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Open development – A focus on organizational norms and power redistribution

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SIRCA III – WHITE PAPER

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Anita Gurumurthy & Parminder Jeet Singh

Abstract

Open development is the employment of ICT-enabled 'openness' towards an improved distribution of power across the intended community of impact. Typically, ICT-based affordances rapidly transform the organisational context of development practice, enhancing organisational outcomes. But affordances cannot be mistaken for norms; the interplay between affordances and norms, and crystallisation of new norms, is critical for moving towards appropriate organisational outcomes. Further, improved distribution of power must occur not merely in the proximity of the '(networked) organising space' but across the intended community of impact. The continuum between the organising and community spaces in 'open initiatives' must be examined critically, especially with regard to governance and distribution of power. Empirical research to trace how norms related to development outcomes are built and sustained in open organisations, and how improved distribution of power in the wider community of impact is caused or not, would help understand and enhance the impact of 'open' practices and organisations on development.

1. Introduction

Development, defined variously¹, in economic terms as improvement in living conditions, or subjectively as expansion of life choices, is well recognised today as consisting in sustained institutional change². Any study of development thus needs to focus on its institutions. However, literature on 'ICTs and development' has focused primarily on the study of particular techno-social milieus – tracing 'development impacts' of specific uses of technologies³. The idea of 'open development' is an attempt within this wider field towards larger abstractions and generalisations about the social consequences of ICTs.

The theory of openness in development or 'open development' is still emergent. A study of the writings on the subject and a scrutiny of practices

1 Sachs, W. (2010). *The Development Dictionary: A guide to Knowledge and Power*, London and New York: Zed Books.

2 Nayyar, D. (2007). *Institutional change and economic development* (pp. 17-34). H. J. Chang (Ed.). Tokyo, New York, Paris: United Nations University Press.

3 Avgerou, C. (2010). *Discourses on ICT and development*. *Information Technologies & International Development*, 6(3), pp-1., http://eprints.lse.ac.uk/35564/1/Discourses_on_ICT_and_development_%28LSERO%29.pdf. Retrieved 25 February 2016.

seen as 'cases' of open development, bring up two key elements that describe open development - greater access to resources (that can be easily replicated digitally), and new forms of organisations⁴ (characterised by greater boundary diffuseness in existing organisations and also including entirely new self-organising forms⁵). Both these elements, *prima facie*, seem to suggest positive consequences for people and communities, but a closer analysis reveals that it may not necessarily be so. ICT-based *new organisational forms* have given monopolistic Internet companies access to the free labour of people and their private information, the two principal factors of production in the digital economy⁶.

Also, in theoretical terms, the two ideas of informational networks and resource sharing processes they are predicated upon may invite us to examine open development as deriving from the dialectic interaction between organisational structure/form and digital resource sharing practices. As community networking literature shows, community networks are both communities and networks, that is, they embody attributes of “amodern hybrids” of the social and the technical, and of hierarchy and heterarchy⁷. The literature on techno-social assemblages also exhorts thinking about emerging norms in new ways. Therefore, it would be necessary to examine open development through such epistemic lenses for normative explorations of development as non-instrumental, in the sense of not being a particular organisational form or concerning particular goals of sharing. Open development may well be a third hybrid category encompassing both networked organizational architecture and egalitarian resource-sharing practices reflecting the norms for human wellbeing, commensurate with the challenges and aspirations of the contemporary digital moment.

Existing literature in the area by and large presents the idea of 'openness' or 'open development' as a normative concept – around deploying technological affordances for furthering values like expanding access to information'⁸,

4 Smith, M. L., Reilly, K. M., & Benkler, Y. (2013). Open development: Networked innovations in international development. MIT Press.
<http://www.idrc.ca/EN/Resources/Publications/openebooks/541-1/index.html>. Retrieved 25 February 2016.

5 Foster, P. A. (2014). The open organization: A new era of leadership and organizational development. Ashgate Publishing, Ltd.

