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The Capabilities Approach of Disability

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Abstract

In this paper, we argue that the capabilities approach developed by Economics Nobel prize winner A.K. Sen provides a sound theoretical framework to define disability. We first summarize different theoretical models of disability (the medical model, the social model, the Nagi model and the International Classification of Functioning, Disability and Health (ICF) of the World Health Organization (WHO)) and we present the main components of the capabilities approach. We then argue that the capabilities approach is a useful framework to define disability and differentiate disability at the capabilities level, *potential disability*, and at the functioning level, *actual disability*. This framework improves our understanding of disability by allowing us to analyze how disability results from the interaction between the personal characteristics, the resources and the environment (physical, social, economic, political) of the individual as well as the person's psychic state.

The capabilities approach is also a model that recognizes that disability is based on value judgments concerning capabilities and functionings. In other words, selecting the evaluative dimensions of disability is an explicit social choice exercise. Determining a set of relevant capabilities that could be used in disability determination is outside the purview of this paper. Irrespective of this theoretical issue, the capabilities approach provides a sound framework to study disability, in particular, to analyze existing disability paradigms and assess the economic sources and consequences of disability.

Key words: disability, capabilities approach, A.K. Sen, ICF, well-being.

1. INTRODUCTION

This paper discusses the application of A.K. Sen's capabilities approach to the conceptualization of disability. Although the capabilities approach has been used in international development for the analysis of the link between disability, gender discrimination and poverty (Welch (2002)), it has not been considered per se as a conceptual framework for the definition of disability. This paper attempts to address this gap in the literature. To the layperson, the word 'disability' means 'the inability to do something'. However, in disability research, there is no consensus on what constitutes disability. There is no commonly accepted way to define disability and to measure it. Disability has been subject to many definitions in different disciplines and for different purposes. Disability has been described from medical, sociological, economic and political perspectives and definitions of disability have been developed and used in different contexts. Various operational definitions have been used for clinical circumstances and administrative programs. Several theoretical models have been developed although the overall picture of disability theory is often presented as a dichotomy between a medical model and a social model. At the theoretical level, defining disability is not an exercise in semantics. Altering the theoretical definition of disability can have far reaching social, economic and political implications through administrative programs and laws affecting persons with disabilities. The ubiquitous question of defining disability in social science research reflects the importance of the issue for persons with impairments, activists, researchers, the government and international organizations.

In this paper, we argue that the capabilities approach developed by Economics Nobel prize winner A.K. Sen provides a sound theoretical framework to define disability. Sen developed the capabilities approach as a set of interrelated theses in welfare economics, in particular on the assessment of personal well-being, poverty and inequality. Sen (1985) favors focusing on a person's capability to function, that is what the person *can* do or *can* be, versus the more standard concentration on *opulence* (the person's real income) or *utility* (as in traditional welfare economics). Under Sen's approach, capability does not constitute the presence of a physical or a mental ability, rather it is understood as a *practical opportunity*. *Functioning* is the actual achievement of the individual, what he or she actually achieves being or doing. Here, disability can be understood as a capability or a functioning deprivation that results from the interaction of (i) an individual's personal characteristics (e.g., age, impairment) and (ii) his or her basket of available goods (assets and income) and (iii) the environment (social, economic, political and cultural).

The rest of this paper is divided into four sections. First, we present different models of disability, in particular the medical model, the social model, the Nagi model, and the second version of the World Health Organization model (section 2). Secondly, we describe the terminology and rationale of Sen's capabilities approach (section 3). Thirdly, we demonstrate that disability can be understood as a capability or a functioning deprivation under Sen's framework (section 4). We then relate the capabilities approach of disability to other models of disability (section 5).

2. DISABILITY MODELS

Different models have been created to define disability. They have used the concepts of pathology, impairment, functional limitation, and disability with a great deal of inconsistency. We present below four major models of disability and review relevant concepts and their meaning in each case¹. The medical model (or bio-medical model) considers disability as a problem of the individual that is directly caused by a disease, an injury or other health conditions, and requires medical care in the form of treatment and rehabilitation. The medical model locates the problem with the person. A person has a condition that is unwanted and that places her in the 'sick role' (Parsons, 1975). As explained by Pfeiffer (2001, p. 31), "if a person has a permanent impairment which results in using a wheelchair to move around, that person will never get 'well'." This model is strongly normative: people are considered as disabled on the basis of being unable to function as a 'normal' person does. Rehabilitation has an important role to play in bringing the person back or close to the norm. The major concern of the medical model at the political level is to provide health care and rehabilitation services. This model has been criticized on different grounds, including its normative strength (Amundson, 2000). The medical model is usually opposed to the social model. Overall, the social model sees disability purely as a social construct. Disability is not the attribute of the individual, rather it is created by the social environment and requires social change. At the political level, disability becomes a human rights issue. As described in Pfeiffer (2001, p. 32-44), there are several versions of the social model. The UK social model was developed by UK disability activists in the Union of the Physically Impaired Against Segregation (UPIAS). At the heart of this model lies societal oppression (Oliver, 1990). The core

