

THE SOCIAL MODEL ANALYSIS OF DISABILITY AND THE MAJORITY WORLD (*)

Elia Bernabeu Mira

Investigadora Independiente

elia_acell@yahoo.es

Abstract:

There is a strong controversy of how disability should be understood and if the models suggested in the minority world can or should be used in other places. Is the social model as relevant to the disabled people in the majority world as it is to disabled people in the minority world? It is exactly part of this controversy that we will try to examine in this paper. This article will begin by defining key concepts relevant to the discussion and following that it will address issues and questions raised by critics of the social model and some answers to them. First, we will examine whether the dominance of the minority world has resulted in a "colonization" of ideas and practices on the majority world (including the social model approach). Secondly, reference will be made to the social model of disability, and whether it is or is not ignoring what impairment means for disabled people in the majority world. Thirdly, an analysis of whether it is relevant to apply the social model of disability in the majority world; is the issue of poverty forgotten? Is survival a first priority for disabled persons in some places? A brief analysis of the links between poverty, impairment and disability will be presented.

Key words: Disability, models, globalization.

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Introduction

Over the last few decades the concept of disability has been a focus of debate and new perspectives have been challenging the traditional approaches in the minority world. As a reaction to the medical model, the social model has been moving the centre of attention from the individual to the society. The problem is not any more conceived as a result of the individual limitations but a failure of society to provide adequate answers to difference. The origin of the approach can be traced to the 1960s (Hunt 1966), although the specific term 'social model' emerged from the United Kingdom disabled persons in the 1980s (Oliver, 1990). The social model thinking was the key to the politicisation of disabled people in the UK. Although we are far from full implementation of the social model in the minority world, "it has allowed a common space from which to develop politicised actions and theories to explain our experience of exclusion, discrimination and oppression" (Flood, 2005: 181)

There is a strong controversy of how disability should be understood and if the models suggested in the minority world can or should be used in other places. Is the social model as relevant to the disabled people in the majority world as it is to disabled people in the minority world? It is exactly part of this controversy that we will try to examine in this paper. This article will begin by defining key concepts relevant to the discussion and following that it will address issues and questions raised by critics of the social model and some answers to them. First, we will examine whether the dominance of the minority world has resulted in a "colonization" of ideas and practices on the majority world (including the social model approach). Secondly, reference will be made to the social model of disability, and whether it is or is not ignoring what impairment means for disabled people in the majority world. Thirdly, an analysis of whether it is relevant to apply the social model of disability in the majority world; is the issue of poverty forgotten? Is survival a first priority for disabled persons in some places? A brief analysis of the links between poverty, impairment and disability will be presented. Prior to this it is important that some key terms are operationally defined:

Different models of disability

Over many years persons with impairments have been subject to professional intervention which has been strongly influenced by the so-called "individual model" of disability, of which medicalisation is one significant component (Oliver, 1990). The individual model of disability places the "problem" of disability within the individual, this view equates disability with impairment. Within this paradigm as

the "problem" is a medical one the solution tends to be care, cure or rehabilitation (including frequently segregation in special institutions to receive these treatments) in order to restore "normal functioning" (Hurst & Albert, 2006).

To challenge this individual model, disabled people themselves have generated the social model of disability in which the "problem" is placed on society. Under this view it is not the problem of the individual that has limitations but it is the problem or failure of society that is not able to provide adequate services and inclusion to their organization. Disability is then not a medical state but a social condition and as a consequence it is the society that has to change, not the individuals. Attitudes, architecture and sensorial barriers and economic barriers among many others are what keep disabled people out of the mainstream society. This provides a radically different point of view, not only about what is disability but also about what can be done about it (Oliver, 1990). Oliver's analysis of the social structuring of disability is established upon two concepts; the mode of production and the ideology or central core values that exist in any society. Both concepts interrelate and determine how disabled people are perceived in their own local current societies. The first concept, the mode of production, refers to the type of economy, its productive units and the way in which production is organized. This could be based on a network of family units in some cultures or through the factory system and wage labour in the UK. The second concept, the central core values, refers to the main values upon which a society is premised (religion, science, medicine or any other). Oliver maintains that in the economic structure and ideological hegemony of minority world modern societies have had a major detrimental impact on the lives of disabled people and other marginalised groups. In this essay we will try to see if this analysis can be "universalized" or is relevant to any part of the world and some of the criticism that has been raised when trying to use this thinking in the majority world.

