# Activity Theory and reconceptualising HIV/AIDS interventions

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Abstract

*In its articulation of the relationship between social and individual levels of analysis, and in providing the tools for an analysis of social practice, CHAT allows for a reconceptualisation of the problem of behaviour change in a context of HIV and AIDS. In so doing, it provides the conceptual framework through which to develop possible interventions. As presented in an earlier paper at this conference, an activity system analysis highlights the relative state of 'crisis' in the activity systems of male and female youth in the research context. The possibility of intervening to change conceptual resources (such as a conceptualization of HIV and AIDS), material resources (such as the availability of condoms), norms/regulations and conventions, as well as the dominant reference groups of the 'subjects' of the activity systems, is discussed. The notion of limited interventions in particular components of the activity system is problematised. A social mobilisation intervention in a rural village in South Africa is discussed. A need to build relatively stable, repeatable and sustainable clusters of actions (practices) as cogent forces towards changing dynamics in a particular community, is highlighted.*

*Please note that this paper is based on material from my doctoral thesis. It is to be read as work in process, with many of the ideas in development rather than finalized. I welcome feedback to develop any of the points I make here. Please do not quote without permission.*

## Introduction

This paper follows on from the first paper presented at this conference entitled: *CHAT and HIV/AIDS: An activity system analysis of a lack of behaviour change,* which outlined the nature of the HIV and AIDS problem globally and in South Africa, and the nature of behaviour change theories on which many HIV and AIDS intervention programmes are based. In a very brief synopsis of the main issues in that paper: HIV and AIDS is an

immense problem in sub-Saharan Africa. South Africa has the highest number of HIV positive individuals in the world. HIV is a particular risk for young people, and for women. Many interventions over the last 20 years have yielded only minor changes in the behaviours which lead to the transmission of the HI virus. The behaviour change theories on which many of these interventions have been based, have been criticised for being individually-centred and focussing on rational cognitive decision-making processes as the impetus for action. The use of context-centred behaviour change theories, which treat context as a variable or as a container, also does not necessarily address the problem of behaviour change.

As outlined in the previous paper, CHAT, and the formulation of activity system analysis within this, provides for a dynamic and dialectical perspective on the relationship between the individual and society. In so doing, it provides a way of conceptualising the interrelationship between 'individual' and 'society' so problematic in the HIV and AIDS field. In comprehending the social nature of being human, and how individual action is inextricably situated within a system of interrelating processes and components, the dualism between individual and social levels of analysis is overcome. The philosophical and revolutionary roots of CHAT highlight the fact that human mind develops within human social activity. Human practices such as sexual practices, and what is referred to in the HIV and AIDS literature as 'individual' human agency, are analyzable only in relation to the activity of which they are a part. Activity is also a collective systemic formation with a particular mediational structure (Daniels, 2001). Activity systems are argued to have specific characteristics which guide the analysis of human behaviour (Engeström, 1996a). In a research study conducted in a rural area in South Africa activity system analysis was used to explore and understand sexual practices.

**Characteristics of activity systems**

Engeström (1996a; 2001) highlights particular characteristics of the activity system which make them unique as a 'unit of analysis', but also provide a way of conceptually sustaining the dialectical relationship between individual and social. There are three

interconnected concepts inherent in the notion of an activity system: heterogeneity, historicity and contradictions.

## 1. Heterogeneity

Engeström (1996a) argues that activity systems are heterogeneous, encompassing disparate elements, multiple viewpoints and divergent perspectives, each with its own history and potential. Analysis of the system involves a scrutiny of all the disparate elements and viewpoints of the various levels in the system; the relations between the components of the system; and the contradictions which emerge from the different voices/viewpoints (Engeström, 1987). A significant point is that the multi-voiced nature of the system is a source of tension and potential innovation (Engeström, 2001).

## 2. Historicity

A central theoretical instrument to achieve explanation suggested by Engeström (1987) is analysing data from the viewpoint of historicity. This perspective is necessarily for two reasons. Firstly, the mediated nature of behaviour means that activity contains, within it, the historical past. Any activity has to 'resort to', and is dependent on "some historically formed mediating artifacts, cultural resources that are common to the society at large" (Engeström & Miettinen, 1999, p. 8). History is thus "present in current practices... manifestations of basic historical types of thinking and practice…coexist as layers within one and the same current activity system" (Engeström, 1996a, p. 92). History is present in the activity system within the history of individual participants and also within its artefacts, rules and conventions (Engeström, 2001). Secondly, humans are not stable and unchanging, but characterised by qualitative transformations. An understanding of human behaviour thus requires an historical perspective (Engeström, 1987). The nature of an activity system as a unit of analysis allows for this historical perspective:

