

# Metatheory, Interdisciplinarity and Disability Research: A Critical Realist Perspective

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**ABSTRACT** *Different methodological tendencies within the field of disability research are described, and the reductionism implicit in the historically dominant models is critiqued. The advantages of critical realism over rival metatheoretical positions, including empiricism, social constructionism, neo-Kantianism and hermeneutics, is shown, demonstrating in particular what is called the “double-inclusiveness” of critical realism. A non-reductionist schema for explanation in disability research is established, and the article argues that the phenomenon of disability has the character of a “necessarily laminated system”. The fruitfulness of this approach is then illustrated with an example drawn from the field, and the case for critical realism as an ex ante explicit metatheory and methodology for disability research is further developed. The conclusion reconsiders the nature of metatheory and its role in research.*

In a recent article in the *Scandinavian Journal of Disability Research* Anders Gustavsson (2004) discusses the role of theory in disability research. Gustavsson emphasizes a problem with existing theoretical developments, that they risk introducing a kind of straitjacket. By this he means that some of the theoretical perspectives he presents are “narrow minded” in one of two ways: either they have too precise a definition of what a disability is or is not, or they have too restricted a concept of the explanatorily relevant reality, e.g. the social model of disability refers almost exclusively to social factors.

Gustavsson presents two *non-theoretical* perspectives in disability research, which he calls the *reformer’s perspective* and the *radical experience-near perspective*, with the latter promulgating an “affirmative”, as distinct from “tragic”, model. He then goes on to discuss four broad types of *theoretical perspective* on disability research. The first three are: *individual essentialist*, associated with the medical (clinical or biological) model; *contextual essentialist*, associated with the social (or socio-economic or economic) model; *social constructionist* (post-modernist or post-structuralist), associated with the linguistic or cultural model, which has also been characterized as a “discursive essentialism”.

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Gustavsson counterposes to these three theoretical perspectives, a fourth broad category, which he calls *relative interactionist*. This draws on, or is at least compatible with, the so-called relative definition of disability and handicap, which he counterposes to the two types of essentialism and social constructionism. Under this fourth category he aligns four perspectives. From a methodological point of view, the most interesting are the second, third and fourth of these perspectives, namely: *critical realism*, as represented in the field of disability research by, for example, the work of Berth Danermark; *systems theory*, as represented by Niklas Luhmann, and applied in the field of disability research by Dimitris Mikailakis; and *hermeneutics*, in the form of the life-world perspective of what he calls critical interpretation.

Furthermore, in his review it is possible to identify five different kinds of meta-theory: naïve realism/empiricism (manifest in many forms of essentialism, including much individual and contextual essentialism); social constructionism; neo-Kantianism; hermeneutics; and critical realism.

An earlier paper by Mark Priestley in *Disability and Society* (1998) raises parallel issues. Priestley makes distinctions along two dimensions, between individual and social, and between materialist and idealist explanations, generating a four-fold typology. The medical model is an individual materialist; the social model, a social materialist; and the cultural model, a social idealist explanation. (Phenomenological and symbolic interactionist models are cited as examples of individual idealist explanation.) In developing this typology, Priestley argues that these four approaches are by no means necessarily mutually exclusive, so situating the possibility of an ontological pluralism similar to the one we are going to motivate here through the concept of a necessarily laminated system. However we do not think that his criterion of commonality for the validity of social models is neither necessary nor sufficient – since there may be social causes for the phenomena of disability, even if only identified in individual experience; and something more than a mere commonality, regularity or constant conjunction is required at the relevant social level for it to be identified as *sui generis* real, this “something more” typically being the model of a distinct generative mechanism at work.

#### *Aim and Scope of the Article*

In this article we contribute to the debate about the role of theory in disability research by focusing on one of the perspectives Gustavsson mentions: critical realism. The aim of the article is to discuss the fruitfulness of critical realism in a comparative framework. In particular we wish to show the fruitfulness of critical realism from the standpoint of disability research in relation to the other four meta-theoretical perspectives, and indeed the other positions, identified by Gustavsson (and implicitly by Priestley). Critical realism has explicitly been put forward as an alternative in understanding disability by Simon Williams (1999). Furthermore, Carol Thomas takes a very similar line in her elaboration of understanding disability, although she does not explicitly use the concept of critical realism (e.g. Thomas 1999, 2004).

Furthermore, we use the concept of “disability” in practice in a broad way, as it is used in the World Health Organization (WHO)’s International Classification of Functioning and Health (ICF).

*Ontologically*, critical realism is characterized by a *double greater inclusiveness*. It is maximally inclusive as to potentially causally relevant levels of reality, or, to put it the other way round, it is ontologically least restrictive, allowing the exact nature of the determinations and their interactions to be empirically determined case by case. And it is maximally inclusive insofar as it can accommodate the insights of the other meta-theoretical positions while avoiding their drawbacks.

*Epistemologically*, critical realism indicates more clearly than the other positions the appropriate *direction* and context of *explanatory research* – from the manifest phenomena to the mechanisms that produce them, in their complex co-determination. At the same time and largely in virtue of its clear concept of the movement of the scientific process, it is able to avoid the partiality of the other positions, which seize on one aspect (e.g. experience, interpretation) of the total research process to the exclusion of others.

Finally, *methodologically*, critical realism is able to move beyond both reductionism and simple non- or anti-reductionism through ontological pluralism to a positive concept of the object of disability research as (what we will call) *a necessarily laminated system*, that is, a system that refers essentially to several different levels of reality. To summarize, among the advantages of critical realism are: ontologically, double inclusiveness; epistemologically, heuristic suggestiveness and non-partiality; and methodologically, its capacity to take us from non-reductionism through essential complexity to necessary lamination.