6 Fuchs, C. (2011). The political economy of privacy on Facebook, Research Paper #9, <http://www.sns3.uti.at/wp-content/uploads/2010/09/The-Internet-Surveillance-Research-Paper-Series-9-Christian-Fuchs-The-Political-Economy-of-Privacy-on-Facebook.pdf>. Retrieved 25 February 2016.

7 Arnold, M. (2004). Theorizing Community and Networks. Community Network Analysis (CNA) Conference, Brighton, UK.
<http://www.cmis.brighton.ac.uk/Research/seake/cna/conference/proceedings/docs/Michael%20Arnold.pdf>.

8 World Bank (2015). Open Development, <http://www.worldbank.org/open/>. Retrieved 25 February 2016.

'participation'⁹ and 'freedom of expression'¹⁰. It is extremely unlikely that an activity with a 'bad outcome' would get cited as a case of open development. While different kinds of positive impacts of ICTs seem to get lumped under 'open development', as bearing a somewhat vague 'family resemblance'¹¹, a well-developed, overarching theory seems to elude the discussion. Further, current theoretical work also exhibits an ambivalence; sometimes taking recourse to a positivist approach, asserting that 'openness' may not always be 'necessarily good'¹². Literature on openness¹³ also tends to conflate networked organisational systems with 'open' ones.

In the emerging body of knowledge, we see the idea of open development thus shifting uneasily between a positivist tradition more associated with 'network theory' and its elucidation of networked organisational systems¹⁴, and a normative position discernible in traditional development literature¹⁵.

Theoretical rigour demands that a concept is either clearly positivist, as a descriptive device to understand what is happening, or specifically normative, as a judgment about what is happening. Since the intent of most proponents of open development appears to be normative, from a field-building perspective, the idea of 'open development' requires to be claimed as unequivocally normative. Appropriate theory-building also needs explication of the concept for its specific normative import and content, so that what can be called 'open development' gets signified in unambiguous terms.

A tentative definition of 'open development'

We would like to define 'open development' as the employment of ICT-enabled "openness" towards an improved distribution of power across the intended community of impact. Following Smith and Elder (2010), we can define "openness" as "a way of organising social activities that favours: (a)

9 Kilamo, T. (2014). Essential properties of Open Development Communities: Supporting Growth, Collaboration and Learning,

<http://dspace.cc.tut.fi/dpub/handle/123456789/22140>. Retrieved 25 February 2016.

10 Hercheui, M.D., Nicholson, B., and Ameripour, A. (2012). Theorising Open Development through an institutional lens: A study of Iranian online interactions, http://link.springer.com/chapter/10.1007/978-3-642-33332-3_32. Retrieved 25 February 2016.

11 Davies, T. (2013). What is open development?, <http://www.timdavies.org.uk/2012/09/10/what-is-open-development/>. Retrieved 25 February 2016.

12 Reilly, K. and Smith, M. (2013). *The emergence of Open development in a network society*, in Smith, M.L. and Reilly, K.M.A. eds., *Open Development: Networked innovations in international development*, <http://www.idrc.ca/EN/Resources/Publications/Pages/IDRCBookDetails.aspx?PublicationID=1274>. Retrieved 25 February 2016.

13 *ibid*

14 Castells, M. (1996). *The Rise of the Network Society*, Malden, MA: Wiley-Blackwell.

15 This would include conceptions of human development, the idea of development as freedom, community development, participatory development and so on.

universal over restricted access, (b) universal over restricted participation and (c) collaborative over centralized production¹⁶.

However, we would like to specifically focus on the interactive and relational aspects of 'openness' as developed in our paper on “Establishing Public-ness in the Network: New Moorings for Development – A Critique of the Concepts of Openness and Open Development” in the book “Open Development: Networked Innovations in International Development”, Matthew L. Smith and Katherine M. A. Reilly:

“We take openness to mean, broadly, decreased constraints on social interactions. The principal social impact of new ICTs stems from their ability to reduce the cost, and improve the effectiveness, of mediated social transactions and interactions. Thus, in the emerging information society, a much more complex array of transactions is possible outside the boundaries of existing organizations and institutions. These can take place in relatively unstructured or flexible ways.ICT-mediated social interactions can significantly strain the dominant vertical-hierarchical institutional paradigm, pushing it in the direction of more horizontal and flexible social structures. This shift holds out the promise of a more equitable distribution of power, an idea that informs the typical technocratic world-view. But such a promise cannot simply be taken at face value.”