> If the unit is the individual or the individually constructed situation, history is reduced to ontogeny or biography. If the unit is the culture or the society, history becomes very general or endlessly complex. If a collective activity system is taken as the unit,

> history may become manageable, and yet it steps beyond the confines of individual biography. (Engeström, 1999, p. 26)

Engeström (2001, p. 137) argues that the problems and potentials of activity systems "can only be understood against their own history". This notion of 'historicity' frames and facilitates an analysis of "change, resistance to change, transformation and stagnation" (Engeström & Miettinen, 1999, p. 11) and can be applied to examining behaviour change in relation to HIV and AIDS.

## 3. Contradictions, discontinuity and change

In the historical development of human activity over time, activity systems become increasingly penetrated and saturated by the basic socio-economic laws, and they are subsequently characterised by the contradictions which correspond to these basic socioeconomic processes (Engeström, 1987; 1996a). They are also characterised by turbulence, change and transformation in society. The components of the system are themselves constantly being constructed, renewed, and transformed as outcome and cause of human life. Engeström (1996a, p. 67) argues that "human beings not only use instruments, they also continuously renew and develop them, whether consciously or not. They not only obey rules, they also mold and reformulate them". In addition to this, continuous construction occurs between the components of an activity system. The life of an activity system is therefore characterised by discontinuity, crises, upheavals and qualitative transformations (Engeström, 1987).

Engeström (2001, p. 137) argues that contradictions are "historically accumulating structural tensions within and between activity systems". Contradictions exist within each component of the activity system (primary contradictions), between the disparate elements of the system (secondary contradictions), and between one activity system and another activity system (tertiary contradictions). An example of a primary level contradiction within the HIV and AIDS field is the biomedical interpretation of HIV (a conceptual tool) in tension with an interpretation of HIV as bewitchment (another conceptual tool). Engeström (1996a, p.72) argues that "the activity system is connected to

other activity systems through all of its components". Changes in one component create contradictions with other components, these are secondary level contradictions. For example, the introduction of a limit on nurses' consultation times with a patient (a rule) is in tension with the needs of a recently diagnosed HIV positive patient (the *novel object* of the activity system) to have a longer consultation time. Activity systems are not isolated from other systems in any particular context. Any one activity system needs to be seen in interaction with a web of other activity systems. However, when one system changes, it also affects another system, and this is a tertiary level contradiction. For example, when the activity system of being a nurse and dealing with thousands of HIV positive individuals changes, but the activity system in which learning how to become a nurse, does not change tensions and contradictions develop.

The inherent contradictions of the activity system can be analysed as the source of development of that system, including its individual participants. Such contradictions generate disturbances and conflicts, but also innovative attempts to change the activity. Drawing on Ilyenkov, Engeström emphasised the significance of these tensions which "get aggravated over time and eventually tend to lead to an overall crisis of the activity system" (1996a, p. 73). This state of 'crisis' leads to new forms of activity, and inevitably, to change. Contradictions are thus essential to the activity system as a dynamic source of transition (Engeström, 1987). They are 'the motive force of change'.

Engeström (1996a) suggests that the process of analysis focuses on concrete modes of the activity (current and historical), tracing disruptions, troubles and innovations. Each component of the activity system is at once historical (containing 'sediments' of the past), and potential (containing the future possibilities). This process of analysis thus includes "both historical continuity and local, situated contingency" (Engeström & Miettinen, 1999, p. 9). This leads to the hypothetical identification of the internal contradictions of the activity system, and leads, potentially, to an understanding of the 'development' of the activity.

Engeström and his colleagues often use a model of intervention research, or developmental work research, which uses the concept of 'expansive learning' (Engeström, 2004). In this process, this concept of 'contradictions' is harnessed to proactively bring about change. Engeström (2001, p. 140) argues that change can be brought about if one touches and triggers "internal tensions and dynamics".

When used in a research process these three characteristics inform the actual 'method' used in the process of analysis. It implies incorporating different perspectives on the data from what is conventionally done. For example the history of a particular practice might be found in a sociological or an anthropological account, in organisational records, and in newspaper reports. The concept of 'heterogeneity' means taking the perspective of different stakeholders/actors in the collective activity, in order to understand the collective activity (the activity as a whole). It does not, as in more conventional research approaches, particularly in psychology, prioritise the individual subjective experience and perspective – it finds a way of relating this to other processes that are happening. It is in this way that the activity of the individual is embedded in its 'context'. In exploring and revealing these different perspectives, the tensions and conflicts which might exist are exposed, which in turn might lead to an understanding of why the activity takes place in the way it does. This also highlights the possibility (or lack of possibility) for change. An activity system analysis thus delimits the potential there is for shifts and changes in the system.

