A geography for, of, with or by disabled people?: Reconceptualising the place of geographer as expert.

Dr Robert M. Kitchin, School of Geosciences, Queen's University of Belfast, Northern Ireland, BT7 1NN.

A geography for, of, with or by disabled people?: Reconceptualising the place of geographer as expert.

> This … requires as a first stage, a breaking down of the conventional model of the researchers as `an expert system' (Giddens 1991, 18) and the development of research methods and procedures which generate the contexts within which participative research evolves. As Zarb (1992, 135) notes, 'historically, disabled people and their representative organisations have been denied the opportunity to influence the agenda for disability research, let alone take control of it'. This, then, is a call for a transformation in both the procedural and power relations of geographical research.
> (Imrie 1996: 400).

> In short, the challenge is to pursue a geography with disabled people which seeks the goals of material justice and political emancipation that are shared by contemporary movements.
> (Gleeson 1996: 395)

Abstract

Increasingly, geographers are turning their attention to, and actively engaging in, issues of disability. Accompanying this upturn in empirical studies has been a fierce debate centring on differences in underlying ideology, conceptions of disability and methodological approaches. These three in combination determine why a piece of research is undertaken, the type of study conducted, and how data is generated and analysed. At present, the principal protagonists have adopted opposing positions. At one side, geographers such as Golledge (1993, 1996) adopt a geography *of* and *for* disabled people, conceptualising disability as a function of impairment and conducting studies of (subjects of research) and on behalf of disabled people (beneficiaries of research). On the other side, geographers such as Gleeson (1996) and Imrie (1996) question the basis of such a geography, instead advocating a search for a geography *with* disabled people which conceptualises disability as a function of social construction. This paper critically appraises this debate and explores the possibilities of a geography *with and by* disabled people. Here, the position of geographer as expert is re-worked to one of facilitator and enabler and the position of disabled people from the subjects of study to co-researchers through a process of empowerment and the adoption of an emancipatory research strategy. Such a re-positioning ensures that rather than just placing the voices of disabled people in the research process that disabled people can *speak through* the research.

I Introduction

Geographers have only recently started to turn their attention to the issues of disability. As Hall (1995) reported, prior to 1990 only a handful of articles concerning disability issues and the geographies of disabled people had been published in learned journals. In the main, these studies focused on six main issues: the de-institutionalisation of disabled people with mental problems into the community (Dear 1977, Dear and Wolch 1987, Laws and Dear 1988, Taylor 1988); the siting of mental health facilities, residents reactions and the socio-economic effects (Dear 1977, Dear and Taylor 1982, Moon 1988, Moon and Burnett 1983, Smith and Hanham 1981a, 1981b, Sixsmith 1988); the historical geography of mental health asylums (Hahn 1989, Philo 1987, 1989), the impact of health care reforms upon the availability and character of medical facilities (Eyles 1988); the mapping and spatial ecology of disability (Giggs 1973, 1988, Dean 1979, Fry 1988); and how people with visual impairments remembered and learnt spatial concepts such as street layout and the routes between locations either through direct experience (Casey 1978, Dodds *et al*. 1982, Passini and Proulx 1988, Spencer *et al*. 1989) or through secondary mediums such as tactile maps (Andrews 1983, Dacen and Coulson 1988). (Hahn's (1986) study of …) Whilst the first three set of studies tended to view disability as socially constructed the latter three tended to see disability as a function of impairment. Within a social constructivist position, disabled people are seen to be primarily disadvantaged not because of their impairment but because society and social organisations fail to provide adequate facilities and accept disabled people as `equal status' citizens. Within a functional position (sometimes referred to as the medical model), disability is seen to be purely a function of the disabled person's impairment.

Since 1990 the number of studies within these six categories has grown slowly. More significantly, however, geographers have been broadening out their empirical studies to include issues such as access to labour markets (Hall 1995), access to education (Kitchin forthcoming), the planning process and urban design issues (Imrie and Wells 1992, Imrie 1993, Imrie 1996), experiences of interacting and living within urban (Butler and Bowlby 1995, Mathews and Vujakovic 1995, Vujakovic 1992, Vujakovic and Matthews 1994) and rural environments (Limb and Matthews 1996, …?), transport and mobility (Gant 1992, Gant and Smith 1991) and the geographical histories of disability (Dorn 1997, Gleeson 1995, Philo 1995). These studies

have formed the foundation for a sustained period of research into geographical aspects of disability issues and has thus led to a special issue of *Society and Space* and the *Disability and Space* sessions at the 1997 RGS-IBG meeting. Helping to develop the basis of a critical mass have been two parallel developments. First, the increasing number of graduate students who have, or who are, undertaking research on disability from a geographical perspective (e.g. Butler (Reading), Cook (Kentucky) Dorn (Penn State), Gleeson (Melbourne), Hall (OU), Jacobson (QUB), McTavish (Otago), Parr (Lampeter), Porter (Swansea) ?? (Bristol)) have provided a range of exciting and innovative studies generating interest within the discipline. Second, and more importantly, there has been a rapid upsurge of critical geographies which explicitly acknowledge differences within society and focuses upon issues relating to sexuality (e.g. gay and lesbian geographies (see Bell and Valentine 1995)), lifestyle (e.g. travellers and gypsies (see Halfacree 1996, Sibley 1993)), 'race' and ethnicity (see Jackson 1987, Keith 1995), gender (see Bondi 1993, Winchester 1993), the underclass and homelessness (see Philo *et al*. 1995), and transgressive acts (see Cresswell 1996, Sibley 1994). These critical geographies all share an emancipatory research agenda which seeks to highlight the position of `others' and the socio-spatial processes of domination, exploitation, marginalisation and exclusion which seek to reinforce current practices of disadvantage and discrimination against these groups (see Cresswell 1996, Imrie 1996, Jackson 1989, Philo et al.1995, Shurmer-Smith and Hannan 1993, Sibley 1995). This noticeable shift towards these critical geographies have provided a receptive environment to studies which focus upon the geographical aspects of disability.

It is against this backdrop of expanding interest and growth of empirical studies concerning disability and the emergence of a substantial platform of critical geographies that the debate concerning how geographers can and should be contributing disability studies has been framed. Essentially the debate has led to conflict at three levels: ideological, conceptual and methodological. The rest of the paper explores this debate and is split into two main sections. In the first section, the central arguments within the debate are critically reviewed and appraised. In the second section, a new position is forwarded which seeks to find a plausible and acceptable approach in which to ground disability studies. It is argued that, at present, nearly all research, with a couple of notable exceptions, is `of' and `for' disabled people regardless of approach (e.g. positivist, behaviouralist, historical materialist, humanist) or the underlying conceptual model of disability (socially constructed, functional). It is suggested that, where

possible, researchers need to move to a `with and by' position - disabled people need to be brought into the research process as active participants; to move from the researched to the researchers; the studied to the consulted. This means more than just providing a voice for disabled people in the research it means allowing disabled people to *speak through* the research. Underlying this approach is a set of ontological questions which seek to integrate social constructivism with political economy approaches and aspects of both analytical and phenomenological behaviouralism. As such, the approach seeks to both understand and explain the *experiences, behaviours and knowledges* of disabled people and the *strucutures, mechanisms and processes* which underlie disability. However, such understanding and explanation must be cast through the eyes of disabled people themselves through a re-positioning of the geographer as expert to that of facilitator, and disabled people as subjects to that of co-researchers. Explicit within this approach is a conceptualisation of disability as a function of both impairment and social construction, and space as both socially produced and given.