Since the 1960s we can find several attempts to define the complex relationship between illness, impairment, disability and handicap (Oliver, 1996). Many definitions, models and theories have been developed, in this paper I will use the terminology and concepts defined by Disabled People's International (Oliver, 1996)

- *Impairment:* is the functional limitation within the individual caused by physical, mental or sensory impairment.
- Disability: is the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers'

This difference is in the heart of the social model and it will be discussed further in section 2 of this essay.

Majority world

The term developing countries is fully charged with meaning, implicit there is the concept of the ladder of development, with the west occupying the top and the rest of the world climbing or falling through the steps below. It is for this reason that some authors such as Emma Stone (1999) has decided to use the term *Majority World* (Developing countries, the south, the third World). The majority world is where the majority of the population lives in, in contrast with the minority world (the west, the north, industrialized countries). This term has less association with negative positioning, but rather focuses attention on where the majority of the world lives. This has relevance for disability as it is also where the majority of disabled people live.

Disability framed within a minority worldview?

The social model sees disability as a **social construction** that penalises impaired people for not conforming to mainstream expectations of appearance, behaviour and/or economic performance. Therefore, the experience of disability may depend on the sort of society we live in (Finkelstein 1996; Oliver, 1990). It is precisely this social variability that challenges the extent that disabled people can be considered as a homogenous entity transculturally and consequently to what extent it is possible to formulate and use a unique model everywhere.

As indicated in the introduction, the social model concept has been developed mainly in the United Kingdom and the minority world. It has been argued that interventions aiming to support disabled persons in the majority world tend to be modelled on minority world concepts of stigma and exclusion with little or no understanding of the historical and cultural specificity of the local disability experience (Miles, 1996; Miles, 2003).

This blunt transfer of concepts and interventions has been termed "colonization of ideas and practices" or imperialism (Miles 1996, 2003; Stone 1999). Critiques have highlighted a number of concerns with this approach. On one hand research indicates that the experience of disability in India, for instance, is historically distinct from that of the western Judeo-Christian tradition (Buckingham, 2011;

Ghai, 2002). Cultural relativists also raise concerns with the focus on individualism that the social model implies. In many majority world countries the organization is more family based and/or communal. The emphasis on individual rights and individual independence can be irrelevant to such cultural organizations or even worse it can make the lives of disabled persons much more difficult and unfulfilling (Hurst & Albert, 2006; Stone, 1999). Imposed change can be very contradictory, where some benefits can occur (new employment opportunities, mobility aids...), previous social roles that once were integrated can be found at risk. Previous ways of cultural functioning where disabled people were very much accommodated can be challenged by the new structures (Stone 1999)

Miles (2003) writes:

"There is a growing menace of simplistic globalised packages, promoted by deeply confused 'flying experts', ignoring or dismissing the indigenous concepts, knowledge and skills that are essential to success in disability service innovation' (p.1)

With the aim to further test the social model cross culturally, Kapp (2011) makes an analysis of people defined in the minority world as socially disabled (people within the autism spectrum) and people who even lack a word for disability (the Navajo). He concludes that Navajo society seems to be a much better place for people within the autistic spectrum and that minority world cultures are much more disabling. He suggests that traditional Navajo social constructs (harmony, beauty and a wellness philosophy called Hozo) better serve the need of people within the autistic spectrum than the minority world notion of "progress" through science and technology. Kapp argues that still today the predominant narrative in the minority world sees autism as a 'disease' within the medical model contrasting with a more positive view of autism as a "difference" in the social model and neurodiversity movement. Out of the article we can see how the social model can actually be clearly "exported" as a model or way to have insight in the situation. Kapp is using it as a tool for analysis in two very different cultures. What is actually criticized when speaking about colonialism it is not the social model analysis but actually the imposition of points of view. Social model theorists have engaged with this criticism and have responded with reiterating the utility of models. The social model only makes sense when understood within the local context (Finkelstein, 2007), and in an early publication he stated: "Models, then, are neither explanations of events nor are they prescriptions for action. They are merely tools for gaining insight into an existing stubborn problem so that the future may be changed." (Finkelstein, 1996: 1,2)

