

## Critical Intent & Interests: a typology of ICT4D initiatives

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**Abstract:** Influential reviews of the field suggest that ICT4D is characterised by uncritical assumptions about the causal relationship of ICT to development, and by an under-theorisation of 'development'. High failure rates in ICT4D initiatives have been attributed to a 'top-down', technologically deterministic process in which 'intended beneficiaries' are not sufficiently involved in determining either the ends or means of ICT for Development.

Drawing on a theoretical framework combining Jürgen Habermas' critical theory, the radical feminism of Maxine Molyneux and Ineke Buskens, and the critical pedagogy of Paulo Freire, this paper outlines a normative and conceptual means to differentiate between the various types of ICT4D initiative, and proposes some elements of a critical theory and practice of ICT4D.

This paper elaborates a typology of nine different types of ICT4D illustrated by a matrix of three types of *development intent* (conformist, reformist and transformist) and by three types of *practical human interests* ('technical-control', 'communicative-understanding' and 'emancipatory responses to domination'). The paper argues that an initiative is an example of '*Critical ICT4D*' to the extent that it combines the *transformist intent* of tackling the structural root-causes of under-development, with the *emancipatory interest* of making the 'intended beneficiaries' the authors and subjects of ICT4D initiatives.

**Keywords:** Critical, ICT4D, conformist, reformist, transformist.

### 1. INTRODUCTION

Influential reviews of the field of ICT4D have identified as problematic uncritical assumptions about the relationship of ICT to development (Avgerou, 2010), and a general failure to define the kind of development that ICT4D is intent upon (Walsham, 2006, 2013). This uncritical, technically-driven approach (Chamberlain, 2012), which limits the agency and participation of 'intended beneficiaries' is partly responsible for ICT4D's high failure rate (Heeks, 2002; Gao, 2014).

Alternatives to this orthodoxy are emerging. Dorothea Kleine (2010) is among scholars who have explicitly unpacked the 'D' in ICT4D and Kentaro Toyama's (2011) research contradicts assumptions that technology's impact, in and of itself, is additive or transformative. Stahl (2008), Unwin (2009) and Zheng and Stahl (2011) are amongst those that have profitably used critical theory to interrogate ICT4D, but so far this remains a minority and heterodox approach. More often ICT4D initiatives are assessed primarily with reference to technical criteria. Yet Toyama (2010, unpaginated) has argued convincingly that, "*In every one of our projects, a technology's*

*effects were wholly dependent on the intention and capacity of the people handling it*". This paper proposes a critical theory and practice of ICT4D that makes the formation of this human capacity and critical intent central to the ICT4D process. It also proposes some non-technical and normative criteria for assessing ICT4D initiatives that encompass the human intent and capacity that Toyama identified as crucial in determining ICT4D outcomes.

We are often unconscious of the interests structuring our lives. We all live in societies where there is inequality (UNDP, 2014); we all live in societies where inequality and (dis)advantage is structured along intersecting dimensions that reflect dominant power interests, including those of gender, 'race' and class (UNDP, 2014a, Davis, 1982; Crenshaw, 1989; Anderson and Hill Collins, 2010). As a result we are all socialised in cultures grounded in unequal social relations (Buskens, 2014) and are subject to dominant ideology that justifies and 'normalises' this inequality, making unequal social relations appear 'natural' and inevitable, rather than socially constructed. This presents the danger that we will unwittingly reproduce structural inequalities in our ICT4D initiatives unless we take conscious steps to be critically aware of power interests during the designing and implementing our initiatives (Buskens, 2014a).

The theory-practice of 'Critical ICT4D' proposed in this paper involves 'intended beneficiaries', practitioners and researchers in a critically reflective process of conscious deliberation about the development problems that they face, the underlying structural causes, and the kind of development they are intent upon producing. By means of a collective analysis of their own practical needs, the political and cultural context (Heeks, 1999) and the underlying power interests, participants create new knowledge and a 'critically conscious' understanding of their situation (Freire, 1994) that enables them to determine their own interests (Geuss, 1981), and to co-design ICT4D initiatives that address both their immediate practical needs and longer-term strategic interests (Molyneux, 1985).