Our above definition of 'open development' has two elements; one consists in organising the employment of ICT-based openness towards certain outcomes. We call this the 'organising space' of any open development initiative. Then there is the intended community of impact, which can be called the 'community space'. It is the 'organising space' that typically orchestrates the application of ICTs and other resources, and their governance. The outcomes or benefits of such organisation are typically oriented to a larger 'community space'.

One significant feature of 'open initiatives' is that there is a certain continuum between the 'organising space' and the 'community space'. While this continuum as an expression of openness is important to recognise and conceptualise, it is also important to critically examine it with regard to governance and the distribution of power.

Openness as affordance and norm

Claiming 'open development' as a normative idea calls for a good understanding of the new organisational forms that arise with new ICTs. In organisation theory, dynamic organisational systems are seen as a

16 Smith, M. L. and Elder, L. (2010). Open ICT ecosystems transforming the developing world. *Information Technologies & International Development*, 6(1), 65–71

conjunction of norms and affordances¹⁷. Affordances refer to the possibilities of action afforded by the technical environment, and norms are the attendant constraining rules of behaviour. While there may exist norms for encouraging action or behaviour of a particular kind, the actual action will be limited by the affordances available. Conversely, the mere existence of affordances may not lead to action in the absence of necessary norms.

Digital technologies present organisations with new affordances. Understandably, any period of rapid technological flux is characterised by preponderant attention to the possibilities presented by new affordances. With new organisational affordances, there can be a positive shift in the performance of certain actions, even though the norms corresponding to such actions remain unchanged (or change in the opposite direction). For instance, the introduction of digital technologies may lead to an increase in the action/practice of 'sharing' within and across an organisational system, which may not necessarily imply a norm shift in terms of a higher value placed on sharing. Further, the normative aspect can be mistaken to be deterministically changing, as new affordances lead to more/better organisational action. More acts of sharing in themselves can be mistaken for a greater acceptance of the value of sharing. The normative aspect of the organisational fibre can thus get obscured as a vector in its own right; a key determinant of organisational actions. We posit that the main blind spot of theories of open development, is an under-emphasis of the normative side, as new affordances materialising in action (and often valuable to the organisational system) tend to be seen as representing the entirety of the content of openness.

As ICTs effect a shift in the organisational equilibrium, some concomitant changes to norms are only to be expected. Such shifts may not, however, be necessarily positive. For instance, in any given setting, ICTs are as likely to be used for greater control as for more sharing. Actual normative shifts are a rather complex phenomena, influenced by a large number of social, economic, political and cultural factors.

One thing can however be said - that times of flux do tend to cause a certain 'normative fluidity'. Such indeterminacy, while being 'disruptive' in a positive sense (as is often asserted in the 'openness' literature), can also be problematic for organisational performance. Further, it can be used as a smokescreen to push forward norms that may be undesirable. Normative fluidity, in its negative implications, is evidenced in what has been described as 'open-washing'¹⁸, taking from the idea of 'greenwashing'. Ironical as it may sound, both 'Wall Street' and 'Occupy Wall Street' are founded on concepts of

17 Stamper, R. and Liu, K. (1994). *Organisational Dynamics, Social Norms and Information Systems*, *Proceedings of the 27th Annual Hawaii International Conference on System Sciences*, <http://doc.utwente.nl/21867/1/00323455.pdf>. Retrieved 25 February 2016.

18 Weller, M. (2014). *The Battle for Open: How Openness won and why it doesn't feel like a victory*, <http://www.ubiquitypress.com/site/books/download/11/167/battle-for-open/>. Retrieved 25 February 2016.

open society and open systems¹⁹! To take another handy example, the term 'open Internet' (used for net neutrality) is co-opted by telecom companies who claim that by making available both a net-neutral Internet and one which is not, they are contributing to openness, as in increasing consumer choice! Only an appropriate analysis of how and where power actually shifts, once net neutrality is forfeited, can reveal the normative implications of net neutrality or an open Internet²⁰. It is therefore important to examine how norms related to positive development outcomes are formed and sustained in an 'open organisation', or in one that exhibits increased openness.