definition of the British social model comes in the UPIAS document, *Fundamental Principles of Disability*, an edited version of which is reprinted in Oliver (1996, p.22); “In our view, it is society which disables physically impaired people. Disability is something imposed on top of our impairments by the way we are unnecessarily isolated and excluded from full participation in society.” In the US, this view was supported by Harlan Hahn (2002), among others. As noted by Hahn (2002, p. 168), the understanding of disability in the social model

“ provided an agenda for the examination of topics such as personal identity, architectural or communications barriers, accessible transportation and public accommodations, and unfair practices in employment, education and government programmes. In addition, it formed the foundation for legal and political arguments about the principle of equality. Most disabled people simply wanted ‘to level the playing field’.”

As an extension of the social model, Harlan Hahn proposed a ‘minority group’ model of disability whereby social inequalities encountered by persons with disabilities are similar to those encountered by other minorities such as “extraordinary high rates of unemployment, poverty and welfare dependency; school segregation; inadequate housing and transportation; and exclusion from many public facilities...” (Hahn (2002, p. 171).

Drawing the overall picture of disability models is not as simple as presenting a dichotomy between a medical model and a social model. There are other models that have developed on their own, as extensions of the medical or the social model or as integrations of the two. We present below two of these models: the Nagi model, given its influence for the last three decades at the policy-making level in the U.S. and in the

economics of disability in general, and the recent International Classification of Functioning, Disability and Health of the World Health Organization given its worldwide scope and the potential role it may play in data collection efforts and policy development in the years ahead. Pathology is the starting point of Nagi's model (1965). Pathology refers to an interruption of normal body processes. An active pathology or residuals of a pathology may lead to impairments, which are anatomical or physiological abnormalities or losses. Nagi identifies functional limitations as the restrictions that impairments impose on the individual's ability to perform the tasks of his or her roles and normal daily activities. These roles include family roles (e.g., looking after a child), work roles (having a job) community roles and other interactional roles as well as self care activities. Nagi (1991, p. 315) understands "an inability or limitation in performing socially defined roles and tasks expected of an individual within a socio-cultural and physical environment." Here, while an impairment is at the source of a causal chain leading to disability, eventually, disability is a social construct. For instance, a 12-year old girl with mental retardation does not attend school, she stays home with her parents helping with household chores. If she lives within a society where young girls are not expected to go to school but stay at home, then she does not have a disability under the Nagi model. In contrast, if she lives in a society where girls her age attend school, then she does not perform this socially expected role and is therefore considered disabled. The Nagi model therefore promotes a social and cultural relativist view of disability.

The World Health Organization developed the International Classification of Impairments, Disabilities and Handicaps (ICIDH) in the early 1980s, which was recently revised and renamed the International Classification of Functioning, Disability and

Health (ICF) (WHO, 2001). For the sake of brevity, we will focus on the latter. Conceptually, ICF is presented as an integration of the medical and the social models (2001, p. 20): “ICF attempts to achieve a synthesis, in order to provide a coherent view of different perspectives of health from a biological, individual and social perspective.” The ICF model is sometimes termed the ‘biopsychosocial’ model of disability (Bickensack, Chatterji, Badley and Ustun, 1999). This model starts with a health condition, that gives rise to impairments, then to activity limitations and participation restrictions within contextual factors. Impairments are problems in body function or structure as a significant deviation or loss. An activity is the execution of a task or action by an individual, while participation is the lived experience of people in the actual context in which they live. Participation is not understood in terms of a role to play but in terms of an involvement in a life situation that can mean “being included or engaged in an area or being accepted or having access to needed resources” (Altman (2001, p. 110)). Contextual factors refer to the entire background of an individual’s life including personal factors, the environment (home, school and work), services available in the community (e.g., transportation, health, social services) and cultural factors (laws and attitudes). Activity and participation domains include among others, learning and applying knowledge, mobility, self-care, education, remunerative employment, economic self-sufficiency. These individual domains can come into play within different roles, but they are not organized as a set of tasks geared towards performing a particular role. Functioning and disability are two umbrella terms, one being the mirror image of the other. Functioning covers body functions and structures, activities and participation, while disability includes impairments, activity limitations and participation restrictions.