A critical review of the disability debates within geography

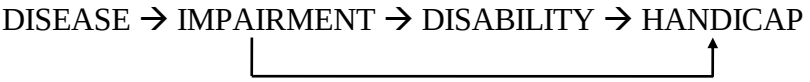
The recent and fairly vitriolic debate concerning disability studies within geography has its roots in Golledge's 1993 paper 'Geography and the disabled: A survey with reference to vision impaired and blind populations' published in the *Transactions of the Institute of British Geographers*. In this paper, Golledge argued that geographers had been dragging their feet in comparison to researchers in other disciplines and he called for a geography of disability, reviewing past research and forwarding a future agenda. In particular, he called for the discipline of geography to examine

> how its expertise can be used to help understand and solve the many problems these special populations encounter in normal commerce with physical and built environments … [and the ways] geographers can invoke their skills and knowledge to deal with sets of problems faced by these special populations. … [As such a] geographical study of the disabled could represent a new systematic area of geographic concentration.

In the main, Golledge's paper focused upon explaining how people with visual impairments understand the geographical environment, a research area he is familiar with both through personal experience (Golledge is himself registered blind) and through a coherent research

agenda extending back over a number of years in which has investigated such issues (see Golledge *et al*. 1987, Golledge 1990, 1991, Golledge *et al*. 1996, Klatzky *et al*. 1990, Loomis *et al*. 1993) and related issues such as designing a Personal Guidance System (see Golledge *et al*. 1991).

Golledge quite explicitly adopts a functionalist conception of disability where the problems facing disabled people are seen as purely a function of an impairment. Here, disabled people are identified by the medical model as defined by the World Health Organisation. This model consists of three parts: impairment, disability and handicap (Hall 1995). Impairment is defined as the specific medical condition (e.g. a missing or defective body part, paralysis, diabetes, mental retardation, nearsightness, etc.). Disability relates to the associated problems of an impairment (e.g. difficulty in seeing, speaking, hearing, writing, walking, conceptualising or any other function within the range considered normal for a human being). Handicap concerns a disability which has interfered with the development of a person's capability to do what is normally expected at a certain age. In general, the relationship between these concepts can be represented as:



where:

IMPAIRMENT		DISABILITY		HANDICAP
Vision	→	Seeing	→	Orientation
Skeletal	→	Walking	→	Mobility
Cardio-respiratory	→	Walking	→	Mobility
Disfigurement	→	→	→	Social integration

Golledge (1993, 64) argued that as a direct result of their impairment disabled people live in transformed spaces:

> While the space in which most people live is certainly not homogeneous, being replete with barriers and obstacles, and requiring effort to perform interactions, there is no doubt that this effort is magnified many times when one is disabled. For the disabled persons the obstacles and barriers not only are multiplied,

> but are expanded well beyond the normal range; gutters become chasms, sidewalks and streets become treacherous paths, stairs may be impossible cliffs, distinctive sizes, shapes or colours may lose their significance, layouts may become a maze, maps and models may be uninterpretable. Space can become wildly distorted either through incomplete knowledge (for example, in the case of the blind or the retarded) or laboriously transformed (as in the case of the wheelchair user).

As such, Golledge contended that traditional geographical theories, concepts and models applicable to the majority of the population might not apply to disabled people. He suggests that as `spatially aware professionals' geographers are in the best position to examine the nature of these distorted spaces and to make recommendations concerning planning, mobility, orientation and geographic education. Here, the geographer is explicitly designated the expert and the disabled people are the subjects of research. As such, an objective scientist/passive subject dichotomy exists whereby the geographer expertly studies the geographical interactions with an environment of the disabled subject, and on the basis of a sample of performances makes recommendations concerning policy. He suggested six potential geographic challenges upon which a geography of disability should focus: location theory (siting issues), spatial awareness (spatial choice and decision making), knowing an environment (spatial knowledge and wayfinding), geographic education (spatial learning), mobility and activity patterns. These challenges, in general, reflect his strong analytical behavioural approach in which space is given and understanding is sought through the analytical examination of the thoughts, knowledge and decisions that underlie human action (Golledge and Rushton 1984).

So far, there have been three critical responses to Golledge's initial paper (Butler 1994, Gleeson 1996 and Imrie 1996) and two defences by Golledge (1994, 1996). All three critiques, whilst welcoming the call for more attention to be paid by geographers to the issues of disablility, attacked Golledge's position on three levels (ideology, conception and methodology) finding little common ground. The discussion of these exchanges takes a thematic form.

All three critiques questioned the ideology of Golledge's position. This, inevitably, is explicitly related to the conception of disability. Golledge explicitly called for a geography of disability in order to improve disabled peoples lives, where improvement involves overcoming or catering for an impairment. Here, if the impairment can be negated either through structural changes to environment or through the development of a specific aid then quality of life will improve to

levels equal to that of able-bodied citizens. For him then, geographers can be improve quality of life by seeking to explain spatial competence, travel behaviour and activity patterns of disabled people in order to formulate policy guidelines or provide attendant information to test a specific aid. Within this position no recognition is attributed to the marginalising or exclusionary practices of society. For Gleeson (1996) and Imrie (1996), it is here that Golledge's geography of disability falls into trap of ablism - the reduction of disability to functional limitations and the acceptance of concepts such as normality and dependency - if we can make disabled people more like able-bodied people, their problems will be significantly reduced. Further, it creates a division between disability and disadvantage thus separating social oppression from impairment (Gleeson 1996).

For Butler, Gleeson and Imrie, this denial of the socially constructed nature of disability is the principle weakness of Golledge's thesis. Drawing upon the work of disability theorists such as Oliver (1990, 1992), Abberley (1991, 1993) and Finkelstein (1980) they argued that geographical work should explicitly recognise the ways in which society and social organisations (re)produce disabling environments. Any studies which fail recognise the socio-spatial processes underlying disability is thus charged with failing to appreciate the ways in which societal values, attitudes and structures are conditioning and impinging upon the lives of disabled people (Imrie 1996). At its most extreme this means rejecting the medical model of disability outright as advocated by Oliver (1990). Oliver (1990, 2) severely criticised the medical model of disability which he argued is both divorced from the direct experiences of disabled people, and reproduces and reinforces the popular conception of disabled people as tragic victims:

> As far as disability is concerned, if it is seen as a tragedy, then disabled people will be treated as if they are the victims of some tragic happening or circumstance.

For Imrie, Golledge's geography of disability perpetuates this situation by attributing the negative experiences of disabled people in obtaining work or interacting with an environment to impairment rather than social or political oppression. Here, disabling environments that restrict movement are seen as 'natural' - the inability to enter the building is not the fault of the designers but the victim (impairment). Implicit within this argument is the assumption that space is given, it is `an absolute container of static, though movable, objects and dynamic flows

of behaviour' (Gleeson 1996: 390) rather than space being socially produced. Within this Golledge is accused of reducing the problems faced by disabled people to technical issues that can be solved with technical solutions thus depoliticising the problems disabled people face and suggesting that structural changes to environments will necessarily lead to lasting solutions for disablement. For Gleeson (1996), this removes disability out of the context of historical and spatial transformations within which modern relations are embedded. Gleeson and Imrie's arguments are strongly influenced by Oliver's (1990) contention that by holding the impairment → disability → handicap structure, the WHO are

> conserving the notion of impairment as abnormality in function, disability as not being able to perform an activity considered normal for a human being and handicap as the inability to perform a normal social role (Oliver 1990, 4).

