



# The Social Licence to Operate and the legitimacy of resource extraction

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The Social Licence to Operate (SLO) has emerged as a leading concept to assess the legitimacy of extractive operations. This article examines recent SLO literature to discuss how the SLO is conceptualized and enacted. Our discussion focuses on three main themes: (1) who are considered to be relevant stakeholders; (2) the ways in which these stakeholders are engaged; and (3) how social and environmental impacts of extractive operations are considered. Our analysis points to a tendency in literature to focus on local stakeholders and a failure to consider wider sustainability implications. On the basis of these findings we argue that the evaluation of extractive operations must be based on a comprehensive concept of legitimacy that not only seeks the approval of local stakeholders but also recognises the importance of open-ended political deliberation that addresses global norms of social and environmental sustainability and includes diverse values, needs and interests.

## Addresses

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## Introduction

Two decades after Jim Cooney coined the term Social License to Operate (SLO) to describe local risk management, the SLO has become a prominent concept used in corporate as well as academic discourse [1–4]. The SLO concept reflects the increasing recognition of the importance of societal support for extractive operations. Failing to secure a SLO is considered a major corporate risk for

many natural resource-based sectors and can lead to protests and litigation [5,6].

Over the last decade, SLO scholarship has focused on assessing how corporations have managed community relations and expectations to generate support [3,7]. A recurring topic in this literature is to analyse to what extent extractive corporations meet specified criteria that are considered important. Authors have identified different criteria for the SLO, including legitimacy, credibility, and trust [2,4,8]. Discussion of what the key components of an SLO are, has led some authors to problematize the conceptual ambiguity of the SLO and its potential to establish legitimacy (e.g. Refs. [9–11]). This also raises the question how the concept is enacted in practice and with what implications [12].

Building on this critical literature, we have identified three main themes. The first main theme is who the relevant stakeholders are; that is, who has to consider extractive operations to be legitimate, credible, and trustworthy? Practices of stakeholder engagement show a tendency to limit the stakeholder concept to communities who live nearby the operation [10,13] and to vocal and organized groups, while non-residents or opponents are excluded or even criminalized [5,14,15]. Second, the way in which engagement is done has been criticized. For example, scholars have noted a lack of inclusiveness [9,13], because engagement is often limited to and focused on the purpose of continuing extractive operations without disruptions or substantial alterations [11,16]. Third, scholars have pointed to a limited scope of the SLO, that is, the SLO focuses mostly on local and social impacts, discarding global and environmental considerations [17,18].

Thus, while the SLO concept has become a prominent term in literature and practice, it also continues to be debated. Not only in terms of how the SLO is and should be conceptualized and defined, but also in terms of the effects it is producing as extractive corporations attempt to secure it. This article discusses recent SLO literature, published between 2018 and 2020 and indexed in either Web of Science or Scopus (*see Annex 1 for an explanation of the selection strategy*) to explore new directions and trends in the SLO's conceptualisation as well as its enactment in practice. We focus our discussion on the three main themes identified above: stakeholders, engagement, and impact. We use this discussion to reflect on how

and to what extent the SLO concept contributes to the legitimacy of extractive operations. Based on our findings, we argue that scholarly literature on extractive operations and the SLO needs to broaden its conception of legitimacy beyond local stakeholders' acceptance [19,20]. Legitimacy should also include the justifiability of operations, that is, the extent to which extractive operations and their social and environmental impacts are seen to be in accordance with formal and informal rules, as well as societal norms and beliefs [11,21]. Using this broader notion of legitimacy is urgently needed to support a fuller evaluation of and critical reflection on the legitimacy of extractive operations.

### Stakeholders

Securing an SLO involves the attempt to gain support from stakeholders and communities [1,22]. Scholars have shown that corporations tend to prioritize residential or local, vocal, and well-organized citizens and social groups, at the expense of historically marginalized communities and individuals for whom no clearly visible or fair representational structure exist [9,16,23–26]. In addition, non-local stakeholders that are affected by and have an interest in extractive operations, including those related to global sustainability crises, are generally not considered [7,22,27,28,29]. This means that the heterogeneity of stakeholders relevant for a SLO is overlooked [7,9,30,31,32]. What this suggests is that the SLO literature is based upon a limited conception of who is a relevant stakeholder, what communities are, and whether and how they can be equal negotiation partners [29,30,33,34].