The ICF is the only conceptual model of disability that also comes close to offering a concrete classification system of individuals. It gives two scales of zero to nine whereby an individual is assessed. A *capacity qualifier* measures an individual's ability to execute tasks or actions in a standardized environment to neutralize the impact of different environments on the abilities of the individuals. A *performance qualifier* measures the actual "lived experience" of people in the actual context in which they live. We will see later that this ICF framework is the closest to a capabilities approach of disability.

3. THE CAPABILITIES APPROACH

Sen's capabilities approach was developed as a framework to analyze different concepts in welfare economics including, the standard of living, personal well-being, quality of life and poverty. If we take the case of the standard of living, it is traditionally measured through the ability to buy a basket of commodities. Sen refers to this approach as the opulence view. The standard of living is also defined in terms of 'utility', where utility is meant as pleasure and happiness, or as a tool for valuation and choice. Sen argues that the standard of living encompasses more aspects than the opulence and the utility measures. Under the capabilities approach, Sen focuses on the type of life that people are able to live, i.e. on their capability to achieve or accomplish, on what they succeed in being or doing. The possession of commodities is valuable only to the extent that it enables the person to do or be a range of things. A commodity is considered as having 'characteristics'. For instance, for a person with a spinal cord injury, a wheelchair has the characteristic of providing transportation, it does not have such a characteristic for a person who can walk. In this approach, 'capability' means 'practical opportunity'. "The

concept of “functionings”... reflects the various things a person may value doing or being” Sen (1999, p.75). The ordinary meaning of ‘functioning’ is an activity, something a person does. In Sen’s approach, functioning has a broader sense, it includes activities as well as desirable states of persons such as ‘being well nourished’ or ‘being free of malaria’. “A functioning is an achievement whereas a capability is the ability to achieve. Functionings are, in a sense, more directly related to living conditions, since they are different aspects of living conditions.” Sen illustrates the difference between capabilities and functionings through the example of two people who are starving. They achieve the same functioning, malnourishment, but they have different sets of capabilities. One is starving out of religious faith, she has *decided* to starve, while the other is starving from poverty. Overall, Sen is concerned with a person’s interests, more than a person’s actions or behaviors. Sen (1985) distinguishes two ways of seeing a person’s interests and their fulfillment: ‘well-being’ and ‘advantage’. ‘Well-being’ is concerned with a person’s achievement: how ‘well’ is his or her ‘being’? The ‘well-being’ is therefore concerned with the functionings, what a person actually achieves being or doing. ‘Advantage’ refers to the real opportunities facing a person, from which the person will have the freedom to choose. The person’s ‘capability set’ is a set of functioning vectors from which the person has the freedom to chose.

At the risk of oversimplifying the above concepts and the way they relate to each other, we have represented the approach in a diagram (figure 1). The basket of commodities available to a person, the environment in which she lives and her personal characteristics influence the capabilities set, which together with the psychic state of the person lead to the functionings, what the person achieves to be or to do.

[Insert figure 1 around here]

The cost of achieving a given capability varies depending on the environment of the person, including the average opulence of the society in which the person lives. Applied to disability, the cost of achieving mobility for a person with a spinal cord injury will be lower where public transportation is wheelchair friendly compared to an environment where the person would need to buy transportation services individually. The cost of achieving a given level of maintenance care through personal assistance for a paraplegic will be higher in a society that is generally richer. This approach is not a rigid framework with lists of commodities, environmental dimensions, personal characteristics, capabilities and functionings. Sen has voluntarily left the capabilities approach incomplete in order to allow for plurality. Sen does not propose a single metric to measure well-being, nor does he give a method to rank capabilities sets. Depending on the issue at stake and the circumstances, a particular variable can be a personal characteristic, a capability or a functioning. Since our area of interest is disability, we will illustrate this idea using examples related to disability. Education can be considered as a ‘personal characteristic’ that influences work as a functioning (e.g., what education do working persons with impairments have?), as a ‘capability’ (e.g., do persons with impairments have the opportunity to get an education?) or as a ‘functioning’ (e.g., what is the education level of persons with impairments compared to those without?) Sen’s capabilities approach has the advantage of having a wide coverage in that it includes all types of functionings from basic ones (e.g., nutrition, shelter, sanitation, health) to complex ones (e.g., self-respect, happiness, the ability to appear in public without

shame). Sen shows the importance of assessing poverty on the basis of the ability to achieve some *basic* functionings, rather than on income only. He does not make a definite list of those basic functionings. Depending on the environment and the issue under consideration, the scope and length of the list will vary (Sen (1993, p.31)). While dealing with extreme poverty in developing countries, Sen includes life expectancy, infant mortality, the ability to be well nourished and well-sheltered, basic education and medical care as basic capabilities.