As a result, Oliver (1990) suggested that people with impairments have been labelled disabled - without ability. Here, as Abberley (1993) noted, disabled people are characterised by their deviation aware from a `standard norm' as dictated by medics. As a result, theorists like Abberley and Oliver called for a social theory of disability which locates the causes of disability squarely within society and social organisation thus recognising that the kind of society that one lives in has a crucial effect on the way the experience of disability is structured. Here, it is suggested that any model of disability be reconstructed with the personal experience of impairment separated from the social oppression that causes disability:

> Impairment - lacking part or all of a limb, or having a defective limb, organism or mechanism of the body.
>
> Disability - the disadvantage or restriction of activity caused by a contemporary social organisation which takes no or little account of people who have physical impairments and thus excludes them from the mainstream of social activities.
>
> (Hall 1995: 6)

In addition, all three critics question the position of geographer as expert and objective scientist and the disabled person as passive subject to be studied and measured. In this scenario, Imrie suggested that there is greater potential to discount, deny or even fail to acknowledge the lived

experiences of disabled people who are under the analytical gaze. Imrie suggested that Golledge's approach reflects the elitist structure in society, perpetuating what Oliver (1992) terms the 'social relations of research production'. Here, the researcher is seen as the expert, the harbinger of specialised knowledge and the controller of the research process and the subject is seen as subordinate (a position that is alienating and belittleing). Butler further argued that research into disability issues must fully engage the experiences and knowledges of disabled people if we are truly represent the reality of day-to-day living. For her, this means interviewing disabled people about their lives not analytically measuring patterns of behaviour. For Gleeson (1996: 394), this means that any empirical study of disability should be a `joint quest with disabled people for a phenomenology of experience, of which they are the principal authors'.

For Imrie this process needs to be advanced. He argued that we need place research concerning disabled people into the context of the unequal and exclusionary power relations of society and concentrate on finding ways to enable disabled people to overcome social oppression. This means concentrating upon analysing the institutional organisations that dictate social reform and the ways in which disabled people and groups can use their experiences and knowledges to challenge and change the system. Gleeson, also questioned the Golledge's positivistic approach to disability, arguing from a historical materialist position that we need to deconstruct the socio-spatial processes of disablement to highlight its produced nature. He suggested that it is only by engaging with disabled people and exposing the inherent flaws in the structure of society that the socio-political emancipation of disabled people will occur. Geographers, therefore, should join with and assist disabled people in `defining and resisting the oppression they experience' (Gleeson 1996; 393). As such, all three question the logic of an analytical behavioural approach that seeks explanation rather than understanding.

It must be noted, however, that it is possible to take Butler's humanist position, Gleeson's historical materialist position and Imrie's political-economic position and create a geography in which the geographer still remains the expert, objective interpreting events on behalf of disabled people. Here, even when disabled people instead of being `measured' are interviewed and consulted it is strictly within the research boundaries as defined by the researcher and only within the data generation phase. Here, the difference to Golledge's position lies in the value attributed to the knowledges and experiences of disabled people and the adoption of

emancipatory research methods. Gleeson and Imrie's recognise the inherent weakness in this position and their call is for geographers to go further and break down the role of 'geographer as expert', to create a geography *with* disabled people.

Butler and Imrie both strongly objected to Golledge's choice of language arguing that it casts disabled people as `abnormal', as fundamentally different. They suggest that Golledge's use of this ableist language designates disabled people a problem to society that must be dealt with humanely. For example, Golledge (1993, 64) states:

> The particular problems faced by members of these populations, as well as the problems faced by society in dealing with and absorbing them, should be a major concern to geographers. … we must put aside our inhibitions about dealing with various retarded, physically disabled or sensorially disabled groups.

Here, disabled people are cast as problems that society needs to deal with, `to compensate for' (Golledge 1993: 64). Such notions reinforce the idea that disabled people are always the recipients of help and that disabilities can be overcome with the aid of professional services provided by able-bodied experts (Imrie 1996). Other phrases such as 'incomplete knowledge' and `widely distorted' may according to Butler (1994: 366) `falsely imply an element of inferiority'. Imrie (1996: 398) furthers that terms such as 'normal', 'ordinary', 'conventional' and 'special needs' convey the idea that disabled people are 'somehow beyond and outside of society'. Both argued that such assertions are dangerous because they provide evidence to those which seek to marginalise disabled people from mainstream society. As such the power of language should not be underestimated. Even terms such as 'the disabled', 'the blind', 'the mentally retarded' as well as being general umbrella terms which categorise all members the same, are labels with negative, differentiating undertones. They imply different or 'other' and are terms used to create and reinforce social boundaries between the dominant group and `outsiders' (Sibley 1992). This is a theme strongly forwarded by Oliver (1990, 2) who argued

> human beings give meanings to objects in the social world and subsequently orientate their behaviour towards these objects in terms of the meanings given to them.

He continued by contending that just as women, ethnic minorities and homosexuals have realised that the dominant definitions that underpinned social problems need to be altered to

create more positive images by attacking and removing biases within language, disabled people have come to recognise that dominant definitions pose problems for individual and group identity and have begun to challenge disablist language. This language is either offensive or depersonalising.

In his replies, Golledge (1994, 1996) consistently held his ideological position, vigorously defending his conception of disability, methodological approach and choice of language. In the main, he took Butler to task on misconceptions and misinterpretations of his writings, in particular the positioning of the blind respondents in his experiments. Here, he agreed that the geographies of blind people should be confronted from a blind and not sighted perspective. Where he disagreed more fundamentally is in regards to Butler's assertion that cognitive mapping tests are misleading, giving a false account of the spatial knowledge of visually impaired people. He cited several studies which have demonstrated significant differences between sighted and non-sighted individuals and strongly asserted that the cognitive maps of visually impaired people are impoverished. Accepting this fact, he suggested, does not mean that these groups will be marginalised but rather that we need to find strategies to improve their spatial competence.

His reply to Gleeson and Imrie was more critical. Golledge accused his critics of grossly misinterpreting his position and used his reply to both reiterate and re-forward his approach and the appropriateness of using a functional conception of disability, and to attack Gleeson and Imrie's social conception of disability and their preferred approaches. He accuses Imrie of being `irresponsible' and `peevishly fabricating comment[s]' to construct a straw man to cut down. In addition, he reasserted that the geographer should take the role of the expert citing studies that have shown that there are significant differences in the knowledge and skill of experts to that of the common sense knowledge of the studied. As such, he felt that the geographer is entitled to interpret disabled peoples behaviours and knowledges on their behalf, as they possess the skills necessary for the complex analysis and synthesis needed. He argued that both Gleeson and Imrie's positions are `intellectual, idealist and somewhat ethereal' (p. 405) whereas his approach is more practical aimed at addressing and providing real world solutions `that, if solved, would increase the quality of life for disabled people' (p. 405). He suggested though that `if all roads lead to Rome' and both approaches serve to increase the well-

being of disabled people, then both approaches are worth pursuing. This given, he then attacked the socio-political theory underlying their positions as eclectic, subjective and value-laden. In particular, he suggested that Gleeson provides insufficient evidence to support his claims, littering his text with unsubstantiated assertions with no documented examples. He further contended that Gleeson's views are very much in the minority because, in the main, disabled people themselves do not subscribe to them. Imrie, he argued, only provides a critique, failing to suggest an on-going research programme, to identify specific problems, ideas or hypotheses. In general, Golledge accused both Gleeson and Imrie of nihilism, being critical for the sake of being critical, of haranguing him for what he left out (although he clearly stated a socio-political geography was needed), and reacting in an unconstructive and at times destructive manner rather than accepting his challenge to explore the potential geography has to offer disabled people.

