‘Production’ vs. ‘Difference-Making’ in Causal Analysis: Implications for Poverty

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Abstract

The objectives of this article are to bring a distinction in the literature on causation to the attention of a readership in development studies and show how it matters for poverty. The distinction is between ‘difference-making’ and ‘production’ as a depiction of the causal relationship. It is argued that the ‘difference-making/production’ distinction lies at the root of applied debates about how to assess the impact of development programs, how to understand the causation of poverty and how to conceive of duties to eliminate or reduce poverty. Understanding such foundational differences is important to expose error in applied debates, to clarify the reasons for actual methodological choice, to explain conflicting research results and to shed light on the reasons for differing policy prescriptions.

Keywords – poverty, poverty dynamics, causation, impact assessment, human rights, duties

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INTRODUCTION

Causal reasoning is quite integral to core themes in development studies and the social sciences, more broadly. While causal reasoning is pervasive in these literatures, there is no consensus view of the meaning of causation or the ways of empirically establishing causal claims. A wide variety of concepts of causation and models of causal inference are found in theoretical and applied literatures dealing with causality (Schaffer, 2008). An equally broad range of concepts of causation and models of causal inference appears in the social sciences (Little, 1991).

There is, in fact, a useful way of distinguishing between the many concepts of causation which has received little attention outside of the philosophical literature on causation. The distinction is between 'difference-making' and 'production' as a depiction of the causal relationship. This distinction has considerable cutting power in untangling debates about poverty. Specifically, it lies at the core of differences about how to assess the impact of development programs, how to understand the causation of poverty and how to conceive of duties to eliminate or reduce poverty.

The objectives of this article are to bring the distinction between 'difference-making' and 'production' to the attention of a readership in development studies and show how it matters for poverty. As such, it makes two contributions to the literature. First, it serves the heuristic purpose of explaining differences across diverse debates in terms of a common, but overlooked distinction. Second, it directs attention to foundational assumptions about causation which often lie hidden in applied debates, and shows how they 'matter'. Specifically, understanding such foundational differences is important to expose error in applied debates, to clarify the reasons for actual methodological choice, to explain conflicting research results and to shed light on the reasons for differing policy prescriptions.

The format of the paper is as follows. The first section outlines the distinction between the two conceptions of causation and provides examples. The next three sections apply the two conceptions of causation to debates about impact assessment, the causation of poverty and duties to eliminate or reduce poverty, respectively. A subsequent section explains why foundational concerns about causation 'matter' for applied debates about impact assessment and poverty. A final section concludes.

TWO CONCEPTS OF CAUSATION[1]

There are a wide range of theories of causation which provide different accounts of the meaning of causation and attendant models of causal inference. In his survey article, Schaffer (2008) identifies at least eight bases for making causal claims, namely: nomological subsumption, statistical correlation, counterfactual dependence, agential manipulability, contiguous change, energy flow, physical processes and property transference. Similarly, Cartwright (2007) contrasts at least six empirical models of causal inference, including: Bayes-nets accounts and Granger causality, modularity accounts, manipulation accounts, invariance accounts and causal process theories.

There is a core intuition about the meaning of causation, however, which provides a way of navigating amongst the approaches. This intuition distinguishes between two concepts of causation, which may alternatively be phrased as 'difference-making and 'production'' (Godrey-Smith 2010), 'dependence and production' (Hall 2004) or 'probabilities and processes' (Schaffer 2008). According to Schaffer (2008):

> The nomological, statistical, counterfactual and agential accounts [of causation] … understand connection in terms of probability: causing is making more likely. The change, energy, process and transferring accounts [of causation] converge in treating connection in terms of process: causing is physical producing

The meaning of the claim that 'a causes b' can indeed turn on our intuitions about 'difference-making' versus 'production' as a depiction of the causal relationship.

Hall (2004), who has provided the most detailed account of this issue, argues that the differences between the two concepts of causation are rooted in the different underlying principles which characterise them. 'Production'-based accounts are closely related to the notions of transitivity and locality. Transitivity holds that if 'a' causes 'b', and 'b' causes 'c', then 'a' is a cause of 'c'. Locality maintains that causes and effects are linked by a continuous series of intermediate events linked in time and space. 'Difference-making' approaches, on the other hand, allow for the causal effect of omissions, or the failure of an event to occur.

As discussed above, debates about how to assess the impact of development programs, how to understand the causation of poverty and how to conceive of duties to eliminate or reduce poverty all turn on this distinction. Before reviewing these debates, it is useful to present a number of hypothetical examples

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1 This section draws on Shaffer (2013).

drawing on Hall (2004), which illustrate how the two conceptions of causation can lead to very different causal inferences.