While this voluntary incompleteness has its value at the conceptual level, it makes the capabilities approach difficult to implement at the operational level. Social scientists and philosophers have produced different versions of a list of dimensions of what constitutes the good life. Alkire (2002a, 2002b) reviews several such lists including John Rawls' list of primary goods, Doyal and Gough's list of needs and Martha Nussbaum's list of capabilities. Philosopher Martha Nussbaum² has developed a list of 'central human capabilities' as a neo-Aristotelian account and an extension of Sen's capabilities approach. Like Aristotle, Nussbaum believes in a unique and objective view of 'human flourishing', from which a unique list of functionings is derived. Her prescriptive list includes 10 ordered functions that are essential to human life and is applicable universally across cultures. The most recent version (Nussbaum, 2000) of the list includes:

1. Life: not dying prematurely.
2. Bodily health: to have good health, adequate nutrition and shelter.
3. Bodily integrity, including physical mobility.

4. Senses, imagination, and thought: including being able to use the senses, to imagine, think and reason.
5. Emotions: including being able to have attachments to things and people outside ourselves.
6. Practical reason: including being able to form a conception of the good.
7. Affiliation: including social interactions.
8. Other species: “Being able to live with concern for and in relation to animals, plants and the world of nature.”
9. Play: “Being able to laugh, to play, to enjoy recreational activities.”
10. Control over one’s environment. (A) Political: including political participation; (B) Material: “Being able to hold property ...; having the right to seek employment on an equal basis as others...”.

A person who falls below a minimum threshold for a given capability loses human dignity. Nussbaum considers this list as a basis for determining a social minimum in a variety of areas. The guarantee of these social minima are fundamental human rights that political and social institutions have to deliver. Compared to Sen’s capabilities approach, Nussbaum’s version is more determined and her focus is on political and legal rather than socio-economic applications. Nussbaum is primarily concerned with gender discrimination, and while her approach may be valuable at the political level, we will argue later on that it cannot be used as part of a capabilities approach of disability.

4. DISABILITY AS A CAPABILITY DEPRIVATION

Health is a major concern in Sen's capabilities approach whether it is considered as part of an individual's well being, or whether health equity is analyzed as part of the justice of social arrangements (Sen, 2002). Disability has not received as much attention as health in Sen's work. However, his work is peppered with references to persons with impairments or chronic illnesses³. His focus is on the link between personal characteristics, including what Sen calls a handicap or disability, which is an impairment in disability theory, and its impact on a person's capabilities set and the assessment of poverty and well-being. Impairment is considered as an example of the personal characteristics that should be taken into account in assessing poverty and personal well being. Under the traditional opulence or utility approach in economics, a person is considered better off than someone else if he or she can command more commodities, irrespective of whether the person has an impairment. For instance, Sen notes (1999, 74):

“A person who is disabled may have a larger basket of primary goods and have less chance to lead a normal life (or to pursue her objectives) than an able-bodied person with a smaller basket of primary goods. Similarly, an older person or a person more prone to illness can be more disadvantaged in a generally accepted sense even with a larger bundle of primary goods.”⁴

Can the capability approach be used as a conceptual framework to define disability? In other words, does it account for the experience of persons with disabilities effectively? Sen himself has not dealt with the capabilities approach of disability. Our effort in this direction should only be taken as an interpretation of Sen's approach. We argue that the capabilities approach can be used as a conceptual framework to define disability. Under

the capabilities approach, disability may be analyzed at two separate levels, as a deprivation of capabilities or as a deprivation of functionings. At the level of personal characteristics, we will talk of an impairment rather than a disability, and we define impairment as a physiological, mental or anatomical loss. In terms of capabilities and functionings, deprivation results from the interaction between the resources available to the person, personal characteristics (e.g., impairment, age, gender), and the environment. Moreover, in the case of functionings, deprivation also results from the psychic state of the person. Let us first describe disability at the capability level. As noted above, capabilities are practical opportunities, and capabilities are not directly observable. Disability occurs when an individual is deprived of practical opportunities as a result of an impairment. For instance, a 19 year old who is unable to walk following an injury is considered disabled if his practical opportunity to attend college is restricted, compared to an individual with a similar basket of goods and in the same environment and similar personal characteristics except for the impairment. We will refer to disability at the capability level as *potential disability*. The onset of a severe physical or mental impairment will almost inevitably lead to a reduction in the range of the individual's practical opportunities, and in the capabilities set, and thus to potential disability. Using Sen's terminology, it will not leave an individual's advantage or freedom unchanged. Whether or not the individual is actually disabled depends on whether the impairment places restrictions on the individual's functionings. At the functioning level, the focus is on what an individual values doing (or being), and on what the individual achieves to do (and to be). We will call disability at the functioning level *actual disability*. An individual is disabled if he or she cannot do or be the things he or she values doing or being. Such