Trying to be an impartial commentator in this debate, it seems that Golledge has to a large degree misinterpreted Imrie's reply, which rather than trying to pick non-existent holes in Golledge's arguments for the sake of advancing his own position, aimed to show what he felt were the disablist weaknesses in the arguments forwarded. Imrie's position was not about creating straw men to cut down or seeking political correctness as Golledge asserted, it was about finding an approach which explicitly recognises the socio-political environment in which disabled people live and from which `measurements' of behaviour cannot be divorced. Imrie, quite clearly argued that whilst he recognises the reasoning behind analysing and interpreting spatial knowledge and behaviour, that he feels geographers should be concentrating on what he sees as the most important issues that impinge upon their lives - namely societal values, attitudes and structures which reproduce a disablist society. Similarly, this forms the basis of Gleeson's position. At the centre of the disagreement was the ideological basis of research. Golledge was calling for a geography of and for disabled people (admitably working with disabled people, but where the researcher was firmly in control) whereas Imrie and Gleeson expressed a wish to try and move away from the geographer as expert to a position of working with disabled people. Their replies were trying to forward an alternative approach, not trying to be critical for the sake of being critical, as Golledge suggests.

II Finding the middle ground: A geography with and by disabled people

The discussion of this debate raises a number of important questions that we as geographers and social scientists have to engage with and try to resolve. For example:

- How do we decide who/what/how to study?
- What sort of research do disabled people want?
- By studying disability are we commodifying the problems of disabled people and exploiting and objectifying their disadvantage?
- By studying disability are we guilty of `academic imperialism', whereby we choose a topic which is under-researched and make careers by exploiting the disadvantage of others?
- Is it possible, or advisable, to avoid the researcher being the producer of the recommendations and the final document(s)?
- By studying disability are we automatically reinforcing and perpetuating the dualisms (e.g. able/non-able) that need to be transcended?
- Is there is always an expert/lay-person, researcher/researched, investigator/investigated dichotomy?
- Can we only provide sensitivity to disabled voices in the research or can we allow disabled people to speak through the research?
- To what extent can we empathize and work with the subjects of research and fairly represent these groups in our writing? Are we always entrenched in multiple interpretations, the politics of representation and what Gidden's (date) calls the "double hermeneutic"?
- Should the able-bodied be involved in research concerning disabled people when they have no personal experience or understanding of everyday interactions and social oppression of disabled people?
- Is a geography `by' disabled people the only worthwhile venture?

At the heart of these questions lies the issue of ideology: how science is used to promote certain visions of society. In essence, the debate centres on the purpose of the research, and in the light of its intended use, how research is conducted. In this section, a pathway through these questions is sought. It is important to realise, however, that finding the middle ground is not about mediating between the opposing stances of Golledge and his three critics, it is about working through these ideological and methodological questions to find a workable approach to underlie geographic research concerning disability issues; it is about linking theory and practice

in a way that represents the experiences, knowledges and behaviours of disabled people and exposes the structures, mechanisms and processes that (re)produce disabling environments; it is about drawing disabled people into the research process as active, consulted participants; it about creating a geography *with and by* disabled people.

At the heart of any geography *with and by* disabled people are the individuals themselves. However, there are number of ways we could construct a theoretical and methodological framework around these individuals depending upon our conception of disability. For example, it may be possible to develop a with and by position solely around the basis of a social constructive interpretation of disability. Here, the emphasis will be on understanding the world of disabled people. An alternative, and the one that is developed here, is to develop a position around the an interpretation which acknowledges disability to be a function of both impairment and social construction. As such, both understanding and explanation is sought. This middle ground position of disability as both functional and socially constructed has been explored by others such as Hall (1995).

Hall (1995) reported that some disabled people have been expressing doubts about the social constructionist perspective, that it detracts from, or devalues, the experience of being disabled. For example, French (1993) argued that even if the social and physical world were adopted for wheelchair users not all their problems will disappear. Some problems are not solvable just by social manipulation and some are not entirely socially produced - for example French is still blind and even if fully accepted by society she still cannot see, recognise people immediately or read non-verbal cues. As Morris (1991: 10) states:

> There is a tendency within the social model of disability to deny the experience of our own bodies, insisting that our physical differences and restrictions are entirely socially created. While environmental and social attitudes are crucial part of our experience - and do indeed disable us - to suggest that this is all there is is to deny the personal experience of physical or intellectual restrictions, or illness, or fear of dying.

Hall (1995) argued that the social model, therefore, also has as many problems as the functional (medical model) by narrowly defining the problems disabled people experience and pretending that if social barriers are removed that disabled people's lives will be the same as the non-

disabled people. He further suggested that the problems with both theories are that they are based upon the construction of dualisms - mind/body, abled/disabled, normal/abnormal, personal tragedy/social oppression, individual/society - and suggests that a theory of disability centred on concept of the body as an unfinished creative entity, literally who we are, throws doubt on these dualisms. Here, the dualisms become blurred as being `able' or `disabled' embodied is not a fixed notion but one that is affected by social, cultural, political and economic context. In other words, disability is an embodied experience which is neither determined solely by the medical condition of the body or by the state but by a complex interaction between the two. Hall uses the labour market to explore his ideas arguing that it is the body that is central, the `place of work', as the locality of contestation. We ourselves and our employers construct a series of ideas about embodiment and capability in the work place. What researchers need to do to break down the strict dualisms that society adopts e.g. abled/disabled; to identify how the dualism is perpetuated and represented both in law and government, and in social interaction (e.g. the work place); and to explore embodiment (the relationships between the body and activities (e.g. employment)) to fully understand the experiences of disability. Butler and Bowlby (1995) developed similar arguments contending that the social model has for political reasons resulted in the ignoring of the illness and physical limitations which many disabled people face. Drawing heavily from developments in feminist research, they too suggested the body as a useful starting point for a new geography of disability which concentrates upon how disabled people experience and interpret the behaviour of others and experience themselves in relation to others and the physical environment.

Whilst Hall (1995) and Butler and Bowlby's (1995) expositions offer a great deal of promise it is limited to creating an understanding of disability issues. Clearly there is a middle ground between between social and impairment models: the experiences of disability are not just social or functional but a mix of the two. And, whilst currently reinforced in social relations, it is clear that we can accept dualisms such as abled/disabled are in fact continuums - we all have varying levels of ability. However, incorporating the ideas of embodiment do not go far enough. An understanding of disability is not enough on its own, we also need to improve quality of life in practical ways beyond just informing and altering societal attitudes through breaking down societal/environmental barriers. We need to broaden the scope of research to try and understand and explain the *experiences, behaviour and knowledge* of disabled people and the *structures,*

mechanisms and processes which underlie disability. Such an understanding and explanation should not, however, be divorced from disabled people themselves but should be contextualised within a geography *with and by* disabled people.