### *Logic of the Article*

The article is divided into four parts. In Part I we critique the reductionism implicit in the historically dominant models in disability research described by Gustavsson and Priestley and show in general terms the advantages of critical realism over the other positions, demonstrating in particular the double inclusiveness of critical realism. In Part II we proceed to establish a non-reductionist schema for explanation in disability research, arguing that the phenomenon of disability has the character of a necessarily laminated system. The fruitfulness of this approach is illustrated in Part III with an example drawn from the field of disability research. This leads on to a conclusion – Part IV – in which we can reconsider the nature of meta-theory and its role in research.

### **Part I: Critique**

#### *Three Theoretical Models and a Critique of Reductionism*

Individual and contextual essentialism, both of which characteristically take an empiricist form, and social constructionism are each associated

respectively with one of three models which have successively dominated disability research: namely the medical; socio-economic; and cultural models.

The two forms of essentialism (individual and social) and social constructionism which have dominated the field of disability research are each reductionist, at least in comparison with the relative model.

When disability was first recognized as a phenomenon for rehabilitation, the medical professions occupied the scene. The dominating view was that the phenomenon was that of impairment and that the problem was located in the body. In critical realist terminology the focus was mechanisms at the *biological* or *neurological levels*. The focus was characteristically reductionist in favour of biological explanation and remedial treatment.

This view was beginning to be challenged in the 1960s – first and foremost by people involved in the disability movement; and the social model emerged. This model emphasized that disability is a consequence of barriers in the environment. The “cause” was not to be found in the body but in the environment. This “environmental turn” had an enormous effect on ways of appraising what a disability was and hence how to investigate phenomenon related to disability. A clear distinction between impairment and disability was brought to the fore. Disability was a creation of the socio-economic arrangements in the society and the bodily dimension disappeared from the analysis. Like the medical model this perspective focused on one level of reality – the *socio-economic*.

In the 1990s a third perspective on disability began to be articulated, a post-modern-inspired model that emphasized mechanisms at the *cultural level*. The social model was criticized for not taking disabled people’s specific lived experiences, in all their multiplicity, into account. And instead of focusing on the socio-economic barriers, the cultural barriers became paramount. It was, for instance, the way normality was conceptualized in society that was crucial; in other words, the vital question was how disability was constructed in different cultures. Values and attitudes were the important mechanisms and concepts such as plurality and diversity became ideologically important.

Each of these models accentuates just one of what are in fact a multiplicity of mechanisms involved in the formation and reproduction of disabilities. Thus individual essentialism highlights the biological; contextual essentialism, the social (or more especially the socio-economic); and social constructionism, the socio-cultural mechanisms or causal determinations. But clearly all three types of determination may play a role in the onset or maintenance of a particular disability. Of course, it is important to say, that it was not the case that these perspectives totally ignored mechanisms at other levels, but rather that there was a clear tendency in each of them to *a priori* privilege, prioritize or emphasize one type of explanatory mechanism to the detriment, often tantamount to exclusion, of the others. This tendency is avoided in critical realism, where the exact weight, role and influence of particular kinds of mechanism is something that must be determined empirically in each specific case. This is a *meta-theoretical* conclusion, which the example we give in this article merely illustrates. The exact empirical determination in each case is the work of substantive science. This is, at its best, we argue, guided by meta-theory,

but it cannot be read off or determined by the latter. Philosophy is an “*underlabourer*”, not a *substitute*, for “science”.

### *Metatheory*

As already noted, we can identify five meta-theoretical approaches in the review of the theories. Before we go on to indicate some of the most important presuppositions in each of these five perspectives, we must note what is wrong with Gustavsson’s non-theoretical perspectives. The critical realist objection to them is that they are basically illusory, that the attempt to abstain from theory results merely in the generation of an implicit theory. A close analysis of, for instance, Gustavsson’s two main non-theoretical perspectives, the reformer’s and radical experience-near perspectives, would reveal such theories.

Before elaborating these perspectives it should be stressed that we do not see a sharp or absolute differentiation between meta-theory and theory, since philosophical and meta-theoretical positions describe, or are essentially about, or refer to the same world as substantive scientific or theoretical ones, save that they describe that world more sparsely, in terms of its most abstract or generic features. That said, however, a meta-theory specifies the ontological, epistemological and methodological presuppositions at work in a kind of scientific practice. These presuppositions may include generic assumptions about the world and science, together with more specific assumptions about social science and the kind of social science which is being done. Moreover, there remains an important difference in level between a science and its meta-theory, in that the meta-theory will specify, for instance, that a science, e.g. disability studies, should investigate the articulation of mechanisms in laminated systems, whereas the science – in this case, disability studies – will describe what these mechanisms are and how they are articulated to form specific laminated systems in the case of various actual disabilities.

It is important to stress that the scope of this article is *meta-theoretical*. Thus we argue against reductionism, and that explanations in the field of disability studies have the general character of laminated systems. However, it is not part of our remit to argue for or display any particular laminated system. Thus the example in Part III is merely designed to illustrate the general pattern of explanation in disability studies, not to establish a particular explanation of any concrete disability.