Within a study on sexual practices in a rural area in South Africa, an activity system analysis drawing on each of these concepts was conducted. This process highlighted specific dynamics within the activity systems of male and female youth in this context.

**The study**

A brief summary of the research design is provided here. Details of the study were presented in the earlier paper delivered at this conference. The study used a qualitative design to examine the socio-sexual dynamics within a rural area of South Africa.

Through interviews and focus groups with 45 participants (27 male and 18 female) between the ages of 10 and 71, a contextualised and historical perspective on sexual experiences, sexual practices, and responses to HIV and AIDS was obtained. The research participants were all residents of a former 'homeland', created by the apartheid government as a residential area for black people. The high rate of unemployment and lack of municipal services in this context reflect the socioeconomic legacies of apartheid.

An historical perspective on sexual practices in a rural South African context, and a detailed analysis and comparison of the activity systems of male and female youth, provide a significant perspective on the problem of behaviour change in a time of HIV and AIDS in this particular context. These have been outlined in the previous paper, but are summarised here:

1. Historically the risk of pregnancy was the concern of the broader community, peers and parents in the form of social castigation. Specific measures were put in place to monitor sexual practices and transgression of these rules were penalised. The introduction of a particular mediating device, the injectable contraceptive, changed the social regulation of sexual activity and changed the nature of the sexual practices. It also established the conditions for current practices around safe sex.
    a. Previously, both male and female partners assumed responsibility for the risk of pregnancy, moderating their activity accordingly. After the introduction of the new mediational means, male partners assumed very little responsibility for the risk of pregnancy. Currently, mothers and the female partner assume the major responsibility for the prevention of pregnancy, through obtaining the injectable contraceptive, from as young as 14 years of age.

2. The dominant norms within this context also encourage risky sexual practices:
    a. Although condoms are the only means to prevent the transmission of HIV amongst sexually active youth, condom use is not a norm within this context. Male youth in the study were particularly resistant to condom use. Female

youth commented that when they requested condom use, their male partners refused to use them.

b. In addition to this, having multiple partners was considered a norm within this context.
c. Previous studies in the same area have also identified a very early age of sexual debut (Kelly, 2000)
d. Age differentials between partners is also large creating the conditions for coercion within sexual activity.

3. Although the risk of pregnancy is a strong mediating factor for male and female youth, HIV and AIDS does not seem to be present in the activity systems of these youth. HIV and AIDS is not conceptualised as part of the 'object'.

If, as Engeström (1996a) argues, contradictions and tensions are the source of change in an activity system, one needs to understand the type and extent of contradictions inherent in the activity systems of youth in this particular research context.

**The state of contradictions within the activity systems**

One of the most significant findings of the analysis of the activity systems within this context relates to the state of 'crisis' within these activity systems. Currently, the dominant form of contradictions are primary level contradictions (within components of the activity system). Primary contradictions seem to exist in the tools, rules and community, but not in other aspects of the activity system. For example, in the 'tools' component of the activity system there is a tension between the use of injectable contraceptives and the use of condoms. However, this tension is not extreme – both are forms of contraception, but the injectable contraceptive is preferred. From an outsider's perspective, the mediating artefact of the injectable contraceptive is problematic for two reasons. Firstly because it is an effective means of preventing pregnancy (a primary 'goal' in the activity), it lessens the possibility of other barrier forms of contraception being used, and barrier forms of contraception such as the condom are critical in the

prevention of the transmission of the HI virus. Secondly it is problematic because there has been a shift in the responsibility for preventing pregnancy historically, from men to women. This creates particular dynamics around the negotiation of the use of condoms. So, although there are tensions between the two mediating artefacts, the tension for male youth (as a subject of the activity system) is not strong, and overall the tension is not strong enough to create a contradiction within the system.