In Hall (1995) and Butler and Bowlby's (1995) mapping of the subject, the post-structuralist positioning of the body as the site of a new geography of disability, it is unclear as to the positioning of the researcher. One has the sense, that although much more interactionalist and reactive to the subject, that the approach still positions the geographer as expert, the synthesiser and interpreter of experience and knowledge. Here, disabled people are given voices in the research but do not speak through the research: we interpret the results and decide the meaning in their dialogue or what their performance means; we write the reports and produce the guidelines. Given Gidden's (199?) concern over the double hermeneutic - that is the two stage removal of researcher from the researched - one has to question whether the role of expert can be removed at all. However, even if we accept the geographer as expert can we re-position ourselves to re-negotiate the 'double hermenuetic' so that the subject(s) truly speaks through the research? One possible way to achieve this re-positioning might be to move the subject from the object of study to the position of researcher through a process of empowerment and the adoption of an emancipatory research strategy. Such a strategy aims to create a geography both *with and by* disabled people.

A geography *with and by* disabled people seeks to fully integrate disabled people into the research process from ideas to hypotheses to data generation to analysis and interpretation to writing the final report. Here, the role of the academic is not as expert but as enabler or facilitator (see Figure 1). As such, the academic takes an emancipatory position which seeks to inform and impart her/his knowledge and skills to the disabled people who are co-researchers in the project, and provide an outlet to inform the policy makers. At the heart of this approach is the belief that, in the main, the best people to inform policy makers of the problems and potential solutions that disabled people face are disabled people themselves - they are the 'experts' and as academics we can provide a relatively privileged position through which they can speak. Even when the subject matter is more technical such as in Golledge's tests of spatial knowledge and behaviour, the work of Matthews and Vujakovic (1995, Vujakovic 1992, Vujakovic and Matthews 1994) has highlighted that such research

benefits greatly through a *with and by* position. In their studies, some of the ideas and techniques of behaviouralism are merged with those from the new cultural turn in human geography. Their strategy was to use sketch mapping techniques to highlight the inaccessibility of certain areas of the city and reveal the socially constructed nature of disability as manifested through planning and design. Such a strategy revealed activity spaces and spatial knowledge and although Matthews and Vujakovic interpreted the sketch maps on their behalf, disabled people were allowed to articulate their feelings and frustrations through a discussion group. They also got the disabled peoples' helpers for the project to complete the same tasks and discuss through differences in maps with their disabled partners with the aim of demonstrating to them the complexity of the issues involved. `The intention was that the wheelchair users would act as consultants, helping the geographers as mappers' (Matthews and Vujakovic 1995: 1072). The culmination was a map of accessibility constructed by the disabled people and the helpers, along with an index of mobility. Here, a definite *with* position was adopted. Such a strategy has a double benefit - not only do studies become more informed but disabled people gain an academic voice and become empowered through a process of knowledge development and the gaining of transferable skills.

Achieving understanding, gaining explanation

Underlying this approach is a set of ontological ideas which seeks to integrate social constructivism with political economy and aspects of both analytical and phenomenological behaviouralism. By combining aspects of each of these approaches a middle ground position can be achieved which provides a suitable, broad based theoretical basis in which to ground a geography *with and by* disabled people. Such a combination has five principle advantages:

- Combines explanation with understanding
- Provides the basis for studies of both pragmatic problems and socio-political problems.
- Recognises the interplay between the local and the global.
- Allows a broad range of techniques, both qualitative and quantitative, to be used.
- Allows disabled people to become the researchers by repositioning the relationship between researcher and researched.

Although, at first, these four approaches seem mutually exclusive it is possible to take aspects of

all four and mould them into a coherent approach. Essentially, the merged approach seeks to integrate the pragmatic, practical and technical studies of analytical behavioural geography with the more personal, value-laden, humanistic studies of phenomenology and to place these explicitly within the social, cultural, political and economic structures, processes and mechanisms in which behaviour, experiences and knowledges are contextualised at both the local (social constructivism) and global (political economy) scales. In many ways, the approach outlined represents another foray into linking agency with structure.

Taken as the starting point for building the ontological bases for this approach are some underlying concepts of behavioural geography. Although flawed, a re-examination of some of behavioural geography's ideas, as demonstrated by Matthews and Vujavokic, provides some useful ways into constructing a geography *with and by* disabled people. A basic behavioural premise is that all life consists of social interaction and behaviour based upon decisions, choices and evaluations - we all interact with each other by deciding or choosing a course of action based upon past experiences and future expectations. The analytical branch of behavioural geography concentrated on the quantifiable measurement of decisions, choices and evaluations seeking *explanation*. Here, space was given and absolutely defined. The phenomenological branch argued that we needed to concentrate on the values, beliefs and meanings underpinning decisions, choices and evaluations seeking *understanding*. Here, space was socially produced and subjective. (Analytical) behavioural geography was criticised on a number of levels, not least its positivistic leanings (Cullen 1976, Ley 1981), the possiblility of psychologism (Greenburg 1984), its `failure to conceive life in its wholeness' detaching individuals from the social contexts of their actions (Eyles 1989, 111), and its focusing upon understanding and explaining the world rather than trying to change it (Massey 1975, Cox 1981).

The ideas of analytical behavioural geography do however, as Golledge argues (1993, 1996) allow a way into the functional and pragmatic side of impairment. Such studies can provide useful data in testing and designing technical aides such as the plethora of orientation and navigation aids now being developed for people with severe visual impairments (e.g. NOMAD (an audio-tactile graphics processor, Parkes, 1988), personal guidance systems (Golledge *et al*., 1991; Petrie, 1995; Balachandran, 1995), talking signs (Brabyn, 1995), and Atlas Speaks (a talking map, Fruchterman, 1995)). It also helps to provide the large-scale, analytical and

quantitative studies that policy makers tend to favour, but critically to do this from an informed position. In a sense, rather than turning away with the links to environmental psychology these links need to be reformulated specifically drawing from critical social theory, phenomenology and social psychology. Such links have been suggested elsewhere. For example, Pile (1996) has recently advocated a search for a common ground between psychoanalysis and behavioural geography as a way of linking internal and external worlds. Pile (1993) questioned the assumptions that the self is fully integrated, cognitive (and potentially cognizant) and rational, with meanings, values and motives for actions understood through conscious reflection upon experience (this is also a criticism of humanisic and radical approaches). He suggests that whilst behaviouralism has some uses there needs to be a turn towards the unconscious in order to gain understanding. In contrast to behaviouralism and the explicit recognition of cognition and its conscious conveyance, psychoanalysis concentrates upon repression and unconsciousness. Pile argues that consciousness cannot form the basis for understanding human spatial behaviour and experience as it is the unconsciousness that protects the self and motivates actions (Pile 1993):

> peoples behaviour is motivated and constrained by forces, from the inside out and the outside in, which lie outside their control or easy access.