### *Näive Realist/Empiricist*

It is very common in research that one wishes to, not only describe a phenomenon, but to give an explanation for it, i.e. to answer a “why-question”. For instance, if a description of the living conditions of disabled people unveils a systematic inequality between disabled and not disabled people, one needs to have an idea of what could have produced such an inequality in order to mobilize for a change in the distribution of resources. An approach informed by naïve realism and empiricism would turn to the covering law model of

explanation, on which to explain an event is (at least ideally) to be able to deductively subsume it under covering laws, i.e. universal empirical generalizations. But not only are there no such laws, a constant conjunction of events is neither necessary nor sufficient for a law – or a scientific explanation!

A second important characteristic of a naïve realism/empiricist approach from a philosophy of science perspective is the role of theory. We go from hypothesis, observation and empirical generalization to a theory, which in its turn generates new hypotheses, etc. The practical elements are research design, conceptualization, operationalization, data collection, coding, input and analysis, and then causal conclusions. This procedure is well known to all researchers. Hence, a theory is a set of statements of empirical observations in terms of empirical regularities or constant conjunctions. A theory can, on the one hand, be supported by such empirical regularities and, on the other hand, be contested and refuted by lack of it. If we for instance find a strong correlation between sex, impairment and harassment (e.g. hearing-impaired women experience more harassment than hearing impaired men and normal hearing people) we interpret this as a support for the hypothesis that disabled women are in a worse position than their male peers and non-disabled people. However, from a critical realist standpoint, there is nothing here to explain why this should be so or to indicate what real-world mechanisms produce it.

The third and last point we want to make about naïve realism/empiricism concerns the view of truth. In general, truth has to do with statements about how the world is, about a reality that exists independently of our conceptualization of it. Statements are either true or not, although we for the moment do not necessarily know which. If a naïve realist for instance argues that a certain phenomenon (X) (e.g. early retirement among a specific group of disabled persons) is 25% explained by (Y) (e.g. gender), she is assuming that there is a correspondence between such a statement and reality. However, this does not necessarily mean that the statement mirrors reality; merely that it is an intelligible and reliable statement.

There are basically three things wrong with such approaches. They ignore the following points: the necessarily interpreted character of reality; that theories conceptualize causal mechanisms; and that they describe only certain aspects of phenomena. The result is that such actualist accounts are necessarily false, without instantiation in the real world. What a theory does is to specify the tendencies of transfactually active mechanisms, which co-determine particular concrete events or phenomena.

### *Social Constructionism*

We may usefully distinguish between strong and weak social constructionism (see Danermark 2002:58). To weak constructionism, which involves the idea that there is a necessarily interpreted element in the construction of any theoretical understanding and any social object, a critical realist has no objection. However if this is taken to imply that the phenomenon investigated is *just* a theoretical interpretation or cognitive construction, or that a social

phenomenon such as some specific form of disability exists *only* as an idea or belief, then it is clearly false.

We may further distinguish two aspects of the constructionist claim, the first collapsing the intransitivity or existence of the object of research or of scientific understanding to that understanding; and the second collapsing the existence of social objects to the participating agents' concept or understanding of them. Strong social constructionism would entail that in the former case there was nothing to investigate prior to the constitutive social scientific investigation; and that in the latter case we were concerned only with cultural mechanisms or patterns of determination, and that biological, socio-economic and other factors played no part in the genesis of the explanandum event or phenomenon under study.

In fact proponents of the relative definition of disability and handicap already made some useful differentiations here. By impairment, they meant the result of mechanisms at the biological level; by function, the manifestation of impairment in daily life; and by disability, the implications of the reduction in a person's functions in social life, including the normative handicaps imposed by, and the psychological, psycho-social and other social effects of, for example, the process of stigmatization and other effects that normally follow (in our societies) from an impairment such as hearing loss, though it did not in *Martha's Vineyard* (Groce 1985), and does not from, for example, loss of vision.

Investigating phenomena in disability research from a social constructionist perspective brings different issues to the fore than with naïve realism. Perhaps the most characteristic one involves the nature of language and discourse. The turn to discourse has had a great influence on social science over the last decades. Language in naïve realism is characterized by a "vertical" relation, between concepts and objects in reality, but in constructionism the relation is "horizontal", between signified and signifiers (Sayer 2000:36). *How* we speak becomes more interesting than *what* we say, i.e. what we speak about. From a critical realist perspective, we are interested in both. We cannot completely explain how we are speaking without taking into account what we are speaking about (and not just what we think we are speaking about). What we are concerned with is not merely a dyadic relationship, either between the sign and referent (as in empiricism) or between the signifier and signified (as in constructionism), but what is in effect a semiotic triangle – that is, the triadic relationship between signifier, signified and referent (Bhaskar 1994:52).

It is argued that our way of speaking about reality is a social construction and when we construct our understanding of reality in mutual interaction with other members of the society we thus construct our understanding of the world. In this act of construction there are only signs, not things. We lose the object – the death of the object – and reality becomes only "text".

This has far reaching consequences. Here we will only touch upon three, involving questions of truth, relativism and theory. Let us assume that a disability researcher is interested in investigating disability and ethnicity. She wishes to understand and explain why different minority groups in her country treat disabled people so differently. After the analysis she finds that

the understanding of disability differs radically between different cultural groups. For instance in Botswana the understanding of disability is that a disabled child is a gift from God (see Ingstad 1995), whereas in Sweden it might be interpreted as genetically caused. The researcher understands the differences in terms of cultural differences, i.e. disability is a social construction. Even the concept of disability is questioned. It is a concept that has “emerged in particular historical circumstances in Europe” (Ingstad & Whyte 1995:7). When the researcher is asked which construction is more true than the other, she finds the question irrelevant because the question brings the object into the picture and there is no such thing as an independent object in reality called *disability*. The only thing that exists in this respect is situated knowledge (Lyotard 1984, Haraway, 1991). How certain cultural groups understand and explain disability is true for them. There exists no “God’s-eye view” from which one can step outside some cultural group and decide which of the different understandings are true. If a group’s understanding of disability works for that group, it is “true” for it. If, for instance, there is a concept of disability as a result of a “bad-eye”, this understanding is as “true” as an explanation that it was caused by an infection, an explanation put forward by another group.