This paper also proposes some non-technical, normative criteria, which may prove useful both in the design phase of ICT4D initiatives as well as in evaluative assessment. These criteria are illustrated in a typology of nine kinds of ICT4D initiative. The typology differentiates between three categories of development *intent* and three categories of human *interests*. It is intended that this framework will contribute towards a conceptual language that will enhance initiative design and evaluation by enabling practitioners, 'intended beneficiaries' and researchers to share their thinking about the critical intent, power interests served, and the logic of the underlying 'theory of change' upon which any ICT4D initiative is based.

## 2. What is 'Critical' about a Critical ICT4D?

It is important to first clarify the use of 'critical' in this paper; the word is now used with such a wide range of meanings that its significance has become non-specific. In this paper I will use the term 'critical' in the explicitly political and emancipatory sense of the critical social-theory of Frankfurt School scholars such as Habermas (1972) as well as the critical theory-practice of Southern scholar-activists and radical feminists such as Paulo Freire (1970), Steve Biko (Arnold, 1978), and bell hooks (2000).

In providing a definition of critical theory Geuss (1981; 2) argued that critical theory has special status as a guide for human action, which is:

(a) aimed at *producing enlightenment*, i.e. enables agents to determine their own interests,

- (b) *emancipatory in intent*, i.e aims to free agents from coercion and domination, including internalised oppression,
- (c) *productive of knowledge* (including self-knowledge), and
- (ci) epistemologically *reflective* rather than objectifying.

*“A critical theory, then, is a reflective theory which gives its agents a kind of knowledge inherently productive of enlightenment and emancipation”* (Geuss, *ibid*).

Geuss asserts that critical theory has dual roots in the psycho-analytical method initiated by Freud and in the socio-analytical method employed by Marx. This critical method enables users to identify often-hidden aspects of social structure and internalised oppression, and to make them objects of their conscious reflection and critical understanding. By thus revealing the mechanisms of domination embedded in culture, ideology, and the unconscious (Ray, 1993) people are better able to determine their own interests and to define their self-action for development.

In the section below 'Towards a Critical Theory-Practice of ICT4D', I will draw primarily on the work of radical feminists and critical theorists-practitioners from the global South to suggest elements of a Critical ICT4D. First however I will outline a conceptual typology for distinguishing between orthodox ICT4D initiatives defined by technical interests and a conformist intent, and a heterodox 'Critical ICT4D', defined by emancipatory interests and a transformative intent.

### **3. A Typology of Intent and Interests in ICT4D**

Writing about gender awareness in research on development Ineke Buskens (2014) has produced a matrix for categorising political intent and methods for gender research in development (Table 1). The categorical distinction that Buskens draws between conformist, reformist and transformist intent resonates with Freire's categories of magical, naïve and critical consciousness (elaborated in the section 'critical-consciousness' below), where only the latter category involves identifying the structural root-causes of (dis)advantage for inclusion in programmes of development action.

It is possible to critique Busken's categories of development intent on the basis that, in conceiving of change only extending from the status-quo in an egalitarian direction, a normative bias is revealed. This is not the only kind of 'development' possible. Neo-liberal theorists have argued that inequality is desirable and productive of economic growth (Hayek, 1976, Friedman, 1980). Informed by neo-liberal economic theory World Bank Structural Adjustment Programmes, certainly delivered 'reforms' and 'transformational' structural change, but in a quite different direction from the kind of 'development' apparently valued by Buskens. However, like Buskens, I am convinced by the argument that inequality, structured as it invariably is, along lines of gender, race-ethnicity and/or class-caste (UNDP, 2014a; Crenshaw, 1989, hooks, 2000) is antithetical to development that we have reason to value. Therefore, as my own normative intent to identify means to facilitate 'development' extending from the status-quo in an egalitarian direction, I will retain Buskens categories of development intent.