Secondary contradictions, between components of the activity system, are nascent (have not yet really emerged or become visible). Awareness of the seriousness of HIV and AIDS, and awareness of the personal risk it entails, does not seem to have created the tension required to lead to a change in the activity system. The tension between components in the system (for example between the 'object' and the mediating conceptualisation of HIV as a risk), has not become aggravated sufficiently to lead to an overall crisis of the activity system, and thus to change. Unless HIV and AIDS becomes a dominant mediating artefact in the form of a conceptualisation of HIV and AIDS, the object, and thus the outcome of the activity, will not be affected to the extent that the nature of the activity changes. In addition to this, the male youth's major reference group or 'community', supports, and does not challenge his activity. This means that there is no major contradiction between the 'object' of the activity system (having sex) and the 'community' component of the activity system. For the male youth there is also no tension between the norm of multiple sexual partners, and this 'community'. The underdeveloped nature of tensions between components of the activity system means that the system is still relatively stable, and not in 'crisis', particularly from the perspective of the subject.

Tertiary level contradictions between activity systems exist, for example between the activity system of the male partner who initiates sex, and who wants to engage in sex without a condom, and that of the female partner who is less willing to engage in sex and would like to use a condom. However, these tensions are not very strong, partly because of the vertical dimension of the division of labour. Gender dynamics within this context do not allow for the female partner to be in control of, or dominant in, the interaction.

The contradictions inherent within and between the activity systems of people in this particular research context (particularly the youth) are in the relatively early stages of their maturity and are thus not sufficient to be a dynamic source of transition. It was argued in the previous paper that this is perhaps what contributes to the lack of behaviour change in this particular research context. Effective interventions in this situation, with stable activity systems and relatively few contradictions, are difficult to implement.

In this paper I want to discuss, given this lack of crisis, potential intervention 'solutions', drawing on an activity theory framework. As Roth (2004, p. 6) argues, "CHAT provides the tools to locate and articulate internal contradictions and to design concrete collective actions to remove them". Activity theory enables a different way of analyzing and therefore understanding the problem of behaviour change, and thus stimulates different ideas for interventions.

**The possibility of intervening to change**

As argued above, tensions and contradictions possess the potential for change, transformation and development. Change can be brought about if the internal tensions and dynamics are 'touched and triggered'. What are the possibilities of intervening in the different levels of contradictions?

Focussing on primary level contradictions means focussing on the contradictions within each component of the activity system. For example, one could provide an alternative mediating artefact in the form of a conceptualisation of the risk of HIV and AIDS in relation to that of pregnancy. One could invalidate a tension between the lack of condoms in this context and the desire to engage in protective sex, by providing the material resources to engage in the activity and flooding the area with condoms. One could cause or create a tension within the 'community' component of the activity system by establishing an alternative reference group for the youth. This has been done for example in setting up 'abstinence groups', in which members sign pledges to abstain from sex

until marriage. However, individuals are not participants in only one 'community', so this is only a partial solution. In addition to this intervention on the level of one component of the activity system might not alone make a difference, or would be insufficient to create the dynamics for change. It could be argued that the changes are not sustainable unless they are supported at all levels of mediation.

In terms of secondary level contradictions, between components of the activity system, one could, for example, attempt to reintroduce a process of social surveillance, which would then restructure the norms and conventions around sexual activity, and create a tension with the 'object' of the activity. This could, controversially, be in the form of re-creating traditional practices similar to those of virginity testing and penalties. However, many of these traditional practices are unsustainable, they ignore the context of the activity and the way that 'individual' agency is contingent on the power relations within interactions in sexual activity.

Could one alter the roles in and responsibilities for the activity, particularly the practice of safe sex in the activity of sex? Is it possible to ensure that male and female partners take equal responsibility for the risk of HIV by using condoms? Perhaps something could be learnt from the historical analysis of mediators of sexual activity. The risk of pregnancy has an effect beyond the individual. This was the case historically, and it is the case currently. The difference now is that there are the means to engage in the prevention of pregnancy without the male partner assuming responsibility. Thus social awareness of the risk of pregnancy and social processes to monitor the risk of pregnancy do not need to take place. However, HIV is a cost to the individual and society in a similar way to pregnancy, although it is not necessarily perceived as such. Pregnancy had financial implications for the family and particularly the father because he would be involved in paying for the 'damage' to the girl and her family. HIV and AIDS also has a social cost, although this is not fully 'conceptualised' within the object of the activity system. It causes illness and eventually death. Both affect the ability of the person to earn a living, and affect a wide range of people – the family of the infected person and the extended family of the same person. It also affects the ability of people to have children, and the

future of these children. It thus has an effect on inheritance and property, in a similar way to that of pregnancy.