In response to these limitations, literature stresses the importance of civil society actors to organize themselves and to strategically employ the SLO for establishing a political space [23,26,30,35]. SLO scholars note how such self-organized bottom up processes may help counter dominant understandings of stakeholders, facilitate open discussion about which stakeholders are relevant to include, and offer a platform for deliberating diverse values, including those that deviate from dominant development norms [7,23,26,30,35,36,37].

### Engagement

Studies have criticized companies for having a top-down approach to engagement rather than promoting meaningful two-way conversations with an active, emancipating role for stakeholders [7,33]. Such top-down approaches are often enabled by the infrastructural and institutional dependencies of local communities on extractive corporations, but they affect the quality and outcomes of engagement, and risk (re)producing uneven power relations and inequalities within and between stakeholder groups [29].

To address these limitations and power inequalities, recent SLO literature emphasizes alternative conceptualisations

of engagement that foreground continuous and equal deliberation and reflection. Social licenses differ from formal legal or political licences because they are not granted with a clear mandate and time-period [13]. Instead, securing an SLO involves open-ended, context-specific and dynamic processes that require long-term engagement strategies [13,24,33,38]. Such processes aid the recognition of diversity in values and sources of knowledge, post-operational impacts, and allow non-corporate and non-governmental actors to co-design the engagement process [7,24,31,33,34,35,39,40].

Governments play a crucial role in enabling deliberative spaces and in preventing corporations from exclusively determining the scope and design of engagement [31,41,42]. While it has been noted that powerful government-corporation collusions can constrain and deter opposition [24], it is important to consider such opposition and protest not just as a problem to be prevented or ignored, but as an expression of public values and a sign of important and ignored underlying issues [32]. The assessment of the legitimacy of extractive operations should focus on the extent to which the SLO involves open-ended engagement approaches that include a more balanced set of values and worldviews.

### Impact

Extractive operations are often associated with negative social, environmental, cultural, political and economic impacts [7,43,44]. Yet, empirical research into SLO rarely includes technical details, analyses, or reports. This absence of the actual material dimensions of extractive operations in SLO research is an important insight, since the operational design, qualities, and impacts of projects are often the locus of passionate public disputes [7,43,44]. From the few studies in our corpus that include this material dimension, only two explicitly relate the SLO to the expected severity and probability of social, economic and environmental impacts at different scales [27,37]. Another suggests that this omission serves to distract actors from considering these impacts [39]. Thus, while the SLO literature analyses operations' efforts to reduce unrest through engagement, it – paradoxically – largely fails to address the actual social and environmental impacts that fuel this unrest in the first place [7,43].

A way to engage more explicitly with the material impacts of extractive operations is by means of information. There is often an implicit and problematic assumption that stakeholders have the capacity to acquire such information themselves, distil potential impacts from this information, and organize themselves to voice their concerns [9,29]. In response, scholars have argued that companies should take an active approach by enabling transparent, easily accessible, and reliable information about a wide range of (potential) impacts as a basis for engagement [43,45]. Moreover, this knowledge base needs to be

sufficiently diverse to align with the diverse worldviews and perspectives of stakeholders [45–47]. A co-production strategy that considers a broad range of stakeholders as active contributors to and co-producers of credible and relevant knowledge for assessing risks and importantly, for co-designing operations, is seen as promising for a fair and informed assessment of the legitimacy of extractive operations [20,48]. A second way to increase engagement with material impacts of operations is by connecting the SLO to discussions around the demand and desirability for extracted resources on local, regional, or global scales. This implies connecting the SLO with broadly supported international sustainability targets, such as the Sustainable Development Goals (SDGs) [18,49].

## Conclusion

The findings we have presented show that the way in which the SLO is enacted is characterized by a limited conception of stakeholder engagement and by insufficient attention towards the local, regional and global, social and environmental impacts of extractive operations. Multiple biases in the conceptualization and enactment of the SLO hinder meaningful engagement of stakeholders and prevent actual changes in extractive operations [27]. Specifically, we have seen: (1) a tendency to privilege well organized and local communities and groups over marginalized, ‘dissident’ or non-local stakeholders; (2) a concept of engagement that restricts opportunities for two-way dialogue and long-term, equal and meaningful deliberation; and (3) a failure to represent the actual nature and impacts of the operations at stake.