This understanding of knowledge as situated brings the question of relativism to the fore. A radical constructionist denies that anyone is in a position that allows him or her to make any judgements whatsoever of the different understandings of disability in terms of reliability and truth. However, most constructionists are willing to agree that there are understandings of disability which are more reliable than others. For instance most researchers would agree that the statement that rubella plays a crucial role in causing deafness is a more accurate statement than that deafness is caused by a “bad-eye”. The latter assumes that deafness is devalued in the society, but the contrary can also be the case, as in *Martha’s Vineyard*. From a disability point of view this “standpoint theory” is highly relevant. Many disabled researchers argue that they are in a more privileged position than non-disabled researchers since they have advantages in understanding disability because they see things that non-disabled researchers do not see. Hence, they claim that their understanding and explanation of disability is deeper and more reliable than that of non-disabled researchers.

Standpoint theory and relativism have implications for the view of theory. Thus many researchers in disability research have become more and more sceptical about the project of explaining disability in terms of “grand narratives” such as historical materialism. Hence, the social model has been subject to criticism by Marianne Corker and Tom Shakespeare among others writing that “The global experience of disabled people is too complex to be rendered within one unitary model or set of ideas” (Corker & Shakespeare 2002:15).

### *Neo-Kantianism*

Neo-Kantianism collapses all structure to scientific structure, that is, the structure in scientific knowledge, epistemological as distinct from ontological

stratification. The intransitivity of the object of study thus goes, and with it the external, real world constraints on the research process. (For a full critique see Bhaskar 1997, especially chapter 3, section 2).

The two main points of the argument of Kant's *First Critique* that were taken up into the neo-Kantian movement and the work of subsequent writers on the philosophy of the human sciences, such as Dilthey and Winch, were that we can not have knowledge of things as they are in themselves, and that our knowledge of things as they appear is structured by our subjectivity, and in particular by the categories. However, it is not clear that there are categories that are fixed or universal. Even more damagingly, it is not at all clear how we could have knowledge of the categories unless we could have knowledge of things in themselves.

Although some of the categories that Kant based his view on can indeed be disputed in the light of, for example, Einstein's theory of relativity, the idea that reality is a construction of our minds remains an abiding one, and is present in many different meta-theoretical approaches. For critical realism, however, it is not nature or non-human reality as such, but our knowledge of nature and non-human reality, which is a construction of our minds. However, the idea that knowledge is structured, of epistemological stratification, is an important corrective to naïve realism, and paves the way for the critical realist theme of ontological stratification.

Sometimes a neo-Kantian perspective is seen as the opposite of essentialism, where the latter is characterized by the idea of having access to "things in themselves" (Rorty 1999). However, in the general polemic against essentialism, it is also important to register one sense in which essentialism is vital, and indeed inevitable, that is, the sense in which all discourse and description depends upon a discrimination between properties or features of the world that are more and those which are less significant, noteworthy, relevant or otherwise important. Without a classification into the essential and non-essential in *this* sense, no science would be possible.

### *Hermeneutics*

On the hermeneutical position, there is essentially nothing more to our social ontology than agents' conceptualizations of it. Hermeneutics may be regarded as transposing the epistemological insight of neo-Kantianism onto the social realm and ontologizing it. Indeed if social constructionism may be seen as neo-Kantianism plus hermeneutics (corresponding to the two aspects of the constructionist claim identified earlier), essayed in a poststructuralist and/or postmodernist key, hermeneutics may be regarded as neo-Kantianism with a (specific) social ontology restored. (For a full critique of hermeneutics, see Bhaskar 1998, especially chapter 4.)

A hermeneutic perspective stresses that social phenomena are intrinsically meaningful, i.e. meaning is an important part of the constitution of a social object. Since disability (not to be confused with impairment) is seen as a social phenomenon, it follows that a hermeneutic approach is inevitable in disability research. Of course some kinds of phenomena are less ambiguous

than others. For instance, withdrawing money from a cash machine is normally less ambiguous than a person's concept of their identity, although it is a challenging task for a researcher to interpret the interpretation that a person with learning disabilities has of cash withdrawal. As this example indicates, whether what is to be interpreted is ambiguous or not, in social science a crucial task is to interpret other people's interpretations. This thus involves a *double hermeneutic*. When investigating objects that themselves do not make any interpretations, such as a virus, this doubleness does not exist. However, many times the double hermeneutic is involved when material objects come into practice. For instance, a hearing aid *per se* is not an object that requires the double hermeneutic to do research about, like improving the technology of the hearing aid. But a hearing aid is not a *hearing* aid when it is not used for amplifying the sound in a human ear. When it *is* used in such a way, then it also becomes a social object and a double hermeneutic becomes necessary.