The forms of surveillance around pregnancy involved regularly checking virginity. What if families introduced HIV tests for couples who were to be married? Or, if families were involved in ascertaining the HIV status of couples before they got married and financial penalties were incurred? The issue of disclosing and making public HIV status is a very complicated one because of the level of stigma and discrimination related to this status. In South Africa people have been killed because they disclosed their HIV positive status. I am also not suggesting virginity inspections, which ignored the context of sexual activity and particularly the gender dynamics around sexual activity. I think any 'return' to tradition should be very carefully considered. The issue is that there were very effective means for the control of pregnancy, and they involved both partners, and the broader society in which the activity occurred. Is there something in this for the control of HIV infection, without stigmatising people?

On the level of tertiary contradictions, that is between activity systems, if the activity system of the female partner was in tension with that of the male partner, the male partner's activity would not be possible. This would require a re-orientation in the 'object' of the female partner's activity systems in the sense of her resisting engagement in risky sexual practices, and might not be possible given the gender dynamics in the context. There are attempts to change the dynamics of the activity systems through the provision of different mediating devices. For example, giving female partners control of the barrier form of protection in the form of the female condom (Matthews & Harrison, 2006). However this form of protection still requires negotiation and it cannot be used covertly by the female partner in the same way that the injectable contraceptive can be used (Vijayakumar, et al, 2006). There are also microbicide trials which are researching the development of a means to biologically combat the infection. These would be used by women and inserted into the vagina before sexual activity (Woodsong, 2004). However, recent findings indicate that they potentially increase vulnerability to infection.

Another form of intervention is male circumcision which is said to decrease the potential for infection (Mukandavirea, Bowab & Gariraa, 2007). Some of the constraints of this strategy are that it does not decrease the vulnerability of the female partner to infection, except in a long term sense that fewer men in the context would be HIV positive, thus decreasing the prevalence. The other disadvantage is that because men might feel relatively 'invulnerable' to infection, they might be more sexually active and even more unwilling to engage in condom use. Widespread promotion of 'circumcision' as a core prevention method may thus overwhelm promotion of primary and urgent interventions such as partner reduction and correct and consistent use of condoms (Parker & Colvin, 2007; Potts et al, 2008). All of these interventions represent attempts to engage in intervention strategies within the constraints of gender dynamics and bypassing the need to address other risky sexual practices such as concurrency and multiple partners.

The above discussion illustrates how an activity theory perspective enables an understanding of how interventions relate to components of the activity system and how they could potentially lead (or not lead) to a tension within or between components, or between activity systems, and thus potentially lead to change.

I wish now to briefly discuss a social mobilisation process implemented in the research area. I will critically reflect on this example, and pose an alternative form of intervention based on the concept of 'expansive learning' (Engeström, 1996b).

**Social mobilisation process**

The concept of social mobilization originates in the socio-economic development context as a strategy to create an enabling environment and effect positive behaviour change. It is a deliberate and calculated process of engaging people in action and creating, or redirecting existing, human and material resources for the achievement of the society or community's goal (Sevilla, n.d).

The main aim of the social mobilisation process was to focus on, and change, the research community' 'response' to HIV and AIDS. The broad hypothesis was that the 'community' was a possible point of transformation for 'individual' activity systems. An exploratory action-research process aimed at developing a framework for response to HIV/AIDS with a special emphasis on issues relating to young people. The detailed outcome of this project is presented in a report: *'Making HIV/AIDS our problem: The development challenge'* (Kelly, Ntlabati, Oyosi, van der Riet & Parker, 2002).

The key questions which were addressed in the intervention were, firstly, in developing an interpersonal and community response to HIV/AIDS, what kind of social practices hold that idea socially? And secondly, what is it about this particular context which maintains a particular behaviour over time?

This action-research process was based on the following assumptions:

- Interventions need to take into account the development of the society's capacities to respond to the epidemic. This means considering the many underlying structural, organisational, and developmental problems, as well as individual and societal capacity. That is, the components of the activity system which create effective local level responses to the epidemic need to be examined and addressed. Understanding or knowledge must be tied to possibilities for action, within real activity systems, rather than being disembedded and abstract.

- There is a need to interpret information within local contexts, and to mobilise social contexts to the point where new forms of empowering understanding can be developed. This suggests the analysis of activity systems, and the reorientation of these systems for the creation of new forms of activity. This required the development of strategies for supporting contextual, localised, developmentally-oriented and sustainable responses to HIV/AIDS.

The process of the intervention

The first step in the process involved taking stock of current knowledge of, and responses to, HIV and AIDS. The people in the area were recognised as belonging to numerous groups such as youth, men, women, youth in school, church women, church men, traditional healers, traditional educators, traditional authorities. A series of workshops was held with each of these 'communities'. This served two purposes: firstly to assess their current response to HIV and AIDS; and secondly, to build their participation into the process.