Openness as decentralisation of power

Access to ICT resources or collaboration and participation in open, ICT-mediated processes, may or may not result in empowering outcomes for all²¹. What may be inferred from this is that positive outcomes from access, participation or collaboration in open environments seem to accrue from a greater distribution of power, something that the evidence also points to²². Among the qualities of open development therefore, more *equal* access to resources, or the decentralisation of control and power, can be construed as a key norm.

Assessing openness through an institutional analysis of power – examining if and how power is centralised/decentralised across the system, would therefore clarify how such openness has contributed to positive change. Decentralisation of power can thus be seen as a useful characteristic and an indicator of open development, denoting a 'super norm' that benchmarks the other positive qualities of openness. Marking this quality as the key determinant of openness is particularly appropriate if development at its core is to be considered a political project.

Accounts of open development would be incorrect in assuming that the contestation between incumbent vested interests attempting to preserve status quo and 'outsiders' seeking a share of power, is the sole axis of power shift in ICT-mediated organisational change. It is eminently possible that other kinds of vested interests who stand to gain from the weakening of a particular organisation or institution actively seek to 'open' it up. How globally networked

19 Cramer, F. (2012). *Openness as political ideology: Talk*, <http://openhedge.data.ie/?p=658>. Retrieved 25 February 2016.

20 Powell, A. (2009). *Lessons from the Net Neutrality Lobby: Balancing Openness and Control in a networked society*, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1810702. Retrieved 25 February 2016.

21 Singh, P. J., & Gurumurthy, A. (2014). *Establishing Public-ness in the Network: New Moorings for Development—A Critique of the Concepts of Openness and Open Development*. *Open Development: Networked Innovations in International Development*, 173. <http://www.idrc.ca/EN/Resources/Publications/Pages/IDRCBookDetails.aspx?PublicationID=1274>. Retrieved 25 February 2016.

22 Smith, M.L. and Reilly, K.M.A. eds., (2013). *op cit*.

production systems work towards undermining the regulatory power of the state is a good instance of such a dynamic²³.

In the ICT arena, we are witness to Internet companies hijacking valuable 'openness activism' initiatives to further their narrow interests. Memes of net neutrality, resistance to intellectual property in the digital realm and Internet freedom are deployed to target the telcos, the traditional content industry and state agencies respectively. Such contestations in the digital arena between pre- and post-Internet corporations, and others in relation to free trade regimes in digital goods and services, frameworks of intellectual property, economics of data, and so on, constitute vital sites of inquiry for open development. A project to build open development theory therefore, demands robust frameworks that can explore who gains and who loses.

It is also evident from the above discussion that rather than just examine power distribution in close vicinity or proximity of a development initiative, we need to look at such redistribution across the entire intended community of impact. Many 'open initiatives' do show results of greater democratisation of power in close proximity of the initiative, but the nature of such redistribution may not only fall rapidly as we move away from the 'organising core' to the wider networks of the 'community space', but may even become unfavourable. It may be wrong to assume that with time, the positive redistribution of power in close proximity to the 'node' of new activity – to begin using network society terminology – would in a linear way reproduce over large distances from the node as well. Whether it does or not needs to be an issue for empirical investigation.

To summarise, in order to claim theoretical rigour, a theory of open development needs to pursue four interconnected directions:

1. Focus simultaneously on the affordances and normative aspects of ICT-induced organisational change.
2. Claim 'open development' unequivocally as a normative category, as something desirable, and articulate the normative qualities of open development in theoretically productive ways, developing measures of such qualities.
3. Explore 'decentralisation of power' as a key characteristic and indicator of 'openness of development'.
4. Specifically examine power redistribution across the whole intended community of impact, making a distinction between proximate impact and overall impact.