Criticism can be also articulated at the academic level, Helen Meekosha (2011) uses the term "scholarly colonialism" to argue that contemporary disability studies are mainly produced in the minority world and need to shift to take full account of the 400 million disabled people living in the majority world. Research into Community-Based Rehabilitation (CBR) is one such example as Miles (2003) illustrates:

"Formal CBR research has been weak or non-existent in most developing countries. There have been probably 20 non-medical doctoral theses directly on CBR... during the last 15 years, and three times that number of theses at a lower academic level" (P10)

This authors' criticism on the ethnocentrism or colonialism of the minority world shows a clear lack of involvement of the minority world at all the levels (from research to planning to implementation). Hurst and Albert (2006) answer to that that it is up to disabled people in the majority world to use the model and adapt it to their circumstances and cultures if they find it useful. All societies are organized with some kind of exclusion so the model could be used by any society. Actions would differ highly depending on the way a society is organized, but it must be remembered that the social model is merely a model, not a plan of action.

Social model theorists have engaged also with these criticisms and have responded that it is relevant to use the social model approach because it focuses on the commonality of disabled people exclusion by society instead of focusing on a result of a medical problem or a "sin" (Flood, 2006). Sheldon (2005) also writes about this unity and argues that to separate disabled people by their cultural differences is just a way to separate disabled people from each other and to suggest they are not in the same struggle.

Does the social model forget about impairment in the majority world?

The social model of disability is based on a clear and key distinction between impairment and disability. Impairment is used for the biological attributes. Disability is used to refer to the failure of society to give equivalent accommodation to different needs. This key distinction can become problematic in the majority world as the individualistic biomedical terms are particular to minority world philosophical traditions (Miles 1996). This problematic links with the discussed cultural relativism as mentioned previously.

One of the most frequent criticisms raised about the social model is that it ignores the reality of what impairment means for disabled people (Shakespeare, 2002). In the minority world it is frequently voiced as denial that the physical and emotional pain and suffering experienced by disabled people due to their impairments has any impact upon their practical daily life (Morris, 1991). In addition to the above, the majority world also focuses on impairment related need interlinked with poverty. This last point has been voiced by David Werner (1998), who wrote that activists from the majority world frequently forget that basic medical or assistive devices needs are still not met in the majority world. They can not take the focus out of impairment. He argues that maybe the biggest limitations of the poor disabled persons in the majority world are not necessarily the same ones as the activists in the minority world. The struggle for the social rights as first priority cannot be projected to the majority world (Werner 1998). Werner states that 95 per cent of the persons that need a wheelchair do not have one and therefore questions the sense of fighting for building to be accessible when people do not have the means to be mobile. Similarly Riger (1993) suggests the possibility that admirable goals such as the ones proclaimed by the social model may inadvertently prevent the achievement of more practical but less "glamorous" needs such as financial security or physical aids. We will see further about financial security in the section 3 of this essay and we will also explore a bit more the need for medical intervention in the coming paragraph.

It seems clear that there is a continuing need for appropriate medical and rehabilitative intervention that goes or should go hand in hand with the disabled people's on-going struggle for equal opportunities and human rights (Populin 2005). Barnes (1996) replies to that criticism by stating that even though the disabled people's movement is advocating to move the focus from the impairment to the environmental and social barriers, they do not deny the existence of impairment or the need of medical intervention. Failure to differentiate or determine which aspects of disabled people's lives need medical or therapeutic interventions; which aspects require policy development and which require political action has resulted in the medicalisation of disability and the control by professionals of disabled people's lives (Oliver, 1996). As Vic Finkelstein (1999) argues professionals, services and ideologies need to be transformed in ways that promote disabled people's self-empowerment and real social change. Professionals should be allied to disabled people and the community, not allied to medicine or administration.

Can professionals work within the social model in the majority world?