assessment would be entirely subjective. It would need to be dynamic and discontinuous since a person may well adjust to an impairment if the person was not born with it and acquired it later in life. Indeed, through adaptive preferences, a person may change the way he or she values functionings and may well consider himself/herself as disabled right after the onset of an impairment, but not so five years later. This adjustment may also take the form of ‘compensating abilities’, a term created by Qizilbash (1997) to refer to the phenomenon whereby people adjust their abilities in the face of deprivation in the context of the capabilities approach.

Under the capabilities approach, disability is the result of a combination of different factors. ‘Potential disability’ results from (i) the nature of an impairment and other personal characteristics (e.g., age, gender), (ii) the resources available to the individual, (iii) the environment. ‘Actual disability’ is influenced by these same factors as well as by the psychic state of the individual, which includes interests, motivation and efficiency. First, deprivation can result from the very nature of the impairment, irrespective of other personal characteristics, the amount of resources available to the individual and the environment. For instance, if a person’s impairment causes constant pain, due to which the person is unable to have access to practical opportunities (e.g., go out of the house, work, leisure), it is the intrinsic nature of the impairment that deprives the person of capabilities and makes him or her disabled. Secondly, deprivation can be the result of barriers in the environment, in its physical, economic, social, political and cultural aspects. For instance, a wheelchair user may find barriers in the physical environment when buildings have steps instead of ramps, which limits mobility and hence the set of capabilities and functionings. Thirdly, deprivation can result from the economic

constraints that an impairment may place on the availability and the demand for resources, or may induce higher costs to achieve a given level of advantage or well being.

Sen (1992, p. 113) notes:

“Sometimes the same handicaps, such as age or disability or illness, that reduce one’s ability to earn an income, can also make it harder to convert income into capability. Often, a high proportion of the poor in the advanced countries have such handicaps, and the extent of poverty in such countries is substantially underestimated, since it overlooks the ‘coupling’ of income-*earning* handicap and income-*using* handicap in generating capability. For example, an old person has a much harder time in being free from disease, in leading a healthy life, in achieving mobility, in taking part in the life of the community, in seeing friends, and so on. And these income-using disadvantages can tremendously compound the feature of low earning power...”⁶.

Taken to an extreme, the lack of resources can also be in itself the catalyst of impairment and/or disability. A person with a chronic condition, say diabetes, who has no health insurance coverage and who lacks the necessary resources to be able to have an ongoing treatment, may well see his or her condition deteriorate to the point where she develops an impairment and becomes deprived in terms of capabilities and functionings. A person in a wheelchair who has no financial support and cannot afford any means of adapted transportation cannot go out of the house if he or she wants to. Disability is not only the result of the interaction between the individual and society. The resources available to an individual constitute an important dimension of disability. An impairment is a pre-requisite to disability but it is only one factor which, along with other factors

related to the resources available, the person's characteristics and the environment, lead to capability deprivation. Overall, the capabilities approach of disability is a holistic approach to disability that accounts for the importance of economic, personal and environmental factors in understanding capability deprivation.

For social and political purposes, it is necessary to identify persons with disabilities in a particular region or country, and one cannot have an individual subjective assessment of disability as described above based on valued capabilities and functionings, but one could well involve persons with impairments in the selection of the evaluative dimensions of disability. At a regional or national level, reference needs to be made to a standard that accounts for the context of the particular individual and other non-impaired persons with similar characteristics (e.g., age, gender), with the same level of resources and environment (e.g., urban, suburban, rural). In each of these contexts, one would need to establish a set of relevant functionings, a method whereby the functionings of a person can be ranked compared to others, and a minimum level below which a person is considered disabled. A similar standard assessment could be performed at the capabilities level. For instance, what opportunities are available in terms of work, education, leisure, and social life to an individual in the same environment with a similar basket of goods and similar personal characteristics except for the impairment? If disability is defined in terms of a deprivation of capabilities (or functionings), then one needs to select a set of relevant capabilities (or functionings) in order to form an 'evaluative space'. This selection of relevant functionings will be influenced by societal norms and expectations. For the purpose of defining poverty, Sen recognizes that the selection of relevant