Among the different ways of checking out the adequacy of an interpretation is the canonical Wittgensteinian one, namely of being able to carry on in the relevant form of social life. Carrying on in this way normally presupposes the consent or interest or acquiescence of the other participants in that form of life. This raises the question of truth already broached. Another approach that *prima facie* appears to avoid this question is merely to see a narrative as a story among other stories that enriches an ongoing conversation (Sayer 2000:46). Other approaches try to connect interpretations with theoretical understanding of the events in the social world, e.g. when theorizing about communication strategies among hearing impaired (Hallberg & Carlsson 1991). (For more on truth, see Bhaskar 1993: chapter 3, section 2.)

*Sub-conclusion: The Advantages of Critical Realism*

So far we have briefly examined the four different non-critical-realist meta-theoretical approaches. Naive realism is a distinct (compared with the other three) approach and we should bear in mind that this approach is common in research, including disability research. The other three approaches are also common in disability research, but much less distinctive. For instance, a post-modernist would most likely adopt a neo-Kantian perspective, but a neo-Kantian could be very sceptical about post-modernist ideas, i.e. the overlappings are not symmetric.

Each of empiricism, neo-Kantianism, hermeneutics and social constructionism pick on important features in social science, and in scientifically sound disability research. Empiricism pinpoints epistemologically the role of experience and the need for empirical controls; neo-Kantianism highlights the important interpretive role of theory and hints at the non-empirical character of laws, mechanisms and the other objects of scientific understanding; hermeneutics emphasizes the already interpreted character of the social world and hence of any syndrome which could be a disability or a differential ability; and social constructionism, combining the virtues of hermeneutics and neo-Kantianism, points to the ingrained character and authoritative

cognitive power of such constitutive pre-interpretations of social reality, including what are known as disabilities. Since each of these meta-theories and their associated methodologies indicate possibly real features in the genesis of any disability, each may – and indeed each must, when appropriate – play a significant role in our understanding of disability research, and in that research itself.

However, each of these four rival meta-theories comes not only with an insight about social science, social reality and disability/disability research, they come with one or more presuppositions which, if acted upon, would prove deleterious to the project of disability research, and indeed logically to their own insights. Thus, empiricism would find its sound emphasis on empirical testing vitiated by the absence of any laws or indeed significant regularities. Neo-Kantianism with its sound emphasis on theoretical interpretation and scientific structure would find itself without rational criteria for developing that interpretation or structure in theory or for integrating it with other structures in the reconstruction of a concrete event, which is always a conjuncture, complex or compound. Similarly, hermeneutics would never be able to get to determinations below or outside the life-world; and social constructionism would not be able to refer to the extra-theoretical or non-interpreted, or generally to what had not yet been constructed.

We have so far tried to illustrate the double-inclusiveness of critical realism. But how are we to conceptualize the intrication of distinct mechanisms in a unitary explanation?

## **Part II: Development of Critical Realism**

We will start this presentation of the critical realist approach to the understanding of disability by explaining the idea of a necessarily laminated system. This appears as a natural extension or elaboration of the basic idea of the critical realist model of applied explanation – in open systems – as normally involving the explanation of a concrete event or thing, in terms of a multiplicity of mechanisms, potentially of radically different kinds (and potentially demarcating the site of distinct disciplines) corresponding to different levels or aspects of reality.

### *Necessarily Laminated Systems*

Now, typically in the genesis of a social event such as disability, or the formation or functioning of a social thing, or kind of thing or level of determination, physical, biological, physiological or medical/clinical, psychological, psycho-social, socio-material, socio-cultural and normative elements may all be involved. If this is the case, then we may talk of understanding disability as a “*laminated system*”, and to the extent that it is necessarily the case, of a *necessarily laminated system*. (We here invoke the term of art introduced by Collier 1989).

Thus it is certainly arguable that: (i) physical, (ii) biological, and more specifically physiological, medical or clinical, (iii) psychological,

(iv) psycho-social, (v) socio-economic, (vi) cultural and (vii) normative kinds of mechanisms, types of context and characteristic effects are all essential to the understanding of the phenomena in fields such as disability research.

There is a wealth of evidence about the operation of mechanisms at all these levels, about their intermeshing, and their differential (or alternative) operation – respectively illustrating the cases of a conjunctive multiplicity of causes,  $C_1$  and  $C_2$  and  $C_3$ , etc., and a disjunctive plurality of causes,  $C_1$  or  $C_2$  or  $C_3$  (Bhaskar 1997, chapter 2). In such cases we are concerned with the interplay of mechanisms (or forms of causality), contexts and effects at distinct levels of reality.

So far we have looked at the issue of multiplicity and complexity from the standpoint of *levels* of reality. But, for completeness, we need to take into account that multiplicity and complexity deriving from multiple *contexts* of sociality and that deriving from *scale* of social being.

Thus, one way of elaborating complexity is to see that, at least in principle, each of levels iii–vii, the social levels, may be set in the context of the concept of *four-planar social being* (Bhaskar 1993, chapter 2.9). On this concept every social event can be understood in terms of four dimensions, namely: (i) material transactions with nature; (ii) social interactions between agents; (iii) social structure proper; and (iv) the stratification of embodied personalities of agents. To say that all social events involve each of these dimensions is to say that social events and social systems generally are “*laminated*”; and we could call explanations involving mechanisms at several or all of these levels “*laminated explanations*”. Of course this does not mean that each of these dimensions has to be consciously referred to in every social explanatory act. That is a matter for the pragmatics of explanation, given the focus of the particular explanatory inquiry.