The first example is a case of 'production' without 'difference-making'. 'Difference-making' is here understood as counterfactual dependence, which is further discussed in the following section. The core idea is that if 'a causes b' then 'b would not have occurred in the absence of a'. Consider a case of 'overdetermination by pre-emption'. Suzy and Billy are engaged in rock-throwing with the objective of shattering a glass. Both throws are perfect, though Suzy's arrives a split second before Billy's and breaks the glass, thereby 'pre-empting' Billy's glass shattering throw. In terms of 'difference-making', Suzy's throw makes no difference to the glass-breaking as Billy's throw would have shattered it anyway. In terms of physical 'production', Suzy's throw does indeed cause the glass to break.[2]

A second example presents the converse situation, 'difference-making' without 'production'. Consider a case of double prevention, whereby a forest fire occurring in June was preceded by April rains, which themselves prevented a forest fire in May. Are the April rains a cause of the forest fire in June? Arguably, they are causally related on a 'difference-making' account, in that the June forest fire would not have occurred in the absence of the April rains. They are not so, however, on a 'production'-based account in that they play no direct role in producing or generating the forest fires.

IMPACT ASSESSMENT[3]

The two conceptions of causation, 'difference-making' and 'production', are closely related to two broad categories of impact assessment, referred to, here, as counterfactual and mechanism-based approaches. Counterfactual approaches assess impact by comparing observed outcomes to what would have happened in the absence of the program. Mechanism-based approaches focus on the causal processes generating impact. While the counterfactual/mechanism distinction blurs at the edges, there are substantive differences between the approaches which justifies the terminology.[4]

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[2] The issue is considerably more complex as there are ways to attempt to salvage a 'difference-making' account of causation in this case. Hall (2004) argues that such attempts are ultimately unsuccessful.

[3] This section draws on Shaffer (2011; 2012; 2013).

[4] Specifically, counterfactual approaches may present information on causal processes and mechanism-based approaches typically rely on an implicit counterfactual. See Shaffer (2011) for the necessary qualifications to the distinction.

Counterfactual approaches to impact assessment, such as experiments and quasi-experiments, are 'difference-makers'. In experimental approaches, such as randomised controlled trials (RCTs), assignment to project and control groups is random, while in quasi-experiments comparisons groups are constructed statistically. Causal claims made by these approaches rely on counterfactual dependence which maintains that for *a* to cause *b, b* would not have occurred in the absence of *a* (Menzies, 2008). In the language of impact assessment, the causal claim that project *a* causes outcome *b*, depends on the counterfactual claim about what would have happened to *b* in the absence of *a*. In the language of 'difference-making', impact is inferred if and only if differences are observed in the value of chosen indicators among participants and non-participants in project *a*.

Proponents of RCTs and quasi-experiments explicitly draw on counterfactual dependence in their framing of the core causal question. With respect to RCTs, Duflo et al. (2008: 3899) write: 'Any attempt at drawing a causal inference … requires answering essentially counterfactual questions: How would individuals who participated in a program have fared in the absence of the program?' Likewise, the 'archetypal evaluation problem' in the context of quasi-experiments has been phrased as follows*:* 'an "impact evaluation" assesses a program's performance in attaining well-defined objectives against an explicit counterfactual, such as the absence of the program' (Ravallion, 2008: 3789).

The specific causal model underlying experimental and quasi-experimental approaches to impact assessment is known as the Holland-Rubin framework in reference to seminal papers by its authors (Rubin, 1974; Holland, 1986).[5] The intellectual debt to this framework is explicitly acknowledged by proponents of experiments (Duflo et al., 2008) and quasi-experiments (Ravallion, 2008). There are two features of the Holland-Rubin model which are particularly important to note.

First, the analytic focus is on causal effects, not on causal mechanisms. Establishing causal claims, or showing program impact, rests on comparing the value of outcomes in treatment and control groups. Holland (1986: 945) is very explicit about this emphasis and provides a rationale: 'Others are interested in understanding the details of causal mechanisms. The emphasis here will be on *measuring the effects of causes* because this seems to be a place where statistics, which is concerned with measurement, has contributions to make.'

[5] Rubin and Holland formalised and popularised the model, which has earlier origins.

Second, causal effects are relative by definition given that a causal claim requires a comparison of outcomes between treatment and control or comparison groups. According to Holland (1986: 946): 'The effect of a cause is *always* relative to another cause. For example, the phrase "A causes B" almost always means that A causes B relative to some other cause that includes the condition "Not A."'