capabilities and their weighting, is a value judgment (1992, p. 42-46) and a social choice exercise. Sen himself does not propose a definitive list of relevant capabilities for poverty assessment. Could we use Nussbaum's list of central human capabilities for disability determination? Clearly, several items of the list are directly related to physical and mental impairments, for instance bodily health, bodily integrity, senses, practical reason. We see two fundamental reasons why this list could not be applied to the determination of disability. First, the list is not specific enough to be used as a tool for the determination of disability. For instance, having "good health" is related to disability⁵, but is not specific enough to be used in its determination⁶. The list would need to be further developed if it were to become a framework for the practical assessment of disability. Secondly, while Nussbaum's approach is meant to be universal, either the list does not seem to apply to persons with disabilities, or it may be that this approach considers persons with impairments as being incapable of well-being. Being mobile and being able to use the five senses are presented as necessary for human flourishing. Implicitly then, impairments are considered as barriers to human flourishing, and Nussbaum does not specifically justify this claim⁷. As pointed out by Segal (1998), some people flourish without some of the capabilities that Nussbaum considers as essential. Qualitative analyses of the quality of life of persons with impairments (e.g., Albrecht and Devlieger, 1999) as well as personal accounts of persons living with impairments are sufficient to prove this point⁸. "While a life could hardly go well without at least some of the capacities Nussbaum enumerates, we have no clear basis for establishing a minimum set" (Wasserman, 2001, p. 234). Using Nussbaum's list would implicitly entail understanding 'disability' as a well-being deprivation rather than a capability failure, and embracing a

conception of ‘human flourishing’ that excludes human diversity. If Nussbaum’s approach therefore does not seem applicable to the definition of disability, there is a need to develop a list of relevant capabilities and functionings, say for a given country, if the capabilities approach of disability is to be completed and operationalized.

5. THE CAPABILITIES APPROACH AND OTHER DISABILITY MODELS

Does the capabilities approach to disability improve our understanding of disability? The capabilities approach of disability has several noteworthy differences compared to other models of disability. Just like the ICF and the Nagi model, the capabilities approach is centered on the individual, as opposed to society as in the social model. Society can be at the source of deprivation, but it is only one dimension among many others that determine whether an individual has a disability. In addition, this framework is not based on roles that individuals are expected to perform by society as in the Nagi model. It focuses on what individuals value doing or being in given environments, as opposed to expectations foisted upon them by society. Of course, societal values have an impact on individual values, but they are not necessarily similar. However, as noted above for social and political purposes, it would be necessary to establish a relevant set of functionings and capabilities to measure the prevalence of disability at a country or region level. Such a list would not be geared towards specific socially expected roles as in the Nagi model and would therefore be expected to be less restrictive.

The capabilities approach has the advantage to differentiate disability at two levels, at the capability level, *potential disability*, and at the functioning level, *actual disability*.

This distinction of these two levels is absent in other models except the ICF. The ICF includes a capacity qualifier (capabilities) and a performance qualifier (functionings). It is unclear though what standardized environment the ICF uses in practice in its capacity qualifier to neutralize the impact of different environments on people's abilities.

Finally, there is considerable interpersonal variation in the link between a given impairment and disability as a result of a wide variety of factors. The capabilities approach of disability gives due account to this variety of factors at the individual level through the personal characteristics (e.g., age, gender, race), the interaction of the person with the environment and the psychic state of the person (e.g., motivation). By including personal characteristics, the capabilities approach of disability accounts for human diversity (Sen (1992, p.1), which the social model, the Nagi model and the ICF models do not address, or at least not as much. While the ICF recognizes that an individual may have restricted participation in a major life area for many reasons (e.g., poverty, gender) (Bickenback, Chatterji, Badley, and Ustun (1999, p. 1184)), the ICF is a health classification, thus the scope of capability and functioning deprivation it addresses is limited to issues related to health. Finally, among the many factors that influence disability, the capabilities approach to disability encompasses an economic dimension of disability through an account of the economic burden and the economic environment of the person with an impairment. It adds an intrinsic economic dimension to disability. By definition, impairments limit the earning capacity and put constraints on the spending patterns of a person, and thus constitute an economic burden at the individual and household level and may lead to a disability at the capabilities or functioning level. The

economic environment influences practical opportunities in terms of employment or self-sufficiency for persons with impairments, as well as the costs of achieving given functionings. Understanding the economic burden and the economic environment of disability is part of understanding disability. This economic dimension of disability is absent or partially accounted for in other models. It is absent in the medical and social models. The Nagi model is focused on roles, and if one is interested in the work role, one would certainly account for the restrictions an impairment may place on an individual's capacity to work and the foregone earnings associated with those restrictions. Economic deprivation associated with a disability can therefore be understood as the consequence of an inability to perform the work role and the Nagi model thus implicitly and indirectly represents this economic aspect of disability. However, in the Nagi model, the environment is purely social, it is there to define the roles that are to be expected of individuals. The fact that the economic environment and the available resources may directly impact on the person's being disabled is not accounted for. In the ICF model, consideration is given to the economic achievements of individuals in terms of remunerative employment and economic self-sufficiency in the activity and participation domains, but again, the fact that the resources available to the person and the economic environment directly influence a person being disabled is not covered.