Moreover, each of the social levels, i.e. levels iii–vii, can not only be situated in the context of four-planar social being, but also in that of a hierarchy of scale, that is, of more macroscopic or overlying and less macroscopic or underlying kinds of structures or mechanisms, which may be involved in social explanation (Brante 2001). In fact in this way we can define distinct levels of agency and collectivity with which the social sciences might be concerned. These may include:

- the sub-individual psychological level, as invoked in e.g. Goffmann’s *interaction order*;
- the individual or biographical level;
- the level of micro- and small-group analysis, studied, for example, by ethnomethodologists and others;
- the meso level concerned with the relations between functional roles such as disabled worker and capitalist;
- the macro role typically oriented to such relationships in “whole societies”, such as, for example, contemporary capitalist society;
- the mega level primed for the analysis of civilizations and traditions, such as basic ideas about normality; and

- the planetary level, e.g. in studies of the impact of globalization of perception of disability.

The multiplicity and complexity deriving from level, context and scale may each result in the constitution of a laminated, and occasionally a necessarily laminated, system (Bhaskar & Danermark 2007).

### **Part III: Exemplification**

We will illustrate the apparatus of critical realism, and in particular the concept of a necessarily laminated system, by reference to one example drawn from the field of eating disorders, the case of Emma who had suffered for many years from what came to be diagnosed as dysphagia.

Dysphagia is a summary concept for a person's problem of not being able to swallow solid and/or liquid food, i.e. it is a kind of eating disorder. Mechanisms, of each of physiological, psychological and social kinds, can predispose, trigger and/or sustain it. Moreover before we have diagnosed it, its symptoms and more generally mode of manifestation, may be indistinguishable from other eating disorders, e.g. anorexia; so what it is, as well as how it came to be, may be enigmatic. Of course after we have a diagnosis, and have achieved a good explanation of its aetiology and/or mode of functioning in a particular case, it will cease to be enigmatic – though the extent to which it can be remedied and treated effectively may remain profoundly problematic. Thus, in Emma's case, though we can develop a good explanation, we do not so far have an adequate therapy or cure.

Note that dysphagia can be stationary or progressive, intermittent or constant; and that its prevalence is not known: there are reasons to believe that it is more common than the actual figures indicate and since it is a "hidden disability", it is difficult to diagnose and many sufferers do not imagine or recognize themselves as potentially having dysphagia.

Emma has suffered from dysphagia for many years. In the beginning she did not pay much attention to the symptoms. She just felt that it was difficult to swallow. But after a while these symptoms got worse and she found it very laborious to eat solid food. When she was invited to other people's homes for dinner she had to make sure that they were serving food she was able to eat without too much difficulty. However, she soon discovered that the food usually caused her serious problems. She had to eat very little and very slowly and she was aware that people around the table noticed, but did not comment on it. A few years after the first symptoms she started to feel that it was virtually impossible to eat anything. It would also occur that she had to rush to the bathroom to vomit. Sometimes there was no time to rush and she vomited on the table. Another symptom was that she, without being able to control it, belched and since there was rotten food in "pockets" in the oesophagus, the stench was extreme. After that, she felt that she had lost all control of eating and she withdrew from all social life that included any kind of eating, like lunches with workmates, dinners with friends. However, she soon discovered that eating was the vehicle that most of our social life circles

around. Restlessness and agony became a part of her everyday life. She lost her self-esteem and isolated herself.

A multi-level approach to understanding and explaining the experiences of Emma has to include biological, psychological and social levels. At the biological level it is extremely important to make the correct diagnosis. For instance, if Emma had been given the diagnosis anorexia (the symptoms of which are very much like those of Emma's type of dysphagia), it would have been a disaster for her. If she had not got treatment based on her actual condition, it could have even cost her life. With a correct diagnosis she could be offered some help, e.g. surgery, which she had, giving her some temporary relief. Many people suffering from dysphagia also describe their enormous relief at a correct diagnosis.

At the psychological level there are many important mechanisms that would have to be included in an analysis of Emma's case. One is closely related to the biological level; the diagnosis. Many people with dysphagia who do not have a diagnosis find it difficult to be taken seriously. They are often overlooked and not believed when they describe their symptoms. For some people this has an extremely negative impact on their psychological well-being. There are also many other psychological mechanisms involving emotions such as shame and guilt.

At the social level we have to recognize the important role eating has in our social life. It is one of the most important cultural factors in our society, with many norms and values connected to it. Hence, people suffering from dysphagia are highly vulnerable to social exclusion. It is also potentially embarrassing to discuss the topic in public, which results in many people with dysphagia trying to hide it.

Here we have only indicated the importance of including biological, psychological, social and cultural factors in order to fully understand all the mechanisms contributing to Emma's situation. Without taking all these mechanisms into account we will have only a fragmentary understanding of her situation, resulting in less possibility of a good strategy for improving it.

### *Commentary*

Let us attempt a reconstruction of Emma's situation so as to bring out the logic of its necessarily laminated development.

We are treating the "hidden disability" of dysphagia as a kind of eating disorder, in which the person is not able to swallow solid and/or liquid food. Mechanisms at the biological, psychological and social and cultural levels all play important roles. The cultural importance of eating in social life and the extreme embarrassment which Emma suffered in eating led to a progressive collapse in her self-esteem, resulting in a more or less total withdrawal from social life. On the other hand, getting the correct diagnosis gave her immediate psychological relief. She had the appropriate concept of her problem, and one moreover which she could in principle explain to others. Furthermore, the clinical diagnosis also pointed to the most immediately obvious form of treatment for her; surgery. Here the effects of the impairment

are profoundly psychological, psycho-social, social and cultural, although the impairment itself is generated (at least initially) by a definite bio-physical mechanism. Clearly, we need to regard the aetiology of dysphagia as constituting a laminated system.