A key technique used in the research process was to engage participants in the research through a series of questions. These questions generated an evaluation of their own responses to HIV and AIDS, as well as a constructive response from them as a social group. It also assisted them in developing realistic commitments to tackling the problem. Out of these workshops several distinctive, varied ideas and contributions based in their own realities emerged. On follow-up visits to the area, the various groups were monitored and assisted in developing declarative statements which incorporated commitments to particular responses to HIV and AIDS. The groups were encouraged to begin to develop rudimentary action plans. These group statements were ultimately integrated into a community response plan and a Declaration.

In tandem with this community level mobilisation process, existing resources were targeted. Long-term sustainable processes were initiated in the form of an adolescent-friendly clinic and a school-based health project. The interest of the relevant Government Departments (Health, Welfare, Education and Agriculture) was secured. Links with outside resources were facilitated. Plans were also made for HIV and AIDS related training for members of the community including traditional healers and traditional educators.

The workshops on the different group's responses to HIV and AIDS formed the beginning of a community action plan. After a three-month process, it was decided to inaugurate the community's response in a celebratory event referred to as an *isimiso* or

*izibambathiso*, a pledging event. The theme of the inauguration was the acceptance of people living with HIV and AIDS. At this event, a young HIV positive person disclosed her status. Self-initiated community and cultural activities were presented, many which had messages about HIV and AIDS. A forum theatre presentation, based on the ideas of Augusto Boal, stimulated the audience to participate in changing the actor's responses to an HIV positive person. At the inauguration the Declaration of the community's response to HIV and AIDS was presented to the community, and endorsed.

Outcomes of the intervention

There were important positive outcomes which I discuss here briefly in the way that they might have influenced the activity systems of the participants.

The intervention challenged the community's lack of recognition of the disease, and the absence of a collective HIV and AIDS community initiative. The intervention thus set up a contradiction between the public inauguration of the Declaration and the convention or 'norm' of treating HIV and AIDS as taboo. In the intervention process, debates about the wearing of a red ribbon as a symbol for commitment to building HIV and AIDS awareness stimulated reflection on issues of discrimination and disclosure. A billboard 'monument' with the AIDS ribbon and date of the inauguration was designed by the planning committee and erected centrally in the village. This symbolic representation of the initiative in the community mediated a visual memory of the process and 'institutionalised' the community's response to HIV and AIDS.

Some changes also seemed to occur on the level of social norms and conventions. In the activity system, rules refer to the explicit and implicit norms and conventions that constrain interactions within the system (e.g. that HIV and AIDS is an aberrant disease, resulting in stigmatisation and non-disclosure). The intervention exposed value interests by creating fora for critical discussion about HIV and AIDS, normalising the issue and shifting it out of the expert government health arena into everyday activity.

HIV and AIDS was also shifted from the individual to social level, bringing different activity systems into interaction, and changing the relative roles of stakeholders. The process of putting health issues in the general domain redefined the activity of the 'response to HIV and AIDS'. The collective development of an HIV and AIDS 'response plan', and a community organisation to lead the response to HIV and AIDS, constructed a different 'community' within the activity system, one which could potentially mediate a different response to HIV and AIDS. Further interventions related to the creation of different communities with different rules, taboos and conceptual resources (tools) governing the activity system could potentially generate alternative conceptualizations of the object. The development of an individual, interpersonal and community response to HIV and AIDS, and, in particular, a community framework for action, is a vastly different outcome from the stigmatisation and dramatization of the HIV and AIDS epidemic evident before the intervention.

The transformed mode of interaction within the activity system is demonstrated by increased readiness to discuss HIV and AIDS issues within the family and in the community. The commitment to assuming some responsibility for reproductive and sexual health issues implies a change in value orientation. Although the social environment was not affected to the extent that individuals were willing to make public disclosures of their HIV status through the intervention process, or on the day of the inauguration, on follow up visits in several of the villages, the researchers were informed about people who were HIV positive, and about public disclosures being made at funerals subsequent to the social mobilisation process. This willingness to acknowledge that HIV and AIDS are present in their own context is already a different response to HIV and AIDS. It also prepares the ground for interventions which address issues of care and support of people living with, and affected by, HIV and AIDS.

This might be explained by using Wartofsky's (1979) levels of artefacts. The collective production of a Declaration potentially works as a tertiary level artefact. Tertiary artefacts are the imaginative, integrative representational structures in terms of which humans attempt to understand the world and their existence in it. They include myths, works of

art, schemas and scripts, theories and models, and imagined worlds (Cole, 1996). For example, the creation myth, the 'dreamings' of the Aborigines, and Vygotsky's model of mediation.