Drawing on the more critical literature that recognizes and reflects on these biases, we suggest to widen the scope of the SLO concept by: (1) including a diversity of local and non-local stakeholders; (2) improving the ability of these stakeholders to actively engage by creating long-term spaces for active and meaningful deliberation and co-production; and (3) enabling the coproduction of knowledge about impacts and risks of extractive operations, and incorporating international sustainability targets. What this comes down to is the creation of spaces for meaningful political deliberation across local-international scales that include diverse stakeholders and involve the co-production of knowledge about the diverse impacts and implications for extractive operations. This requires that extractive sites are connected to wider sustainability issues including pollution and emissions, patterns of production and consumption, and (global) inequality [50,51].

Taken together, these suggestions imply a broader conception of legitimacy that includes not only the acceptance of relevant stakeholders but also the wider justifiability of extractive operations which foregrounds the importance of including diverse values, arguments and knowledge claims in SLO deliberations. This broader

concept of legitimacy will require SLO scholarship to go beyond problematic approaches to engagement that primarily focus on acceptance by local stakeholders. These approaches have been criticized in studies of participation beyond the SLO [52–54], including studies that focus on the exclusion of indigenous and traditional communities [55]. Although they remain common in research and practice, they are limited in their scope. Specifically, they prevent the explicit consideration of the wider political economic context in which extractive operations are situated and how this limits the inclusion of the diverse values and interests that are at stake, enables the perpetuation of power inequalities, and prevents the establishment of political spaces for equal and open deliberation about the desirability of extractive operations [20,56].

To conclude, it is important that the SLO literature adopts a broader concept of legitimacy in its assessment and evaluation of extractive operations [11,19,20] and that it engages with other scholarship on participation and engagement, and on the political economy of extractivism. This will contribute to a fuller understanding of how and under what conditions extractive operations may meet local and global requirements for subsistence and human and ecological well-being and it will strengthen the conceptualization, evaluation and enactment of legitimacy in the SLO.

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## Conflict of interest statement

Nothing declared.

## Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.cosust.2020.11.002>.

## References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest
  - of outstanding interest
1. Thomson I, Boutilier RG: *Modelling and measuring the social license to operate: fruits of a dialogue between theory and practice*. Downloaded on June 18, 2020, on <https://sociallicense.com/publications/Modelling%20and%20Measuring%20the%20SLO.pdf>, 2011.
  2. Boutilier RG: **Frequently asked questions about the Social Licence to Operate**. *Impact Assess Project Appraisal* 2014, **32**:263–272.