An ideal-typical – or better, explanatorily relevant abstract, “*normic*” (Bhaskar 1997, chapter 2, section 4) – description of Emma’s development might run along the lines of: progressively worsening physical impairment; progressively acute psychological effects and social consequences; withdrawal behaviour; correct diagnosis and understanding; enhanced self-esteem and partial re-engagement. This was then followed by surgical treatment at the level of biological mechanism, which led to some temporary physical improvement, leading to further social re-engagement.

Since the disability has not been cured, only relieved, in Emma’s case it is still necessary from a therapeutic point of view to operate with a battery of different measures of physical, medical, psychological and psycho-social, economic, social and cultural kinds designed to counteract the various causes of Emma’s suffering in the laminated system that constitutes the ongoing field of this tenacious disability (see Swedish Dysphagia Association: [www.dysfagi.se](http://www.dysfagi.se)).

What it is important to appreciate is that although each type of mechanism plays a part in this case history and interacts with the others, there is a definite ordination or sequence to their play, which cannot be specified *a priori*, but which depends upon the particular facts of the case. There is a real-world order or sequence which progressively constrains the class of possible narratives. Indeed as we attempt to construct a coherent narrative that maximizes explanatory power in relation to the accounts of the participants and the other data, a particular real causally determinant geo-history will become compelling, such that no other story can be substituted for it and fit our knowledge of that real world order or sequence so well.

Of course, any example is bound to be selective. Taking dysphagia, and even this particular case of dysphagia, should not imply that we believe, for example, that all impairments need physical treatment. On the contrary, the arguments are strong for treating, for instance, deafness or many mental disabilities as phenomena which should be accepted – with the necessary transformations occurring in the perceptions and resource allocations of the wider society or larger environment. Our central argument is that all phenomena of disability need to be understood in terms of a necessarily laminated system, so that we must always refer to bodily, psychic and social components. *The relative importance and specific role of these components varies from disability to disability, and often from case to case, and is always an empirical question.* It follows from this that we cannot, or should not, always give the same form of treatment or social response to each disability.

Let us return to the question we posed before the beginning of Part II: How are we to conceptualize the intrication of distinct mechanisms in a unitary explanation? We do this primarily through the idea of the object of disability research as a necessarily laminated system. This is pluralism, but it is an *integrative pluralism* (Bhaskar 1986: chapter 2, section 1). What intricates the

distinct mechanisms, integrates the pluralism, is that the articulated lamination is *in relation to the experience*, and perception of the experience, *of some impairment* or functional loss, which itself or the effects of which, require to be socially or psychologically assessed, compensated (or accepted), transcended, mediated or otherwise reflected. Such social and psychological contexts may themselves need to be radically re-described, explained and/or transformed.

*The Necessity of Critical Realism*

To what extent is critical realism necessary for the above example?

*Ex post reconstructibility.* The first point to notice is that a critical realist reconstruction will always be possible *ex post*, in the context of presentation, after an exemplary piece of scientific research is done. Great scientific explanations or the work of great scientists, including social scientists, whatever their avowed methodology, may always be shown to conform to the kind of schema that critical realism elaborates. But this in itself says nothing about the process of arriving at such explanations, in the context of discovery. Great scientists may indeed often be closer in their practice and in their comprehension of what they are doing to critical realism, but this has not necessarily or always been the case. Their explanations may have been constructed intuitively and/or with an implicit sense of realism, and in opposition to their own methodological ideas. This accounts for the fact that we can explain from a critical realist standpoint the conformity of the research results of, say, Durkheim, Marx and Weber, to critical realism alike, while phenomenologically, only Marx of these three approximated in his consciousness to a critical realist perspective. When this happens, we can say that great science or great scientists arrive at their scientific results, despite themselves.

*Ex ante transcendental necessity.* There is a further level or sense in which in practice all our research must proceed in accordance with the schemas and distinctions identified in critical realism, at least in some way and/or to some extent, or it would not be possible at all. In practice the experimental or applied scientist must work with a distinction between a law and its empirical grounds, and with the notion of a distinction between open and closed systems, whatever theory of causal laws or confirmation they might have. The notion of laws as transfactually efficacious and of reality as constituted by open systems is categorically and axiologically indispensable, imposed on the scientist by the nature of reality itself. If it is not explicitly adhered to, it will be implicitly efficacious, presupposed in practice; and if it is not consciously and consistently employed, the resultant complex will embody the implicit presuppositions of critical realism in a complex compromise formation. This is what has been called a TINA compromise: a compromise to which “There Is No Alternative” (Bhaskar 1993: chapter 2.7).

*Reflexivity and consistency.* The arguments summarized above show that if you are committed to empiricism, social constructionism, neo-Kantianism, and/or hermeneutics, you will not be able consciously and consistently to make certain moves essential for the scientific research process. You may, of course, be able to make them implicitly or inconsistently with the rest of your scientific research practice. This is what, in practice, has mostly happened.

Our contention is that, in the present context of malaise and crisis, in which it is not intuitively obvious how one should proceed and in which the researcher is subject to the pull of potent metatheories already jostling in the field, social science, and more especially disability research, now needs an explicit *ex ante* metatheory and methodology. So the argument for critical realism, as an explicit *ex ante* metatheory and methodology for the research process, is not that this is the only way to do science, but that this is the easiest way to do science and the only way to do it consciously and consistently.