Pile (1993) suggests that psychoanalysis has more to offer geographers than different accounts of socio-spatial relations which dominate or guide human actions because it offers other models of lived world. However, although psychoanalysis might give a contextualised picture of individual actions incorporating wider concerns through repression of the subconscious, it is suggested that it fails to acknowledge that individuals are capable of conscious decision-making and reveals little about life and behaviour in space/place beyond the `cultural constitution of the material world' (p. 136). As a result, it is suggested that psychoanalytical methodology should maybe form only part of a wider set of approaches. In this sense, the role of `discourse' in understanding people, society and space is not rejected but acknowledged to be constrained and constraining when used alone.

The suggested method here, to link behaviouralism into more contemporary critical social ideas is to use phenomenology to provide understanding to counter-balance analytical

behaviouralism's explanation, and to use social constructivism and political economy to provide a social, cultural, economic and political context. This strategy builds upon Aitken's (1991, 1992) initial forays into exploring behavioural geography's compatibility and relevance to contemporary debates concerning feminism and structuralism. In his writing, Aitken foresees a pluralism within behavioural geography that seeks to accommodate the challenges of societal-structural theories and postmodern perspectives. The adoption of such a strategy acknowledges the functional limitations of impairment and the socially constructed nature of disability. However, it also forces studies searching for pragmatic and technical solutions to contextualise the work within the socio-political nature of disability.

Such a strategy is necessary because we cannot just dismiss functional problems as of little relevance in relation to socio-political problems, especially if improvements to quality of life can be gained through such studies. For example, orientation and navigation aids could increase mobility and independent living amongst blind individuals, studies of whom have estimated that at least 30% of people with visual impairment or blindness make no independent journeys outside their homes (Clark-Carter *et al*. 1986) with most of those venturing outside their home independently adhering to known routes, as exploration can lead to disorientation and chaos, accompanied by the fear, stress and panic associated with being lost (Golledge, 1993a; Hill *et al*., 1993). The way forward, however, is to make sure these studies are informed through a full process of consultation with the group being `measured' and the study is being conducted on behalf of, and that the results are placed in the context of broader socio-spatial processes.

Within social constructivism, space and disability are social artifacts as they mediate a series of social interactions and are themselves a product of social mediation. Social constructivists are interested in the micro-level social processes of human agency used in shaping and reappropriating spaces with the aim of identifying, analyzing and explaining causal relationships between social, institutional and political factors. The purpose of research in the social constructivist tradition is, therefore, to understand how disability and spaces are socially and politically `constructed' through complex processes of institutional and personal interaction, whereby many different actors and agencies interplay over periods of time (Graham and Marvin 1996). As a consequence, social constructivism rejects the social determinist ideas that structures of capitalism and the power of political-economic forces dominate how spaces and

places develop.

Political economic approaches on the other hand suggest that rather than social relations being constructed through an interplay at individual level that social relations cannot be understood without considering these broader relations and dynamics of capitalism of advanced industrial society (Graham and Marvin 1996). In general, this approach focuses upon the relations that underpin capitalist power and how they are changing. In the main, arguments are neo-marxist with the suggestion that capitalism is still dominant shaper of today's society, and that spatial relationships help to reproduce the political and social relations of capitalism. In relation to disability, this means examining how the drive towards production and consumption has led to the marginalisation of disabled people from labour markets and sites of consumption.

Both the social constructivist and political economic approaches are narrow in their focus and views. For social constructivists, space and disability is mediated and understood through culture. They are only interested in micro-level social processes used in shaping and reappropriating the interactions between different actors and institutions that socially construct disability. As such, they reject the influence of broader social and economic structures of capitalism and the power of political-economic forces. Political economists, in contrast, only focus upon these larger political-economic structures failing to acknowledge the role of social processes in determining how disability is socially constructed in the local through exclusionary and marginalising processes. It is suggested, as Graham and Marvin (1996) argued in relation to understanding the relationship between technology and society, that these two approaches need to be merged to gain utility. Here, it possible to argue that these approaches are suitable for combination because they both recognize that disabililty is socially constructed within society. Essentially, disability is socially constructed at the local scale and mediated by a broader, more regional/global political economy: there is a recursive relationship between local, social/cultural and regional/global, political/economic processes. Here, disability is locally constructed through the interplay between individuals and institutions, and bound within historical systems: disability is not just given. These local constructions are, however, bound into larger political and economic contexts and affected by factors such as policy, marginalisation, local economic conditions and status (levels of unemployment, poverty etc).

This joining is designed to seek a conceptual understanding of the ways in which disability and society are together constructed socially within both local relations and interplay and the broader framework of capitalist political economy. A linking with the joined analytical and phenomenological behaviouralism allows technical and functional research to be socio-politically contextualised. Such a joining of all four positions, therefore, provides a context into which studies of both experiences, knowledges and behaviours of disabled people and the structures, process of mechanisms underlying disability can be framed.

This approach should have great utility for those wishing to undertake a geography *of* and *for* disabled people. As noted earlier, however, explicit within this merging between aspects of these approaches is a re-positioning of the researcher away from the role of expert. In all four of these approaches the researcher is seen as the expert - the generator, analyser and interpreter of data. Within the new position, the geographer moves from researcher to facilitator or enabler and the subjects of research (e.g. disabled people) move to become co-researchers. Within this position, the problem or situation to be explored is decided through a discussion between co-researchers (geographer and disabled people), as is the method of data generation, analysis, interpretation and presentation. The idea is to create an emancipatory research environment where disabled people undertake the project themselves with the guidance of the geographer who also advises on other, related studies and relevant literature and theories. The approach outlined gives a wide scope for research projects on a diverse set of issues for co-researchers to explore using a wide set of techniques whilst providing a clear outline of the conception of disability and ontological and ideological bases. The bases of such a theoretical approach was provided to give an explicit link between theory and practice, detailing a context into which geographies with and by disabled people can be framed. Such an approach has great utility beyond providing a geography with and by disabled people. For example, a group at QUB is currently using a similar strategy for a geography with and by unemployed people. Here, professional geographers are helping community groups to design questionnaires about the links between religion, poverty, housing and employment, which are then administered by the community group and analysed and presented with the help of the geographers. Not only is such a strategy building links between the community and the university, but it is empowering members of the community and providing them a medium in which to express their views. Such as been the success of this venture that other groups have contacted the university and a

research empowerment seminar is planned for early next year involving a number of community groups.

III Conclusions

This paper has explored how geographers can and should become involved in disability studies both through an examination of the current debate between geographers concerning ideology, conceptualisation of disability and methodology, and through the development of a new approach which advocates a move to a geography with and by disabled people. This new approach repositions the geographer as expert to that of facilitator and the subjects to that of co-researchers, so that rather than placing disabled voices in the research disabled people can *speak through* the research. Underlying a new geography with and by disabled people is a set of ontological ideas which seeks to integrate aspects from analytical and phenomenological behaviouralism with social constructivism and political economy. Such an integration provides a theoretical framework which explicitly recognises that disability is both a function of impairment and social constructions, and that space is both given and produced. As such, it provides a context to frame studies concerning the experiences, knowledges and behaviours of disabled people and the structures, processes and mechanisms underlying disability.

References

Abberley, P. (1987) The concept of oppression and the development of a social theory of disability. *Disability, Handicap and Society* 2, 5-19.

Abberley, P. (1993) Disabled people and `normality' in Swain, J., Finkelstein, V., French, S. and Oliver, M. (Eds) *Disabling barriers - enabling environments*. Open University, Milton Keynes, 107-115.