3. Prno J, Slocombe D: **Exploring the origins of social license to operate in the mining sector: perspectives from governance and sustainability theories.** *Resour Policy* 2012, **37**:346-357.
4. Jijelava D, Vanclay F: **How a large project was halted by the lack of a Social Licence to Operate: testing the applicability of the Thomson and Boutilier model.** *Environ Impact Assess Rev* 2018, **73**:31-40.
5. Hanna P, Vanclay F, Langdon EJ, Arts J: **Conceptualizing social protest and the significance of protest action to large projects.** *Extr Ind Soc* 2016, **3**:217-239.
6. Mitchell P: *Top 10 Business Risks and Opportunities – 2020. Ernst & Young Global Mining & Metals Leader.* . Downloaded on June 14, 2020, on [https://www.ey.com/en\\_gl/mining-metals/10-business-risks-facing-mining-and-metals](https://www.ey.com/en_gl/mining-metals/10-business-risks-facing-mining-and-metals) 2019.
7. Voyer M, Van Leeuwen J: **'Social license to operate' in the blue economy.** *Resour Policy* 2019, **62**:102-113 <http://dx.doi.org/10.1016/j.resourpol.2019.02.020>  
The authors demonstrate how conflicting underlying values challenge SLO at a cross-sectoral scale requires engaging a broader range of societal and political actors in debates around ocean governance than only at the local level.
8. Vanclay F: **Principles to gain a Social Licence to Operate for green initiatives and biodiversity projects.** *Curr Opin Environ Sustain* 2017, **29**:48-56.
9. Owen J, Kemp D: **Social licence and mining: a critical perspective.** *Resour Policy* 2013, **38**:29-35 <http://dx.doi.org/10.1016/j.resourpol.2012.06.016>.
10. Harvey B, Bice S: **Social impact assessment, social development programmes and Social Licence to Operate: tensions and contradictions in intent and practice in the extractive sector.** *Impact Assess Project Appraisal* 2014, **32**:327-335.
11. De Jong W, Humphreys D: **A failed Social Licence to Operate for the neoliberal modernization of Amazonian resource use: the underlying causes of the Bagua tragedy of Peru.** *Forestry* 2016, **89**:552-564 <http://dx.doi.org/10.1093/forestry/cpw033>.
12. Demuijnck G, Fasterling B: **The Social Licence to Operate.** *J Bus Ethics* 2016, **136**:675-685.
13. Moffat K, Lacey J, Zhang A, Leipold S: **The Social Licence to Operate: a critical review.** *Forestry* 2016, **89**:477-488 <http://dx.doi.org/10.1093/forestry/cpv044>.
14. Owen J: **Social licence and the fear of mineras interruptus.** *Geoforum* 2016, **77**:102-105.
15. Lansbury Hall N, Jeanneret T: **Social Licence to Operate: an opportunity to enhance CSR for deeper communication and engagement.** *Corporate Commun Int J* 2015, **20**:213-227 <http://dx.doi.org/10.1108/CCLJ-01-2014-0005>.
16. Parsons R, Lacey J, Moffat K: **Maintaining legitimacy of a contested practice: how the minerals industry understands its 'Social Licence to Operate'.** *Resour Policy* 2014, **41**:83-90.
17. Gehman J, Lefsrud LM, Fast S: **Social License to Operate: legitimacy by another name?** *Can Public Adm* 2017, **60**:293-317.
18. Pedro A, Ayuk ET, Bodourogrou C, Milligan B, Ekins P, Oberle B: **Towards a sustainable development licence to operate for the extractive sector.** *Miner Econ* 2017, **30**:153-165 <http://dx.doi.org/10.1007/s13563-017-0108-9>.
19. Beetham D: **Max Weber and the legitimacy of the modern state.** *Anal Kritik* 1991, **13**:34-45.
20. Parkinson J: **Legitimacy problems in deliberative democracy.** *Political Stud* 2003, **51**:180-196.
21. McCullough A: *The Legitimacy of States and Armed Non-state Actors: Topic Guide.* . Downloaded on June 14, 2020, on GSDRC Birmingham, UK: University of Birmingham; 2015 In: <http://www.gsdrc.org/wp-content/uploads/2015/08/Legitimacy.pdf>.
22. Moffat K, Zhang A: **The paths to Social Licence to Operate: an integrative model explaining community acceptance of mining.** *Resour Policy* 2014, **39**:61-70 <http://dx.doi.org/10.1016/j.resourpol.2013.11.003>.
23. Filer C, Gabriel J: **How could nautilus minerals get a Social Licence to Operate the world's first deep sea mine?** *Mar Policy* 2018, **95**:394-400 <http://dx.doi.org/10.1016/j.marpol.2016.12.001>.