The shifts in people's behaviour because of the production of the Declaration, and its 'presence' in the community, Wartofsky might explain this in the following way

> ... our own perceptual and cognitive understanding of the world is in large part shaped and changed by the representational artifacts we ourselves create. We are, in effect, the products of our own activity, in this way; we transform our own perceptual and cognitive modes, our ways of seeing and of understanding, by means of the representations we make. (1979, pp. xx - xxiii)

The inauguration event and the production of a Declaration as a representational artefact shapes and changes ways of seeing and understanding HIV and AIDS and the possibility of responding to it in a different way. Admittedly this is an effect on the activity system of the 'response' to HIV, and has particular impact in relation to stigma and discrimination. However, it could, potentially affect the individual's response to HIV. If the community as a whole has adopted a concept of itself as an 'AIDS-active community', and if a particular set of attitudes and responses are almost 'institutionalised' within this community, this could mediate the relationship between the subject, object and outcome, within activity systems of individuals.

The intervention was thus relatively successful in providing a different conceptual resource in the form of destigmatising HIV and AIDS and creating the possibility for the assumption of collective responsibility for HIV and AIDS. The conceptual resources of identifying, speaking about and recognising HIV serve to make HIV more visible and less stigmatised, making available to the subject a set of concepts about how to manage and respond to the disease. The government's stance on HIV thus has significant implications for the individual's response to HIV. A lack of a public stance, or an inappropriate public stance, on HIV further 'invisibilizes' the disease HIV and ensures that it is not part of the 'object'. The proactive stance on HIV of the Botswana and

Ugandan governments is argued to have had a significant effect on individual response to HIV and AIDS. Through the intervention, HIV and AIDS are now visible to the members of the community in a different way. The most significant challenge of the process was finding a way to maintain, sustain and develop the initiative.

It seems that in this context if one remains at the level of actions performed by an individual, intervention outcomes would be very weak. Attempts to change the 'institutions' in this context are difficult because of lack of sustainable access to these structures. Aiming at changing the whole activity system might also be unrealistic. The anecdotal evidence of changes in practices, in 'strings of actions' indicates that there might be changes in the research context beyond shifts in conceptual resources. The concept of 'practices' has been used by Scribner and Cole (1981) in their study of literacy, and refers to strings of action with scripts, repeatability, longetivity and some sort of social anchoring. They are thus much more than singular actions, they are sustainable.

These types of novel practices (public disclosure of HIV status and youth groups visiting and supporting those who are ill with AIDS), have made the 'object' more visible. In some senses they function as secondary practices to the primary practices of sexual activity. They seem to have the potential to be significant forces in changing the community. That they are novel, and have emerged from the context, means that they might be more sustainable. If interventions could generate new practices, and could ultimately generate a new conceptualisation of the 'object' in an activity system, they would have become more than routines or operations, and could bring about a change. It is also possible that if the secondary practices are in place, the tertiary artefact of the Declaration which emerged out of the social mobilisation process might be more viable.

These practices have not been formally researched and are anecdotal. A future research process could attempt to understand the extent to which new practices such as these lead to, for example, a new conceptualization of the object within the activity systems of youth. The question is how does one build relatively stable, repeatable and sustainable

clusters of actions (practices) as cogent forces towards changing dynamics in a particular community?

**Future intervention possibilities**

I would like to conclude with a brief discussion of a possible frame for an intervention, drawing on Engeström's (1996b) theory of expansive learning and the notion of 'change laboratories' which is inherent in much of the work of the Centre for Developmental Work Research and Activity Theory, in Helsinki Finland.

The interest in expansive learning and change laboratories comes from a need to bridge the gap between research and practice (Engeström, Y., Engeström, R. & Kerosuo, 2003). These kinds of interventions go beyond conventional research, and beyond merely providing feedback to research participants, to engaging participants in changing their practice. The theory of expansive learning has been mainly applied to large scale transformations in activity systems, over fairly lengthy periods of time, for example in the health system in Finland (Engeström, 2001), or in redesigning shop floor practices (Engeström, Virkkunen, Helle, Pihlaja & Poikela, 1996). A Change Laboratory process is in essence a process of intervention in which the participants' understanding of a phenomenon is mediated in a collective workshop process. Engeström and colleagues have conducted several such interventions which have lead to change/transformation of activity systems.