We need to distinguish, then, between *ex ante* and *ex post* metatheories and methodologies, on the one hand; and between (*ex ante*) *explicit* and *implicit* metatheories and methodologies, on the other. Note that all scientific results can be reconstructed *ex post* as conforming to critical realist schema, in the context of presentation. Moreover, all scientific research involves an explicit or implicit critical realism, in the context of discovery; but an implicit critical realism involves an inconsistent compromise (or TINA) formation or theory/practice ensemble. So that if metatheory is concerned with the presuppositions of our practices, then we can always ask: Are the presuppositions *explicit* or *implicit*; and are they *correct* or *incorrect*? The argument of this article is that we need *correct explicit ex ante metatheory*. Such metatheory will function in a maximally fruitful way.

#### **Part IV: Conclusion**

Gustavsson raises the question as to whether a theory is a straitjacket. In this article we have tried to demonstrate that metatheories by nature, insofar as they say something about the world, necessarily exclude other things about the world, and therefore, to that extent, may indeed be regarded as a kind of straitjacket, although we find this way of reasoning misleading. A metatheory is a perspective that includes presuppositions about reality. These presuppositions indicate a certain approach to phenomena in disability research. Some of the perspectives we have discussed limit our vision more than others. The claim for critical realism is that it is the *ontologically least restrictive perspective*, insofar as it is maximally inclusive as to causally relevant levels of reality and additionally maximally inclusive insofar as it can accommodate the insights of other metatheoretical perspectives. This, we have been calling the “*double inclusiveness*” of critical realism.

At the same time, critical realism contains a view about the nature of knowledge, and in particular scientific and social-scientific knowledge, which indicates more perspicaciously than the other metatheoretical positions considered in this article, the appropriate direction of explanatory research, *viz.* from particular phenomena, including established regularities, to the

underlying structures and mechanisms which, in their complex and manifold determinations, account for them. The claim for critical realism here is that not only do other metatheories not indicate, or indicate perspicaciously, this goal, but that they fasten on other features of the phenomena which would make it impossible to get there. Thus critical realism is not only the ontologically least restrictive perspective, but the *epistemologically most heuristically suggestive* one.

Moreover, critical realism, in enabling us to think the transfactuality of mechanisms and the co-determination of events in open systems, allows us to begin to explore the variety of modes of co- and multiple-determination in fields such as disability research. For here we are dealing not only with mere ontological pluralism, but with *essential complexity* – and in particular that kind of essential complexity that we have characterized as a *necessarily laminated system*. If this is so, then it follows that reductionism is not just a mistake, but a categorical mistake. Thus the medical model was always (at least in part) a cultural phenomenon, the social model presupposed a manifold of bodily impairments, and the cultural model itself had definite economic causes, etc.

We can now begin to answer the questions “What is metatheory?” and “What is it good for?” Our broad answer to the first question is that a metatheory is a set of presuppositions about the nature of the world and knowledge, respectively. These presuppositions are of two kinds, namely about the *objects* of knowledge (ontology) and about the *conditions* for knowledge (epistemology). A similarly broad answer to the second question is that our ontology and epistemology are “guidelines” when approaching the real world in order to do science. Implicitly or explicitly, metatheory informs you as to what you can/cannot do (and even see) and what kind of knowledge you can/cannot obtain – if you want to do science.

However, sometimes researchers try to avoid the complex metatheoretical issue by arguing that it is a kind of straitjacket. These researchers would prefer a sort of *tabula rasa* approach, clearly shown in the way Howe (1988) formulates the problem: “But why should paradigms determine the kind of work one may do with inquiry any more than the amount of illumination should determine where one may conduct a search?” (p. 13). Howe holds that metatheory must not be placed above practical issues, nor the conceptual over the empirical. The practical and the empirical should take precedence over ontological and epistemological, a view called “the dictatorship of the research question” (Tashkkori, A. & Teddlie, C. 1998). Although we sympathize with the pro-research biases of this view, we believe that it is an illusion that one can avoid a metatheoretical perspective in research.

For *every question or inquiry involves presuppositions of some sort*. Thus, if we ask how many things are there in this room, we tacitly presuppose we know what kind of thing to look for. Similarly if we ask what event is going on. Suppose we ask how many people are in this room? That the answer will not be obvious – independently of one’s presuppositions – is shown if one asks it about someone who is on the telephone; or, alternatively, has just been bereaved; or again someone who has just come out of a row with their partner

or boss (where their partner or boss is no longer physically present); or when one is talking about a person who is engaged with grappling intensely with an intellectual tradition, such as neo-Kantianism.

Critical realism, in its epistemology and ontology, attempts to formulate general answers about the nature of the world and what counts as scientific, more specifically social-scientific knowledge, which would inform the research process. For example, that causal laws refer to the transfactually active operation of mechanisms, rather than reporting regular concomitances of events. These are at best grounds for the identification of causal laws, not the laws themselves. Hence the social scientist should look for mechanisms; and not expect the most significant statements in his or her explanations to report sequences of events, let alone regular ones. Similarly, interpretations, even when one is concerned specifically with discursive mechanisms, must always be related to their extra-cognitive causes and their physical grounds, and be viewed as both transient and corrigible, but indispensable and invaluable starting points in social scientific inquiry, not least in the experience of Gustavsson's radical experience-near perspective, even if we may eventually also want to see such experience, in accordance with Priestley (1998), as, at least in part, "ideology".

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