Busken's categories also reflect the distinction developed in feminist theory between 'practical gender interests' and 'strategic gender interests' (Molyneux, 1985; Longwe 1994; Young, 1987). This debate makes a distinction between women's immediate '*practical interests*' for access to childcare and equal pay, and their '*strategic interests*', to secure equity in relation to the gendered

divisions of labour, power, and control, such as ending male violence and control over women, and in removing the burden of domestic work and childcare. The challenge, as Molyneux pointed out, is that practical interests are often symptomatic of deeper-seated structural issues of power and control, and it is the latter which must be rooted out in order to achieve any fundamental or lasting change to the nature of domination/subordination: “[Addressing] practical interests do not in themselves challenge the prevailing forms of gender subordination, even though they arise directly out of them” (Molyneux, 1985; 233).

In critiquing Molyneux, scholars including Sara Longwe (March, 1999; Young 1993) have argued convincingly that practical and strategic interests cannot so easily be separated; that initiatives in the realm of practical needs often have consequences on strategic interest (and vice versa); and that as a consequence, development interventions should target *both* practical needs and strategic interests.

In order to enable the analytical tools of practical needs and strategic interests to be used in a more nuanced way Kate Young (1993; 156) suggested the concept of 'transformatory potential'. The method that she proposed was, “to allow the interrogation of practical needs (by women themselves) to see how they can become or transform themselves into strategic concerns. In other words have they the capacity or potential for questioning, undermining or transforming gender relations and the structures of subordination. This type of 'consciousness-raising' about strategic gender issues by women themselves is not unique to Young's framework; the Longwe Women's Empowerment Framework (Wallace and March, 1991, Williams, 1994) specifically includes 'conscientisation' as a mechanism to bridge between practical and strategic interests. According to Molyneux (1985; 233) the group work of translating practical interests into consciousness of strategic interests, “constitutes the central aspect of feminist political practice”.

Following this logic, it is equally important in the following sections, to be mindful that the analytic tools of 'reformist' and 'transformist' categories should be seen as interpenetrating, and that an optimal overall approach will often involve activities in more than one typology sector.

#### **4. Conformist; Reformist & Transformist Intent**

Along the horizontal axis of Table 1. Buskens categorises gender research by development intent; as either 'conformist', 'reformist' or 'transformist'. The conformist category houses research that is intent on conforming with the status-quo by generating knowledge about how people might better cope with, or respond to, existing unequal gender relations without challenging or changing those relations. The reformist category houses research that is intent on highlighting the unequal nature of gender relations and reforming them, but which does so without changing the socio-economic, political and religious structures that support them. Finally the transformist category houses research that is intent on understanding and transforming both unequal gender relations and the socio-economic, political and religious structures that support them.

Along the vertical axis of her table Buskens categorises gender research by research methodology. Following Smaling (1991, 1994) Buskens pairs Habermas' (1972) categories of 'knowledge-constitutive interests' with the three main research paradigms: 'empirical-analytical' with quantitative research, 'interpretive-hermeneutic' with qualitative research, and 'critical-emancipatory' with participatory action research, to establish nine options for categorising gender research by intent and methods.