Research Questions

The proposed framework attempts to address two distinct, but interrelated questions on open development:

23 *Hardt, M., & Negri, A. (2001). Empire. Cambridge, MA: Harvard University Press.*

- As ICTs transform organisational contexts through new affordances that catalyse new actions, what are the accompanying changes to organisational norms? How are new norms negotiated in the dialectic between technological affordances and organisational practices? What assumptions and interpretations about technology and development underpin such normative flux?
- How can 'open development', in different organisational and institutional contexts, be scrutinised for decentralisation/centralisation of power? What frameworks of analysis are most appropriate for this purpose?

Possible directions for research that may be undertaken under this framework

In order to explore the above research questions in this theory testing phase envisaged under SIRCA-3, a multi-disciplinary approach would be necessary. While much of the work would be desk-based, field-based observations will enhance the veracity of findings. Ideating with scholars working on allied research areas and key informants will be useful to inform and refine the framework.

Focus on 'organising' and 'community' spaces

The research framework describes two complementary concepts – 'organising space' and 'community space'. In any open development initiative that exhibits elements of networked organisation, organisational participation extends beyond typical organisational boundaries. A continuum between the 'organising space' and its impact ecology, or 'community space', may, therefore, be assumed. Development network sociologies normally manifest in assemblages of varying 'thickness' across the network, making for uneven network topology. The network is likely to have nodes from where much of the initiative is controlled and orchestrated. On one extreme, we do find formations where the 'organising' and 'community' spaces overlap to a great degree, as in the case of self-governing open source software communities. In other cases, an initiative with overlapping 'organising' and 'community' spaces may later re-orient its activity to include a wider community of impact; for instance, a teachers' online network creating collaborative content for use by the group may open up the content for larger public access. This would result in a graded 'organising space-community space' continuum. There are also cases where the initiative may be designed from the beginning with graded participation, reducing as one moves from the central organising nodes towards the community peripheries. What we see therefore is that organisational factors (design, evolution and norm development) are bound to shape the flow and distribution of power in the networked development initiative.

Within the 'organising space', it would be important to study how substantive development related norms are formed and sustained in the open

development initiative under consideration. As emphasised, the technical possibilities of openness made available by digital networks (new affordances) are not a substitute for norms that guide 'what needs to be done and for whom'. It is possible that openness in networked development initiatives may weaken the traditional means by which organisations develop and sustain norms, owing to increased reliance on virtual interactions and organisational loose-coupling²⁴.

On the 'community space' side, it is important to assess how distribution of power occurs across the intended community of impact. As actors in the close vicinity of the 'organising space' learn to 'operate' openness, they are likely to benefit. How power gets distributed from this network of proximity to the peripheries of the intended community of impact is another key question to examine for understanding 'open development'.

Organisational theory

The question of norms development in open development initiatives will need to be studied by employing different concepts of institutional and organisational theories. It will be important to examine the interplay of organisational affordances and norms, with a focus on the changes induced by ICTs, thus mapping:

- how norms, rules and practices – the key elements of an institutional ecosystem – change as ICTs play out in specific organisational/institutional contexts;
- what consequences have emerged from the normative fluidity; and whether and how they have impacted the organisation's/institution's capacities to meet its objectives.

Literature on organisational theory and design in the past two decades has pointed to the processes of 'organisational reconfiguration' through 'open systems'. The idea of a 'learning organisation'²⁵ (as opposed to an efficient one) has been advanced in this regard. The way norms, rules and practices are reconfigured in a networked organisational ecosystem and how such a process defines and redefines the organisation's substantive goals would constitute an important point of inquiry.

Gaventa's power cube analysis

The issue of power distribution across the 'community space' of the development initiative can be examined through different methodologies. Two frameworks that can be suitably adopted are 'power cube analysis' and

24 Orton, J. D., & Weick, K. E. (1990). Loosely coupled systems: A reconceptualization. *Academy of Management Review*, 15(2), 203-223. http://dimetic.dime-eu.org/dimetic_files/OrtonWeickAMR1990.pdf

25 Edmondson, A., & Moingeon, B. (1998). From organizational learning to the learning organization. *Management Learning*, 29(1), 5-20.