24. Bowles P, MacPhail F, Tetreault D: **Social licence versus procedural justice: competing narratives of (il)legitimacy at the San Xavier mine, Mexico.** *Resour Policy* 2019, **61**:157-165 <http://dx.doi.org/10.1016/j.resourpol.2019.02.005>  
Illustrated with a case study of a Mexican mine, authors show how competing narratives of legitimacy determine who to consult, how the operation is assessed, and how it influences company-state relations.
25. Nyembo N, Lees Z: **Barriers to implementing a social license to operate in mining communities: a case study of peri-urban South Africa.** *Extr Ind Soc* 2020, **7**:153-160 <http://dx.doi.org/10.1016/j.exis.2020.01.007>.
26. Ofori JJY, Ofori DR: **Earning a social license to operate: perspectives of mining communities in Ghana.** *Extr Ind Soc* 2019, **6**:531-541 <http://dx.doi.org/10.1016/j.exis.2018.11.005>.
27. Brueckner M, Eabrasu M: **Pinning down the social license to operate (SLO): the problem of normative complexity.** *Resour Policy* 2018, **59**:217-226 <http://dx.doi.org/10.1016/j.resourpol.2018.07.004>.
28. Baines J, Edwards P: **The role of relationships in achieving and maintaining a social licence in the New Zealand aquaculture sector.** *Aquaculture* 2018, **485**:140-146 <http://dx.doi.org/10.1016/j.aquaculture.2017.11.047>.
29. Mercer-Mapstone L, Rifkin W, Louis W, Moffat K: **Power, participation, and exclusion through dialogue in the extractive industries: who gets a seat at the table?** *Resour Policy* 2019, **61**:190-199 <http://dx.doi.org/10.1016/j.resourpol.2018.11.023>  
This article shows that existing stakeholder engagement frameworks lack inclusivity and processes to distribute power among stakeholders, for example, through capacity building in communication skills; dealing with conflict; general education; and technical information.
30. Matebesi S, Marais L: **Social licensing and mining in South Africa: reflections from community protests at a mining site.** *Resour Policy* 2018, **59**:371-378 <http://dx.doi.org/10.1016/j.resourpol.2018.08.009>.
31. Szablowski D: **"Legal enclosure" and resource extraction: territorial transformation through the enclosure of local and indigenous law.** *Extr Ind Soc* 2019, **6**:722-732 <http://dx.doi.org/10.1016/j.exis.2018.12.005>.
32. Vanclay F, Hanna P: **Conceptualizing company response to community protest: principles to achieve a social license to operate.** *Land* 2019, **8**:101 <http://dx.doi.org/10.3390/land8060101>  
This article stipulates that local unrest and protest can be warning signs that point towards specific actions to be taken. Authors also offer plenty of practical guidance to do so.
33. Luke H, Emmanouil N: **'All dressed up with nowhere to go': navigating the coal seam gas boom in the Western Downs region of Queensland.** *Extr Ind Soc* 2019, **6**:1350-1361 <http://dx.doi.org/10.1016/j.exis.2019.11.003>.
34. Lytle M, Hitch M: **Miners and mendicants: a cautionary tale.** *Extr Ind Soc* 2019, **6**:498-503 <http://dx.doi.org/10.1016/j.exis.2019.02.005>  
Authors demonstrate the importance for the resource developer to influence governments to provide basis social infrastructure and to assist in creating local social assets rather than short-term services.
35. Gunster S, Neubauer RJ: **(De) legitimating extractivism: the shifting politics of social licence.** *Environ Politics* 2019, **28**:707-726 <http://dx.doi.org/10.1080/09644016.2018.1507290>  
The authors demonstrate the counter-hegemonic potential of the SLO to further democratic principles in extractive contexts. The SLOs very vagueness may facilitate the contestation that is essential for democracy.
36. Kelly R, Fleming A, Pecl GT: **Social licence for marine conservation science.** *Front Mar Sci* 2018, **5**:1-6 <http://dx.doi.org/10.3389/fmars.2018.00414>.
37. Mather C, Fanning L: **Social licence and aquaculture: towards a research agenda.** *Mar Policy* 2019, **99**:275-282 <http://dx.doi.org/10.1016/j.marpol.2018.10.049>.