There is a lot of controversy of what should be the legitimate and appropriate role of the medical professions when intervening on the disability field. For the social model analysis of disability to be relevant in the majority world, there is the need for a much more developed understanding of the respective viewpoints among disabled people and professionals (Lang, 2011)

In order to implement strategies based on the social model the "expert" role has to be abandoned. In order to have services really rooted on the social model disabled persons should be the directors of rehabilitation. Professionals are the providers of services and this should be strongly reinforced as a new identity. Disabled persons have in the social model a new identity where they are in power and in control. The oppression comes from the society and included in this society we find the services and professionals, who should adapt their identity in order to provide services at the level required. In the last few decades there has been an open debate about the position of disabled people in the rehabilitation process but the new positive position of professionals has not been adequately challenged and debated. The social approach actually requires a higher degree of skills than treating somebody who is actually an object in the process. As resources professionals need a different and more challenging attitude and a different training (Hartley, S., Nganwa, A and Kisanji, J. Undated). The social model analysis could be relevant if the people involved in the disability field understoond it and tried to apply that way of thinking in their practice.

What about Prevention of impairment?

It has also been argued that disability researches within the minority world discourse, scared of a return to the medical/individual model of disability, avoid the issue of prevention of impairment (Michalko 2002, 182 cited by Meekosha 2011). Another reason for them to avoid the discussion could be that trying to claim the positives of a disability identity becomes complicated facing the devastating suffering that results from colonisation, war, famine, and poverty. Therefore, there is tension between concepts like pride, celebration and prevention (Meekosha 2011).

Many impairments are bound up in the way societies are structured and in the way resources are distributed; war, social unrest, inadequate nutrition and hazardous modes of living lead to impairment that could be prevented. In the majority world the amount of impairment that could be potentially preventable is much greater than in the minority world (Baylies, 2002).

Defenders of the social model have articles where they clearly mention and discuss the issues of impairment production and prevention. Barnes (1999) and Sheldon (2005) for example, use a social model analysis to present a materialistic examination of the politics and production of impairment in the majority world. Barnes characterizes the production of impairment in the majority world as the direct outcome of a skewed and abusive economic and social development. Arguments that we will see further developed in the coming section of this paper.

Does the social model forget about poverty?

Poverty is a major concern for most disabled people led organizations all over the world (Barnes, 2009) which raises the issue of the relevance of the social model for disabled people who live in extreme poverty. As Hurst and Albert (2006:29) state: "Surely 'you cannot eat rights'. Just as surely, people without rights frequently cannot eat". This statement suggests that rights and social activism should potentially take second place to approaches to tackle poverty. However the social model of disability has much to offer in the conceptualisation of disability and its relation with poverty.

There is a very well established link between impairment, disability and poverty. A vicious fish that eats its tail as poverty leads to impairment and impairment in a disabling society leads to poverty (Sheldon, 2010). However poverty is not exclusive to disabled people, most of the people in the majority world live in poverty. Yeo (2006) argues that the characteristics between poverty and disability are so similar that rather than the common representation of the vicious circle she would better represent it as interlocking circles, as seen in the illustration below (next page).

"Disabled people share the general profile of the non disabled poor" (2005:4). If the commonalities of the two processes are recognized we see then disability and poverty as manifestations of the same processes. The need to build horizontal alliances with the wider movement for social change becomes very obvious (Yeo, 2006)

The model is so powerful because it illuminates the fact that the roots of poverty and powerlessness do not reside in biology but in society' (Hurst and Albert 2006:26)

We can see in this illustration that most of the features that relate to poverty, relate also to disability. As Thomas writes:

The social model has been interpreted in a different number of ways, as previously mentioned, the model constructed by Oliver (1990) is expressed in Marxist terms. Barnes (2009) offers a materialist account based on the social model of the politics and production of impairment in the majority world. He argues that "disablement is a socially created problem exacerbated by the escalating processes of globalization" (p4). Both authors find a strong link or better yet, a strong root of disability in the capitalist mode of production – the capitalist system. The unequal distribution and control of resources does not affect only disabled persons but the poor in general, and this unequal wealth sharing has its roots in the global capitalism (Sheldon 2010). Sheldon also argues that poverty is also something we find close to her house in the UK and that the analysis can be done not geographically but more on the unequal distribution of resources globally.