'network theory of power' which are briefly outlined, respectively, in this section and the next one.

The power cube analysis developed by John Gaventa²⁶ proposes three intersecting axes: form, space and level. Each of these axes has three variations. The form can vary from visible, to hidden, to invisible. Then there are closed, invited and claimed spaces. The levels include local, national and global. But 'levels' can be seen in other ways as well, as also other axes. This model, mostly used to assess participation in projects and political spaces, is likely to be very useful in the context of open development initiatives to assess impacts for real participation. A good primer on this approach can be found at <http://www.powercube.net/analyse-power/what-is-the-powercube/>.

Castells' network theory of power

Castells' network theory of power is especially suited for networked forms of organisations that are in focus for this research framework. In his paper on 'A network theory of power', Castells describes how, in the network society, power is exercised through networks. There are four different forms of power under these social and technological conditions:

- “1. Networking Power: the power of the actors and organisations included in the networks that constitute the core of the global network society over human collectives and individuals who are not included in these global networks.*
- 2. Network Power: the power resulting from the standards required to coordinate social interaction in the networks. In this case, power is exercised not by exclusion from the networks but by the imposition of the rules of inclusion.*
- 3. Networked Power: the power of social actors over other social actors in the network. The forms and processes of networked power are specific to each network.*
- 4. Network-making Power: the power to program specific networks according to the interests and values of the programmers, and the power to switch different networks following the strategic alliances between the dominant actors of various networks.*

Counterpower is exercised in the network society by fighting to change the programs of specific networks and by the effort to disrupt the switches that reflect dominant interests and replace them with alternative switches between networks²⁷”.

²⁶ Gaventa, J. (2005). Reflections on the uses of the 'power cube' approach for analyzing the spaces, places and dynamics of civil society participation and engagement. Prepared for Dutch CFA Evaluation 'Assessing Civil Society Participation as Supported In-Country by Cordaid, Hivos, Novib and Plan Netherlands'.

²⁷ Castells, M. (2007). Communication, power and counter-power in the network society. *International journal of communication*, 1(1), 29.

One can see these forms of powers being exercised by different actors in any open development initiative, which would be useful to evaluate and draw conclusions from.

Researchers interested in our research framework are also welcome to propose other methodologies for studying norms development and power distribution.

An illustration of what kind of issues may be researched

We would encourage researchers to pick any organisational site that they think lends itself to scrutiny under this framework. This may be an organisation that has emerged from the very possibilities of the networked form or any other, including hybrid forms. To help potential researchers understand this framework better, we provide below a rough illustration of how, at the site of choice, the researcher can unpack the research questions. We take the example of Wikipedia that has been the subject of much research.

To study the first research question, Wikipedia's processes of establishing and sustaining development related norms will need to be explored. This will mean looking at the interplay of the new ICT enabled affordances and norms. A whole set of elements needs to be analysed to see how substantive, development related norms and outcomes emerge – the founding and working principles followed in Wikipedia groups, discussions on Wikipedia's internal lists, the nature of contestations, their resolution, and so on. It could, for instance, be investigated whether there is a core focus not only on including enough women contributors, but also if the reach and use of Wikipedia content includes women and other, non-normative, genders equitably. And if it does not, whether there is a strong effort to investigate what should be done about it. This direction of study would enable inferences about the nature and meaning of openness; whether the focus remains on the norm of openness alone, with the assumption that greater openness would automatically fulfill the developmental objectives of Wikipedia or it is also on core – substantive, development-related – norm building.

The second question is regarding the distribution of power across 'organising' and 'community' spaces. Appropriate tools for analysing power distribution will have to be developed to examine how power is distributed within and beyond the organisation. One will need to see how Wikipedia is run; whether 'power users' alone have substantial role in the decision making process or the wider community of impact, including its peripheries, too have some influence.

The above is merely for the purpose of illustrating a possible research site and method, and the hypotheses employed are merely illustrative and do not represent any *a priori* position being taken on the relevant outcomes.