Can we consider existing disability models as interpretations of the capabilities approach of disability with specified dimensions of capabilities? The Nagi model might be interpreted as a model where the relevant functionings are 'socially expected roles', whether work, education or play related: it could be considered as a highly specified form

of a capabilities approach of disability. Similarly, the medical and social models might be interpreted as models where relevant functionings are normal bodily functional capacities and environmental barriers respectively. However, there is a fundamental difference between these models and the capabilities approach that prevent the former from being considered as narrow applications of the latter. In both the Nagi, the medical and social models, there is no concern for the lived experience of the individual, nor her achievements or aspirations. Asking a person if she can work in the Nagi model, or lift 10 pounds with one hand in the medical model, regardless of whether she wants to and needs to, whether there is any job for her in the economy, or whether she has anything that heavy to carry seems restrictive if the concern is about the activities and states of affairs the person values. In addition, the strength of the capabilities approach is to make the selection of relevant evaluative dimensions an explicit social choice exercise, while the social, medical and the Nagi models come up with a fixed and limited set of evaluative criteria. The ICF model stands out of the other disability models in its link with the capabilities approach in that it has a concern for the lived experience of the individual in a wide range of functionings. It is important to note that the term ‘functioning’ has different meanings in the ICF model and in Sen’s capabilities approach. In the ICF, it includes functionings that are directly related to health (body functions and structures) as well as activities and participation in a wide range of life domains (e.g., education, self care, work). Sen’s concept of functionings is broader in that it includes activities (e.g., playing soccer) as well as desirable states of persons (e.g., being fit), and it can be general (e.g., being free of thirst) or specific (e.g., drinking wine). We argue that the range of functionings under consideration in the ICF includes functionings that are relevant to

disability, and is broad enough to reflect the lived experience of the person. As such, the ICF can be understood as a specification of the capabilities approach of disability. An additional similarity between the two approaches is that disability in the ICF has the same meaning as actual disability in the capabilities approach of disability: both refer to functioning deprivation. However, in order for the ICF to be a faithful specification of the capabilities approach of disability, as we noted above, the ICF would need to be modified to account for the economic constraints and the economic environment of the person, as well as the personal characteristics (e.g., gender) that may exacerbate the capability deprivation that results from an impairment. This is particularly important for the ICF since it is being implemented worldwide, including in a lot of countries where disability often goes hand in hand with poverty. Finally, there is one area though where the capabilities approach may clash with the ICF. The capabilities approach promotes a relativist view of disability by recognizing that selecting the dimensions whereby disability is determined is a social exercise and will therefore vary from society to society. In contrast, the ICF is intended as a universal classification of health, functionings and disability applicable across cultures.