<b>Intent/Method</b>	<b>Conformist</b>	<b>Reformist</b>	<b>Transformist</b>
<b>Empirical-Analytical</b>	Quantitative Research that aims to understand how to make women better respond to the demands of the existing socio-economic-political-religious structures that support, amongst other things, unequal gender relations.	Quantitative Research that aims to reform gender (labour) relations that are discriminatory, whilst leaving the socio-economic-political-religious structures that support such relations intact.	Quantitative Research that aims to transform the socio-economic-political-religious structures that support unequal gender relations, through understanding to what degree women are dependent on those structures for their needs and practical gender interests.
<b>Interpretive-Hermeneutic</b>	Qualitative Research that aims to understand how to make women better respond to the demands of the existing socio-economic-political-religious structures that support, amongst other things, unequal gender relations.	Qualitative Research that aims to understand the emotions and justifications women have developed in adaptation to their unequal gender relations in order to reform those unequal gender relations.	Qualitative Research that aims to transform the socio-economic-political-religious structures that support gender inequality through assisting women to understand their feelings, emotions and choices regarding their discriminatory realities.
<b>Critical-Emancipatory</b>	Participatory / Action Research that aims to assist women to better cope with unequal gender relations and the socio-economic-political-religious structures that support them.	Participatory / Action Research that aims to understand women's feelings, emotions and reactions in their relationships and situations in order to reform these unequal gender relations.	Participatory / Action Research that aims to transform unequal gender relations and the socio-economic-political-religious structures that support these, through assisting women to understand to what degree they are dependent on those structures for their needs and practical gender interests.

**Table 1: Gender Research Intent and Method: Buskens, 2014**

Building on Busken's conceptual framework for gender research in development, in this paper I propose a conceptual framework for intent and methods for ICT4D initiatives (Table 2.). My proposed framework encompasses disadvantage structured around dimensions such as 'race'-ethnicity and class-caste in addition to gender. I retain Buskens' categories of conformist, reformist and transformist *intent*; but modify her *method* categories to foreground another aspect of Habermas' theory of knowledge-constitutive interests.

In establishing his three categories of knowledge-constitutive interests Habermas (1972) was attempting to locate knowledge production in relation to what he considered to be three basic

drives innate to the human species (Ray, 1993). Habermas saw the '*technical control of nature*' as the drive structuring the mode of enquiry and knowledge production that characterises the empirical-analytical sciences. The second human drive for '*communicative-understanding*', in Habermas' view is what structures the interpretive-hermeneutic sciences. The '*emancipatory interest in overcoming domination*', is the final, and equally deep-seated human imperative, and one which he argues structures the critical-emancipatory mode of enquiry and knowledge production. This latter category differs from the preceding two in its reflective and participatory nature (Stanford, 2014).

In constructing a conceptual framework for a 'Critical ICT4D' I will rely primarily on Habermas' 'technical-control', 'communicative understanding' and 'emancipation from domination' knowledge-constitutive interests rather than on the related research paradigms. This is because this paper is not centrally concerned with research methods, and I wish to suggest a link between the practical human interests of technical-control, communicative understanding and freedom from domination, and different types 'schools' of ICT4D. Unwin (2009; 63) uses Habermas' knowledge-constitutive interests to frame his historical analysis of ICT4D and suggests that, "*this approach could usefully be developed further into a practical framework for a critically aware ICT4D practice*", one that, "*empowers poor people sufficiently to overcome the conditions that have impoverished them*". This paper aims to make progress in that direction.

## 5. Development Intent

Along the vertical axis of Table 2. I have retained Busken's categories of conformist, reformist and transformist intent, but have expanded them to encompass the dimensions of 'race' and class in addition to Busken's original gender focus.

'**Conformist ICT4D**' includes those initiatives that use ICTs to improve the efficiency of existing social institutions but which do not disrupt the *status-quo*. Conformist ICT4D leaves unchallenged inequality structured along dimensions including 'race'-ethnicity, class-caste and gender (as well as the power interests that give rise to this inequality). In leaving unequal relations intact Conformist ICT4D initiatives have the effect of serving the power interests of those already privileged classes that most benefit from the *status-quo*. An example could be an 'eGovernment' portal that offers services such as instant access to government information and the ability to apply and pay for permits and licences on-line. Another example might be an 'Open Government' portal that enables citizens to access and 'hack' government data about <http://open.glasgow.gov.uk/hackathon/hackathon-no4/transport>. As a citizen one may have good reason to value ICT4D initiatives that enable individuals to access data about cycling or process a planning application online. This practical reason to value the initiative is not however inconsistent with saying that it does not fulfil the development intent of reforming unequal social relations or of transforming the structures that support them.