In the social model analysis, the problem emanates from society and what is needed is to change society which has huge implications on poverty reduction (Yeo, 2006). The social model advocates for a change in society that would benefit not only disabled persons in the majority world but most people in the majority world. The insight it provides might be used to challenge the root causes of the disadvantage of disabled people from the majority world (Sheldon, 2005). It is clear that social action for social change will not provide a fast solution to people starving but the social model does give us an insight into the experience of people with impairments in a disablist society and has relevance for all manner of marginalized groups (Yeo, 2006). Indeed Hurst and Albert (2006) use these commonalities to further promote the central importance of the social model:

'The [social] model is so powerful because it illuminates the fact that the roots of poverty and powerlessness do not reside in biology but in society'

The social action to create social change element of the social model (and trying to implement it) is largely less documented than the academic debate about the impact of impairment. Examples of evidence that a social model can be effectively implemented and has an impact on poverty can be found;. Flood (2005) presents one of them, where disabled people living in the majority world have identified their barriers to participation and they have taken action to create social change: A project called PROJIMO: Program of rehabilitation organized by Disabled Youth of Western Mexico. In a country where there is almost no institutional social system to support persons in situations of exclusion, a group of disabled people created this small community-oriented program to support their peers. In the beginning they were providing healthcare related services and now they make a large range of mobility aids. It is run entirely by disabled people and they are a community of disabled and non-disabled people. The children living in that village play together because the swings are where PROJIMO is located. Flood acknowledges that to give a rehabilitation project as an example of the social model implementation might be criticised by many but for her this is a clear example of social action for social change within social model thinking. Werner (1998) has worked as a facilitator and advisor to the program since it began in 1981 and relating to poverty and disability he writes:

"As in much of the Third World, poverty, landlessness, and unemployment have grown with Mexico's structural adjustment to "free trade" and the inequities of the global economy. The widening gap between rich and poor leads to an increase in crime, alcoholism, drug trafficking, street-children, corruption, police brutality and institutionalized violence. All this has led to a substantial increase in disability among young men"(unpaged).

As a consequence, Werner explains how the increase in spinal-cord injured teenagers and young adults has presented a challenge for the project in order to welcome the physically and psycho-socially disabled street youth. Is this example of "application" of the social model forgetting about poverty? I don't think so. Werner also states that "people who are disadvantaged for whatever reasons need to join in the struggle for equal rights and full participation in a fairer, more caring society. "(Unpaged)

Conclusions

Anita Ghai critiques the minority world universalising speech by arguing that it "ignores the harsh reality of disabled people's lives in countries such as India, which are caught in social and economic marginalization" (2002: 96). And this is exactly what the social model theorists say, it has to be contextualized, it is not an action plan, it is a way to have an insight into a situation and this has to be done locally (Finkelstein, 2007). This globalized time is good for new productions coming from majority world perspectives and analysis. A majority world perspective of disability should inevitably speak about an imbalance of resource distribution (Meekosha, 2011), and this is also what the economic materialistic account of the social model talks about.

Poverty and disability seem to share the same features; they are kind of embedded on the current system and based on an inequality of resource distribution. In order for something to change there is the need for strong alliances with other movements. To advocate for inclusion in the current system it is probably not the best strategy (Yeo, 2006), there is a need for a wider change in society and this is exactly what the social model of disability is also about. When speaking about poverty and disability it seems to me that the social model analysis, as I understand it, is more than relevant but essential in future developments in the majority world.

On the impairment and service delivery side; disabled people in the minority and in the majority world require both choice and expert resources, two constructs that are not exclusive. There is a need to reframe the way services are provided and the power intrinsic in them because there is no question that there is and will be a need for services. In order to improve this service delivery as a resource for disabled people, training of professionals has to be radically changed. Professionals need to become allies to the community and build alliances in order to join the struggle to change this world (Finkelstein, 1999). Professionals in both the majority and the minority world need to understand what the social model of disability is about in order for it to have relevance anywhere or everything will stay just in the rhetoric.

"So in conclusion the social model is still absolutely relevant as an explanation of our experience as disabled people whether we live in the developed or majority world. The barriers may be different but solutions are the same - social action creating social change" (Flood 2005:12)

References:

- Barnes, C. (1996): "The social model of disability: Myths and Misconceptions" in Greater Manchester Coalition of Disabled People's Journal 'Coalition' August 1996: pp 27-33
- Barnes, C. (2009): "Disability in a Majority World Context: A materialist account." (Available at: http://www.disability-archive.leeds.ac.uk/).
- Baylies, C. (2002): "Disability and the Notion of Human Development: Questions of rights and capabilities", Disability & Society, 17 (7): 725-739.
- Buckingham, J. (2011): "Writhing histories of disability in India: Strategies of inclusion", Disability & Society, 26 (4): 419-431
- Finkelstein, V. (1996): "Modelling disability". (Available at: http://www.disabilityarchive.leeds.ac.uk/).