8. CONCLUSION

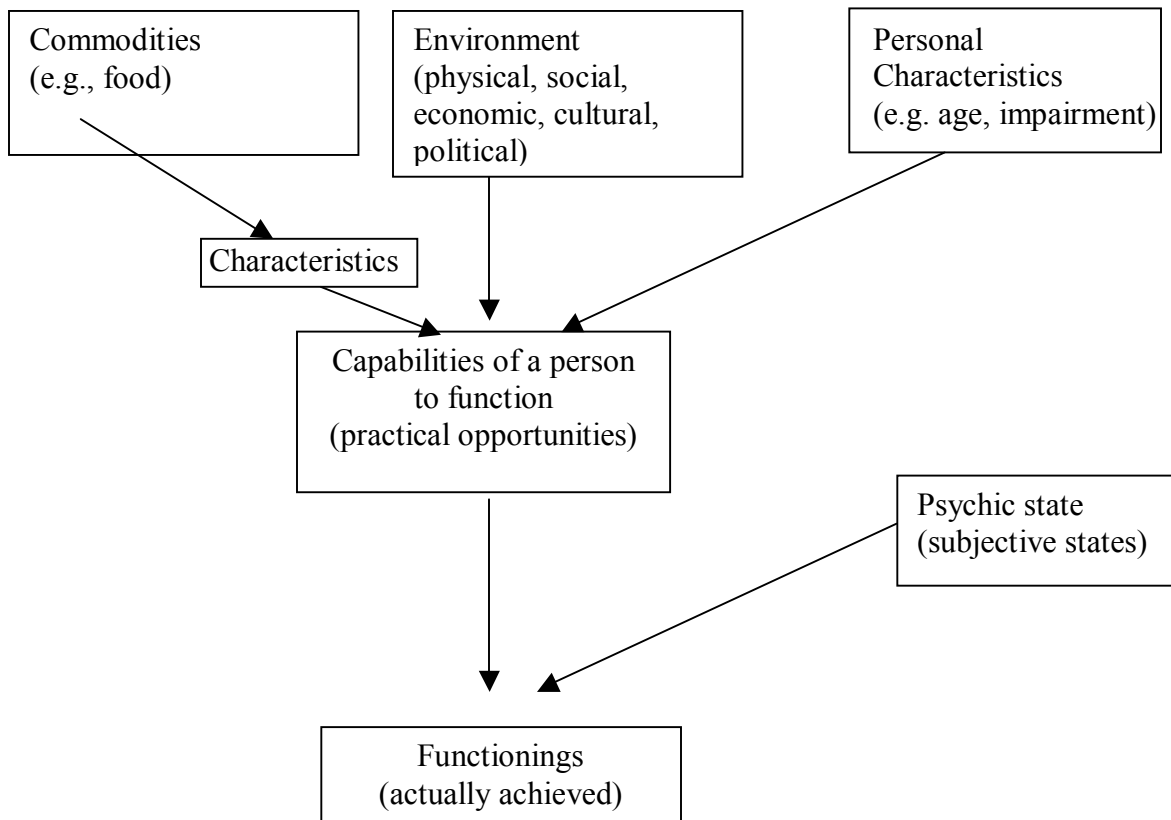
To conclude, we will recapitulate the main points made in this paper. We argue that the capabilities approach provides a sound theoretical framework to define disability. This framework allows us to analyze how disability results from the interaction between the personal characteristics, the resources and the environment (physical, social, economic,

political) of the individual as well as the person's psychic state. In addition, we found that the capabilities approach to disability has important implications for determining disability in public programs through the distinction between potential and actual disability, and the inclusion of the economic constraints placed by an impairment and/or a disability. The capabilities approach is a paradigm that recognizes that disability is based on value judgments concerning capabilities and functionings, in other words, the selection of the evaluative dimensions of disability is an explicit social choice exercise. The capabilities approach of disability is also an overall framework where several mechanisms of deprivation can be simultaneously understood and analyzed (e.g., poverty, disability, gender discrimination). Determining a set of relevant capabilities that could be used in disability determination is outside the purview of this paper. However this theoretical issue is resolved, the capabilities approach provides a sound framework to study disability, in particular to analyze disability models and assess the economic sources and consequences of disability. It would be interesting in the future to apply this approach by defining a set of relevant capabilities and functionings and measure the prevalence of disability in a given country or region and compare such estimates with those provided through other definitions of disability. In addition, international development agencies such as the World Bank have lately exhibited an increasing interest in disability, as evidenced by the amount of resources dedicated to disability-related conferences or publications. Yet linking disability to development is largely an uncharted area, and the capabilities approach of disability may well provide a useful framework for understanding the relation between disability and development. This area is currently being investigated by the author.

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Figure 1: The Capabilities Approach



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¹ A long list of definitions of concepts relevant to disability is available in Altman (2001). It is not our intention to explain in details the history and the contents of each model of disability, a broad coverage of these models is available in Altman (2001), Pfeiffer (2001), Williams (2001), and Campbell Brown (2001).

² E.g. Nussbaum (1990, 2000) and Nussbaum and Glover (1995).

³ For instance, Sen (1985, p.5, p.10; 1992; p.107; 1999; p.74; 88;2001; p.54, 2002; p. 663)).

⁴ Elsewhere Sen writes that (1999, p. 88): “Handicaps, such as age or disability or illness, reduce one’s ability to earn an income. But they also make it harder to convert income into capability, since an older, or more disabled, or more seriously ill person may need more income (for assistance, for prosthesis, for treatment) to achieve the same functionings (even when that achievement is at all possible). This entails that “real poverty” (in terms of capability deprivation) may be, in a significant sense, more intense than what appears in the income space.”

⁵ Although disability is far from being equivalent to having bad health.

⁶ Even when Nussbaum (2001) reviews three books of personal accounts of life with an impairment, she is silent on the link there might be between her capabilities approach and disability.

⁷ Even when Nussbaum (2001) reviews three books of personal accounts of life with an impairment, she is silent on the link there might be between her capabilities approach and disability.

⁸ For instance, philosopher Eva Feder Kittay (2001) describes the well-being of her daughter, Sesha, who has a severe mental impairment, and the activities Sesha enjoys. Kittay notes that Sesha can flourish if she receives a lot of care.