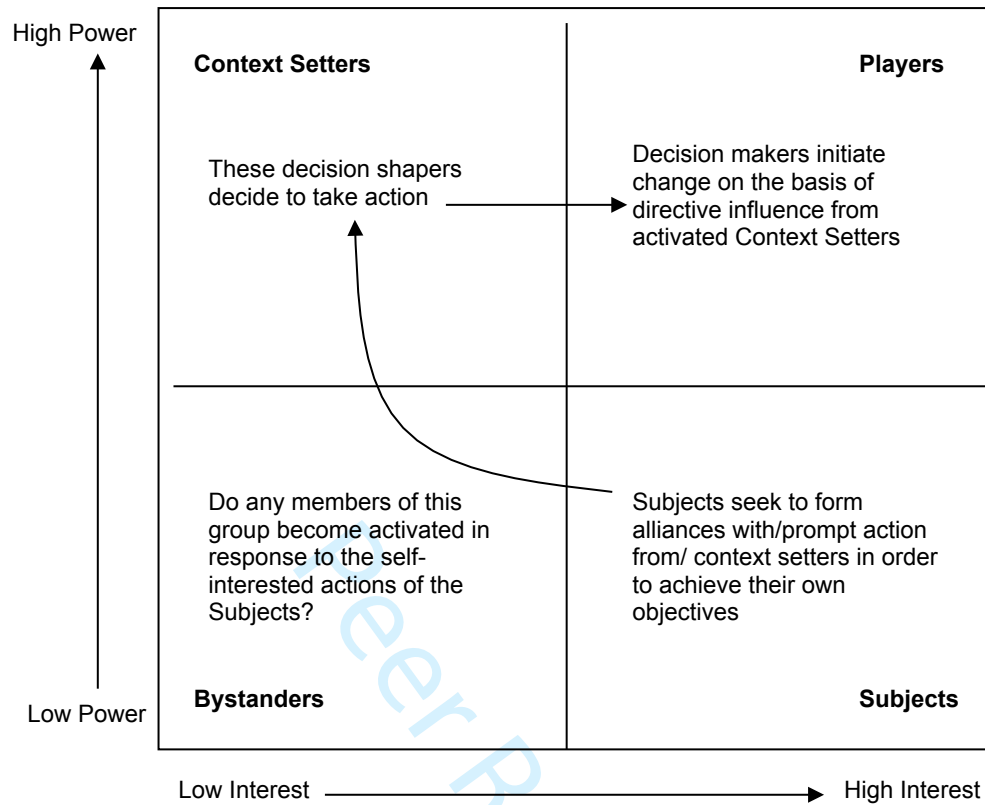


Figure 1 – Stakeholder analysis matrix (adapted from Cairns and Wright, 2018)





**Figure 2 – Stakeholder activation at work** (based, in part, on Cairns and Wright, 2018)

**Table 1. Evaluation of the alignment of current stakeholder interests with those of the scenario developers**

	<b>Positive alignment</b>	<b>Negative alignment</b>	<b>Neutral alignment</b>
<i>Context Setters</i>	Attempt to activate these stakeholders to help achieve your own interests	Monitor these stakeholders and be prepared to defend your own position against these stakeholders	Monitor these stakeholders and attempt to achieve their positive alignment with your own interests
<i>Players</i>	Collaborate with these stakeholders.	Be prepared to defend your own position against these stakeholders	Monitor these stakeholders and attempt to achieve their positive alignment with your own interests
<i>Bystanders</i>	Monitor these stakeholders	Monitor these stakeholders	Monitor these stakeholders
<i>Subjects</i>	Consider collaboration with these stakeholders.	Monitor these stakeholders	Monitor these stakeholders