38. Leena S, Karina U, Jungsberg L: **Social license to operate in the frame of social capital exploring local acceptance of mining in two rural municipalities in the European North.** *Resour Policy* 2019, **64** <http://dx.doi.org/10.1016/j.resourpol.2019.101498>.
39. Van De Biezenbos K: **The rebirth of social licence.** *McGill J Sustain Dev Law* 2019, **14**  
 • The author dissects different uses of SLO and distinguishes between normative and descriptive uses. The author dismisses SLO as a normative concept: the watering down of the meaning of SLO may distract from real community involvement.
40. Walsh KB, Haggerty JH: **Social license to operate during Wyoming's coalbed methane boom: implications of private participation.** *Energy Policy* 2020, **138**:211-217.
41. Poncian J: **When government commitment meets community proactiveness: governing gas and community engagement in Tanzania.** *Energy Res Social Sci* 2019, **52**:78-90 <http://dx.doi.org/10.1016/j.erss.2019.01.012>  
 • The author shows how present bottom-up activity did not translate into engagement in local governance but instead that participation in non-renewable resource governance is marginalised by governmental manipulation.
42. Taarup-Esbensen J: **Managing risk through dependency: how do mining MNEs strategise to legitimise business continuity?** *Extr Ind Soc* 2019, **6**:489-497 <http://dx.doi.org/10.1016/j.exis.2019.02.003>.
43. Demajorovic J, Lopes JC, Santiago ALF: **The Samarco dam disaster: a grave challenge to social license to operate discourse.** *Resour Policy* 2019, **61**:273-282 <http://dx.doi.org/10.1016/j.resourpol.2019.01.017>.
44. Saenz C: **The context in mining projects influences the corporate social responsibility strategy to earn a Social Licence to Operate: a case study in Peru.** *Corporate Social Responsib Environ Manage* 2018, **25**:554-564 <http://dx.doi.org/10.1002/csr.1478>.
45. Zhang A, Measham TG, Moffat K: **Preconditions for social licence: the importance of information in initial engagement.** *J Clean Prod* 2018, **172**:1559-1566 <http://dx.doi.org/10.1016/j.jclepro.2017.10.323>.
46. Hampton JO, Teh-White K: **Animal welfare, social license, and wildlife use industries.** *J Wildl Manage* 2019, **83**:12-21 <http://dx.doi.org/10.1002/jwmg.21571>.
47. Kelly R, Fleming A, Pecl GT, Richter A, Bonn A: **Social license through citizen science: a tool for marine conservation.** *Ecol Soc* 2019, **24** <http://dx.doi.org/10.5751/ES-10704-240116>.
48. Fraser J, Kunz N, Batdorj B: **Can mineral exploration projects create and share value with communities? A case study from Mongolia.** *Resour Policy* 2019, **63**:1.
49. Panda SS, Sangle S: **An exploratory study to investigate the relationship between social license to operate and sustainable development strategies.** *Sustain Dev* 2019, **27**:1085-1095.
50. Hitchcock Auciello B: **A Just(ice) Transition is a Post-extractive Transition. Centering the Extractive Frontier in Climate Justice.** London: War on Want & London Mining Network; 2019.
51. IRP (2019). **Global Resources Outlook 2019: Natural Resources for the Future We Want.** Oberle B, Bringezu S, Hatfield-Dodds S, Hellweg S, Schandl H, Clement J, and Cabernard L, Che N, Chen D, Droz-Georget H, Ekins P, Fischer-Kowalski M, Flörke M, Frank S, Froemelt A, Geschke A, Haupt M, Havlik P, Hüfner R, Lenzen M, Lieber M, Liu B, Lu Y, Lutter S, Mehr J, Miatto A, Newth D, Oberschelp C, Obersteiner M, Pfister S, Piccoli E, Schaldach R, Schüngel J, Sonderegger T, Sudheshwar A, Tanikawa H, van der Voet E, Walker C, West J, Wang Z, Zhu B. A Report of the International Resource Panel. Nairobi, Kenya: United Nations Environment Programme.
52. Mbeche R: **Climbing the ladder of participation: symbolic or substantive representation in preparing Uganda for REDD+?** *Conserv Soc* 2017, **15**:426-438 [http://dx.doi.org/10.4103/cs.cs\\_16\\_100](http://dx.doi.org/10.4103/cs.cs_16_100).
53. Pelletier J, Horning N, Laporte N, Achu R, Goetz S: **Land use policy anticipating social equity impacts in REDD + policy design: an example from the Democratic Republic of Congo.** *Land Use Policy* 2018, **75**:102-115 <http://dx.doi.org/10.1016/j.landusepol.2018.03.011>.
54. Skutsch M, Turnhout E: **How REDD + is performing communities.** *Forests* 2018, **9**:638 <http://dx.doi.org/10.3390/f9100638>.
55. Ruckstuhl K, Thompson-Fawcett M, Rae H: **Māori and mining: indigenous perspectives on reconceptualising and contextualising the Social Licence to Operate.** *Impact Assess Project Appraisal* 2014, **32**:304-314 <http://dx.doi.org/10.1080/14615517.2014.929782>.
56. Gaventa J: **Finding the spaces for change: a power analysis.** *IDS Bull* 2006, **37**:23-33 <http://dx.doi.org/10.1111/j.1759-5436.2006.tb00320.x>.