Aitken, S. 1991: Person-Environment theories in contemporary perceptual and behavioural geography 1: personality, attitudinal and spatial choice theories. *Progress in Human Geography* 15, 179-193.

Aitken, S. 1992: Person-Environment theories in contemporary perceptual and behavioural geography 1: the influence of ecological, environmental learning, societal/structural, transactional and transformational theories. *Progress in Human Geography* 16, 553-562.

Andrews, S.K. 1983: Spatial cognition through tactual maps. In J. Wiedel (Ed), *Proceedings of the 1st International Symposium on Maps and Graphics for the Visually Handicapped.* Washington, DC: Association of American Geographers, 30-40.

Balachandran, W. 1995: Satellite navigation system for blind pedestrians. Research at the

University of Surrey. Paper presented at Conference on Orientation and Navigation Systems for Blind Persons, Hatfield, UK, 1-2 February 1995.

Bell, D. and Valentine, G. (1995) *Mapping desire: Geographies of sexuality*. Routledge, London.

Bondi, L. (1992) Gender symbols in urban landscapes. *Progress in Human Geography* 16: 155-170.

Brabyn, J. 1995: *Orientation and Navigation Systems for the blind: An Overview of different approaches*. Paper presented at Conference on Orientation and Navigation Systems for Blind Persons, Hatfield, UK, 1-2 February 1995.

Burnett, A. and Moon, G. (1983) Community opposition to hostels for single homeless men. Area, 15, 161-166.

Butler, R. (1994) Geography and vision-impaired and blind populations. Transactions of the Institute of British Geographers, 19, 366-368.

Butler, R.E. and Bowlby, S. 1995: *Disabled bodies in public space*. Discussion paper No. 43, University Reading, UK.

Casey, S.M. 1978: Cognitive mapping by the blind. *Journal of Vision Impairment and Blindness*, 72, 297-301.

Clark-Carter, D.D., Heyes, A.D. & Howarth, C.I. (1986). The efficiency and walking speed of visually impaired pedestrians. *Ergonomics*, **29**, 779-789.

Cox, K.R. (1981). Bourgeois thought and the behavioural geography debate. In Cox and Golledge, R.G. Eds., *Behavioural problems in Geography revisited*, Nortwestern University press, pp. 256-279.

Cresswell, T. (1996) *In place/out of place: Geography, ideology and transgression*. UCL Press, London.

Cullen, I. (1976). Human geography, regional science, and the study of individual behaviour. *Environment and Planning A*, **8**, 397-409.

Dacen, D and Coulson, M. (1988) Tactile mobility maps - a comparative study. In Tatham, A.F. and Dodds, A.G. (Eds). *Proceedings of the Second International Symposium on maps and graphics for isually handicapped people*. University of Nottingham. pp. 7-23.

Dean, K. (1979) The geographical study of psychiatric illness: The case of depressive illness in Plymouth. Area, 11, 167-171.

Dear, M. (1977) Impact of mental health facilities on property values. Community Mental Health Journal, 13, 150-157.

Dear, M. and Taylor, S. (1982) Not on our street: community attitudes to mental health care. Pion, London.

Dear, M. and Wolch, J. (1987) Landscapes of despair: From deinstitutionalisation to homelessness. Polity Press, Oxford.

Dodds, A.G., Howarth, C.I. & Carter, D.C. (1982). The mental maps of the blind. *Journal of Visual Impairment and Blindness*, **76**, 5-12.

Eyles, J. (1989) Mental health services, the restructuring of care, and the fiscal crisis of the state: the United Kingdom case study. In Smith, C.J. and Giggs, J. (eds) Location and stigma: contemporary perspectives on mental health and mental health care. Unwin Hyman, London. pp. 36-57.

Eyles, J. (1989). The geography of everyday life. In Gregory, D. and Walford, R. Eds., *Horizons in Human Geography*, London, Macmillian, pp. 102-117.

Finkelstein, V. (1980) *Attitudes and disabled people*. World Rehabilitation Fund, New York.

French, S. (1993) Disability, impairment or somewhere in between? In Swain, J., Finkelstein, V., French, S. and Oliver, M. (Eds) *Disabling barriers - enabling environments*. Sage, London.

Fruchterman, J. 1995: *Arkenstone's Orientation Tools: Atlas Speaks and Strider*. Paper presented at Conference on Orientation and Navigation Systems for Blind Persons, Hatfield, 1-2 February 1995.

Fry, C. (1988) Maps for the physically disabled. The Cartographic Journal, 25, 20-28.

Gant, R. (1992) Transport for the Disabled. Geography, 88-91.

Gant, R. and Smith, J. (1991) The elderly and disabled in rural areas: travel patterns in the North Cotswolds. In Champion, T. and Watkins, C. (eds) People in the Countryside. London: Paul Chapman Publishing.

Giddens, A. (1991) *Modernity and self-identity: self and society in the late modern age*. Polity Press, Cambridge.

Giggs, J.A. (1973) The distribution of schizophrenics in Nottingham. Transactions of the Institute of British Geographers 59, 55-76.

Giggs, J.A. (1988) The spatial ecology of mental illness. In Smith, C.J. and Giggs, J. (eds) Location and stigma: contemporary perspectives on mental health and mental health care. Unwin Hyman, London. pp. 103-133.

Gleeson, B. (1995) Disability - a state of mind?' Journal of Social Issues, 29, 10-23.

Gleeson, B.J. (1996) A geography for disabled people? Transactions of the Institute of British Geographers, 21, 387-396.

Golledge, R.G. 1991: Tactual strip maps as navigational aids. *Journal of Visual Impairment and*

Blindness, 85, 7: 296-301.

Golledge, R.G. (1993) Geography and the disabled: a survey with special reference to vision impaired and blind populations. Transactions of the Institute of British Geographers, 18, 63-85.

Golledge, R.G. (1994) A response to Ruth Butler. Transactions of the Institute of British Geographers, 19, 369-372.

Golledge, R.G. (1996) A response to Gleeson and Imrie. Transactions of the Institute of British Geographers 21, 404-410.

Golledge, R.G., Klatsky, R.L. and Loomis, J.M. 1996a: Cognitive mapping and wayfinding by adults without vision. In J. Portugali (Ed.) *The construction of cognitive maps*. Dordrecht: Kluwer, 215-245.

Golledge, R.G., Loomis, J.M., Klatzky, R.L., Flury, A., and Yang, X-L. (1991) Designing a personal guidance system to aid navigation without sight: Progress on the GIS component. *International Journal of Geographical Information Systems*, **5**, 373-396.

Golledge, R.G., Gale, N. and Richardson, G. 1987: Cognitive maps of cities: studies of selected populations. *The National Geographical Journal of India*, 33, 1-16.

Golledge, R.G and Rushton, G. (1984). A review of analytical behavioural research in geography. In Herbert, D.T. and Johnston, R.J. Eds., *Geography and the urban environment*, **6**, pp. 1-43.

Graham, S. and Marvin, S. (1996) *Telecommunications and the city*. Routledge, London.

Greenburg, D. (1984). Whodunit? Structure and subjectivity in behavioural geography. In Saarinen, T.F., Seamon, D. and Sell, J.L. Eds., *Environmental perception and behaviour: an inventory and prospect*, Research paper 209, Department of Geography, University of Chicago.