- Finkelstein, V. (1999): "Professions Allied to the Community (PACs)". (Available at: http://www.disability-archive.leeds.ac.uk/).
- Finkelstein, V. (2007): "The 'Social Model of Disability' and the Disability Movement." (Available at: http://www.disability-archive.leeds.ac.uk/).
- Flood, T. (2005): "Food' or Thought'. The social model and the majority world". Barnes, C. and Mercer, G. (eds): "The Social Model of Disability: Europe and the Majority World, Leeds: The Disability Press, pp 180-192.
- Ghai, A. (2001): "Marginalisation and disability: experiences from the third world." In M. Priestley (ed.), Disability and the Life Course, Cambridge: Cambridge University Press, 26-37.
- Hartley, S., Nganwa, A and Kisanji, J. (undated): "'Professionals' Particiaption in CBR programmes". http://www.asksource.info/cbr-book/cbr05.pdf (last accessed: 12.10.2011)
- Hurst, R. and Albert, B. (2006): "The social model of disability, human rights and development cooperation" In Albert, B. (eds) In or out of the mainstream?, Leeds: The Disability Press, pp 24-39.
- Kapp, S. (2011): "Navajo and autism: the beauty of harmony". Disability and society 26 (5): 583-595.
- Lang, R (2011). "Community-based rehabilitation and health professional practice: developmental opportunities and challenges in the global North and South." Disability and Rehabilitation, 2011; 33(2): 165-173.
- Meekosha, H. (2011): "Decolonizing disability: thinking and acting globally". Disability & Society, 26(6): 667-682.
- Miles, M. (1996) "Community, individual or informational development? Dilemmas concept and culture in South Asian disability planning". Disability & Society 11(4): 485-500
- Miles, M. (2003) "CBR works best the way local people see it and build it". Asia Pacific Disability Rehabilitation Journal 14(1): 86-98
- Morris, J. (1991). Pride Against Prejudice, London: The Woman Press.
- Oliver, M. (1990): The Politics of Disablement, Basingstoke: Macmillan
- Oliver, M. (1996): "Defining Impairment and disability: issues at stake", in Barnes, C. & Mercer, G (eds), Exploring the Divide: Illness and Disability, Leeds: The disability Press.
- Populin, E. (2005): "Disability and Rehabilitation: reflections on working for the World Health Organization." Barnes, C. and Mercer, G (eds) 2005: The Social Model of Disability: Europe and the Majority World. Leeds: The disability Press, pp 193-209.

- Riger S. (1993): "What's wrong with empowerment?". American Journal of Community Psychology 1993; 21: 279-292.
- Shakespeare, T. (2002): "The social model of disability: an outdated ideology?". Research in Social Science and Disability. Vol 2:9-28
- Sheldon, A. (2005): "One World, One People, One struggle? Towards the global implementation of the social model of disability." Barnes, C. and Mercer, G. (eds): The Social Model of Disability: Europe and the Majority World, Leeds: The Disability Press, pp 115-130.
- Sheldon, A. (2010). "Locating disability in the majority world: geography or poverty?" from a paper presented at the "Disability and the majority world: challenging dominant epistemologies' conference, Manchester Metropolitan University, July 9th 2010.
- Stone, E. (1999): "Disability and development in the majority world." In E. Stone (ed.), Disability and development: Learning from action and research on disability in the majority world, Leeds: The Disability Press, 1-20.
- Thomas, F. (2005): "Disability, poverty and the Millennium Development Goals: Relevance, Challenges and Opportunities for DFID". Disability Kar, Available at: http://www.disabilitykar.net/research/policy_DFID.html
- Werner, D. (1998): "Nothing about us, without us: Developing innovative technologies for, by and with disabled people". Palo alto, Health Wrights. http://www.dinf.ne.jp/doc/english/global/david/dwe001/dwe00102.html#in troduction1 (last acces. 21.11.2011)
- Yeo, R. (2005): "Disability, Poverty and the 'new' development agenda." A Report to the KaR Programme. (Available at: http://www.disabilityarchive.leeds.ac.uk/).