In a Change Laboratory, material prepared by the researchers from a research process with the participants, is reflected back to the participants in the form of the complex model of the activity system (Engeström et al, 1996; Engeström et al, 2003). This 'mediating artefact' contains examples of systemic roots, problems, and disturbances which have emerged out of an activity system analysis. These are conceptualised as contradictions of the activity system. In a theoretical and conceptual analysis of this activity system, a vision of the past and the future of the activity system is generated. In

the Change Laboratory, the multiple perspectives of different participants and the researcher/s are captured.

Engeström (1996b) argues that in order to generate and actualize a change in the situation an intervention would need to involve an 'expansive learning cycle'. The process of expansive learning is essentially a process of knowledge creation, creating a different framework or perspective on a particular set of behaviours or practices in people's lives to enable changes. In CHAT "the object of activity is regarded as the key to understanding change and learning (Leont'ev, 1978). Expansive learning focuses on the 'object' in an activity. Engeström (1996b) argues that the potential for such expansion is best discovered by means of change experiments, interventions which open up the zone of proximal development of the activity system (Vygotsky, 1978). The collective research process thus focuses on reconceptualising or 'expanding' the object. A key characteristic of this process is the "local discursive construction of a shared object and intention in knowledge creation" (Engeström, 1996b, p. 324). The expansive learning cycle must incorporate actions which direct the construction of a shared understanding of a problem. Engeström (1996, p. 360) argues:

> The formation of shared object is a major collaborative achievement. It is above all an analytical achievement, involving the formation and use of historical explanations, systemic comparisons, and explanatory principles.

Engeström et al (2003) refer to three steps in the process of 'expanding the object' of an activity and involves making its developmental potentials visible. In a slight conflation of different sources, the processes are those of:

1. Co-narrating (constructing a holistic account of the participant's life situations) and negotiating the object. This is a collective process and might also involve questioning, criticizing or rejecting some aspects of the accepted practice and existing wisdom. It also involves a process of analysing the situation to find out causes or explanatory mechanisms; by tracing the origins and evolution of the

situation, and constructing a picture of the inner systemic relations of the situation (Engeström, 1996b)

2. Modelling the newly found explanatory relationships; constructing an "explicit, simplified model of the new idea that explains and offers a solution to the problematic situation" (Engeström, 1996b, p. 322). This modelling of the particular actions in the Change Laboratory session stabilises and objectifies the new, expanded image of the object (Engeström et al, 2003), and
3. Expanding the 'model' to a more generalised level through implementing and consolidating it.

Engeström (2004) argues that in practice this means that

> selected objects of work in the research settings are first followed ethnographically. Critical incidents and examples from the ethnographic material are brought into a series of Change Laboratory sessions to stimulate analysis and negotiation between the participants. The laboratory sessions themselves are videotaped for analysis. The participants of the sessions engage in constructing shared models and tools to enhance their collaborative mastering of the object. The objects are again followed as the new tools and models are being implemented. (cited in Engeström, 2005, p. 447)

It is evident from the reflection on the research study that there are limitations to attempting to change individual components of the activity system. The social mobilisation process had a partial effect, but perhaps lacked the collective focussing on changing the 'object' of the activity system. What is the potential of engaging in an 'expansive learning cylce' in a community setting such as that described in the research study? Would it be possible to engage in this process of a collective reflection on the activity systems, and an analysis of the tensions and contradictions? Would this process generate change?

The intervention process incorporating an 'expansive' learning cycle process would be embarked on collectively, by a 'group'. Whether the 'community' of a particular geographic area could constitute this 'group' is an important question and there might be problems with the fact that they are not a naturally formed social organisation or institution, and they do not necessarily share an object. There is obviously also a

difference between the activity of sex as an activity between partners and the activity of a response to HIV and AIDS. Is a collective reflection to create a shared object even possible if one is dealing with different activity systems? It is also not clear whether it would even be possible to engage in a Change Laboratory in a setting which is not an organisation or a work place.

However, had the social mobilisation process introduced elements of expansive learning and a Change Laboratory process in the sense of a collective analysis of the activity systems (an historical analysis of the shift from a social concern with pregnancy to a lack of a social response to HIV and AIDS; the impact of the injectable contraceptive as a new mediational means), might this have had an effect on the practices of individuals, and possibly a reconceptualisation of the object? The implications of this kind of intervention are significant in terms of costs and time. An intervention such as this has a longitudinal design and would require a team, with rather different skills from those which are usually possessed by a researcher. Would embarking on such a process be sufficient to ultimately bring about some sort of 'crisis' in the activity system? This is perhaps material for a further research process.

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