Hahn, H. (1986) Disability and the Urban Environment: a perspective on Los Angeles. Environment and Planning D: Society and Space 4, 273-288.

Hahn, H. (1989) Disability and the reproduction of bodily images: the dynamics of human appearances. In Wolch, J. and Dear, M. (eds) The power of geography: How territory shapes social life. Unwin Hyman. London. pp. 370-388.

Halfacree, K.H. (1996) Out of place in the country: travellers and the rural idyll. *Antipode* 28, 42-72.

Hall, E. (1995) Contested (Dis)Abled identities in the urban labour market. Proceedings of the Tenth Urban Change and Conflict Conference, 1-26. Royal Holloway, London.

Hill, E.W., Rieser, J.J., Hill, M.-M, Hill, M., Halpin, J. & Halpin, R. (1993). How persons with visual impairments explore novel spaces: strategies of good and poor performers. *Journal of Visual Impairment and Blindness*, **87**, 295-301.

Imrie, R.F. (1993) Disablism, planning and the built environment. Environment and planning C: Government and Policy, 11, 213-231.

Imrie, R.F. (1996) Ableist geographies, disablist spaces: Towards a reconstruction of Golledge's geography and the disabled. Transactions of the Institute of British Geographers, 21, 397-403.

Imrie, R. (1996) *Disability and the city: International perspectives*. Paul Chapman Publishing, London.

Imrie, R. and Wells, P. (1992) Creating a barrier-free environment. Town and Country Planning, 278-279.

Jackson, P. (Ed) (1987) Race and racism. Allen and Unwin, London.

Jackson, P. (1989) *Maps of meaning*. Routledge, London.

Keith, M. (1995) Ethnic entrepreneurs and street rebels. In Pile, S. and Thrift, N. (Eds) *Mapping the subject*. Routledge, London.

Klatzky, R.L., Loomis, J.M., Golledge, R.G., Cicinelli, J.G., Doherty, S., and Pellegrino, J.W.(1990) Acquisition of route and survey knowledge in the absence of vision. *Journal of Motor Behavior*, 22(1), 19-43.

Laws, G and Dear, M. (1988) Coping in the community: a review of the factors influencing the lives of disintitutionalised ex-psychiatric patients. In Smith, C.J. and Giggs, J. (eds) Location and stigma: contemporary perspectives on mental health and mental health care. Unwin Hyman, London.

Ley, D. (1981). Behavioural geography and the philosophies of meaning. In Cox, K.R. and Golledge, R.G. Eds., *Behavioural problems in geography revisited*, Northwestern University Press, pp. 209-230.

Loomis, J., Klatzky, R., Golledge, R., Cicinelli, J., Pellegrino J. and Fry, P. (1993). Nonvisual navigation by blind and sighted: assessment of path integration ability. *Journal of Experimental Psychology: General*, **122**, 73-91.

Massey, D. (1975) Behavioural research. *Area* 7: 210-213.

Matthews, M.H. and Vujakovic, P. (1995) Private worlds and public places: mapping the environmental values of wheelchair users. *Environment and Planning A* 27, 1069-1083.

Moon, G. (1988) Is there anyone around here? Investigating the reaction to small-scale mental hostel provision in Portsmouth, England. In Smith, C.J. and Giggs, J. (eds) Location and stigma: contemporary perspectives on mental health and mental health care. Unwin Hyman, London. pp. 203-223

Morris, J. (1991) *Pride against prejudice: transforming the attitudes to disability*. The

Women's Press. London.

Oliver, M. (1990) The politics of disablement. MacMillan, Basingstoke

Oliver, M. (1992) Changing the social relations of research production. *Disability, Handicap and Society* 7, 101-114.

Parkes, D. 1988: NOMAD - An audio-tactile tool for the acquisition, use and management of spatially distributed information by partially sighted and blind people. Dodds, A. and Tatham, A. (Eds.) *Proceedings of the second international conference on maps and graphics for the visually disabled*, King's College, London, 24-29

Parr, H. and Philo. C. (1995) Mapping `mad' identities. In Pile, S. and Thrift, N. Mapping the Subject, Routledge. 199-225

Passini, R. & Proulx, G. (1988). Wayfinding without vision: an experiment with congenitally blind people. *Environment and Behavior*, **20**, 227-252.

Petrie, H. 1995: *User requirements for a GPS-based travel aid for blind people*. Paper presented at Conference on Orientation and Navigation Systems for Blind Persons, Hatfield, UK, 1-2 February 1995.

Philo, C. (1987) "Fit localities for an asylum": the historical geography of the "mad-business" in England viewed through the pages of the Asylum Journal. Journal of Historical Geography, 13, 398-415

Philo, C. (1989) "Enough to drive one mad": the organisation of space in 19th century lunatic asylums. In Wolch, J. and Dear, M. (eds) The power of geography: How territory shapes social life. Unwin Hyman. London. pp. 258-290.

Philo, C. (1995) Journey to asylum: the contexts of a medical-geographical idea. Journal of Historical Geography

Philo, C. et al. (1995) Off the map: social geography of poverty. CPAG.

Pile, S. (1993) Human agency, and human geography revisited: a critique of `new models' of the self. *Transactions of the Institute of British Geographers*, 18, 122-139.

Pile, S. (1996) *The body and the city: Psychoanalysis, space and subjectivity*. Routledge, London.

Shurmer-Smith, P. and Hannam, K. (1994) *Worlds of desire, Realms of Power*. Edward Arnold, London.

Sibley, D. (1993) Outsiders in society and space. In Anderson, K. and Gale, F. (Eds) *Inventing place: Studies in cultural geography*. Longman, Melbourne.

Sibley, D. (1994) The sin of transgression. *Area* 26: 300-303.

Sibley, D. (1995) *Geographies of exclusion*. Routledge, London.

Sixsmith, A.J. (1988) Locating mental health facilities: A case study. In Smith, C.J. and Giggs, J. (eds) Location and stigma: contemporary perspectives on mental health and mental health care. Unwin Hyman, London. pp 175-202.

Smith C.J. and Hanham, R.Q. (1981a) Any place but here! - mental health facilities as noxious neighbours. Professional Geographer 33, 326-334.

Smith C.J. and Hanham, R.Q. (1981b) Proximity and the formation of public attitudes towards mental illness. *Environment and Planning A* 13, 147-165.

Spencer, C., Blades, M. and Morsley, K. 1989: *The Child in the Physical Environment*. Chichester: Wiley.

Taylor, S.M. (1988) Community reactions to deinstitutionalisation. In Smith, C.J. and Giggs, J. (eds) Location and stigma: contemporary perspectives on mental health and mental health care. Unwin Hyman, London.

Vujakovic, P. (1992) Mapping another world. Access by design 57, 14-16.

Vujakovic, P. and Matthews, M.H. (1994) Contorted, folded, torn: environmental values, cartographic representation and the politics of disability. Disability and Society 9, 359-375.

Winchester, H. (1993) The construction and deconstruction of women's roles in the urban landscape. In Anderson, K. and Gale, F. (Eds) *Inventing place: Studies in cultural geography*. Longman, Melbourne.

Zarb, G. (1992) On the road to Damascis: first steps towards changing the relations of disability research production. *Disability, Handicap and Society* 7, 125-138.