Mechanism-based approaches, on the other hand, are 'producers'. Causal inference depends upon identifying the causal mechanisms generating causal effects. According to Little (1998: 202): "To assert that A's are causes of B's is to assert that there is a typical causal mechanism through which events of type A lead to events of type B."

There is no consensus in the literature as to the precise definition of causal mechanism (Hedström and Swedberg, 1998; Pickel, 2004). In the context of impact assessment, it typically refers to the causal process generating observed outcomes. Process involves the causal variables, the links or pathways between them, i.e. the causal 'tree', as well as an explanation of why they are linked. Mechanism, in this sense, focuses on the reasons for observed outcomes

There are conceptual and definitional ambiguities about the idea of mechanism which have been highlighted in the literature (Mahoney, 2001). Nevertheless, an example illustrates the core idea at hand. Sufficient evidence of a causal link between smoking and cancer was provided by the discovery of the mechanisms, i.e. the causal variables and pathways, through which chemicals compounds in tobacco contribute to cancerous cell subdivision and growth.

> Scientists studying a tumor suppressor gene called p53 demonstrated a direct link between cigarettes and lung cancer. … When it detects DNA damage, p53 halts cell division and stimulates DNA repair enzymes that fix the trouble. p53 is inactivated in 70% of all lung cancers. A puzzling discovery was that the p53 mutations in cancer cells almost all occur at one of three "hot spots" within the p53 gene. The key link that explains the "hot spots" and links lung cancer to cigarettes is a chemical called benzo (a) pyrene (BP), a potent mutagen released into cigarette smoke from tars in the tobacco … [which] binds directly to the tumor suppressor gene p53 and mutates it to an inactive form. The key evidence linking cigarette smoking and cancer, the "smoking gun," is that when the mutations of p53 caused by BPDE from cigarettes were examined, they were found to cluster at precisely the same three specific "hot spots" seen in lung cancers! The conclusion is inescapable: the mutations inducing lung cancer are caused by chemicals in cigarette smoke. Faced with this new

> incontrovertible evidence, the tobacco companies have abandoned their claim that cigarettes have not been shown to cause cancer (Johnson, n.d.)

In the above terminology, the relevant causal variables are the chemicals components in tobacco (BP/ BPDE) and the p53 gene, specifically the three 'hot spots on it.' The causal pathway and explanation of linkages includes the: i) release of BP in cigarette smoke: ii) binding of BP on the three hot spots on the p53 gene; iii) mutation of the p53 gene rendering it unable to suppress cancerous cell division.

The Context-Mechanism-Outcome (CMO) model of Realistic Evaluation is the most explicit attempt to found impact assessment on a mechanism-based approach to causation (Pawson and Tilly, 1997; Pawson, 2002). Other mechanism-based approaches include theory-based evaluation (Weiss, 2000), some types of participatory assessment (Mayoux and Chambers, 2005), applied ethnographic evaluations (Adato, 2008) and process-tracing designs (George and Bennett, 2004). These approaches all base causal claims about impact on the processes linking program activities and development outcomes/impacts, derived either from theory or from the perceptions of stakeholders.

It has been argued that counterfactual approaches to impact assessment are 'difference-makers' and mechanism-based approaches are 'producers'. But how does this matter practically for impact assessment? Consider the hypothetical of two micro-credit projects, '*a*' and '*b*', which together supply credit to all members of a population. Access to credit from project '*a*' precludes access to project '*b*' and *vice versa*. Assume that both projects, and not other factors, succeed in significantly raising income of project participants in identical fashion. In terms of 'production', a positive impact may be inferred for project '*a*' in that it 'causes' an increase in incomes among project participants. In terms of 'difference-making' however, no such positive impact may be inferred in that there is no difference in outcomes between projects 'a' and '*b*'.

These issues are not simply hypothetical but have real-world relevance for causal analysis in impact assessment. They are at the root of debates about substitution bias, as exemplified by the following exchange between Thomas Cook and James Heckman:

> It makes little sense to criticize [random assignment] for substitution bias, asserting that, for instance, individuals in the control group had access to services like those to which the treatment group had access. After all, experiments answer the question of whether a

> treatment is better than some alternative. In this case, the alternative is whatever other services are available… (Cook, 2000: 79)
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> … the job training experiment Cook mentioned actually killed the large-scale Job Training and Partnership Act (JTPA) program because of what we call substitution bias. Subjects who were randomized out of the study had excellent substitutes for the program, resulting in a gross underestimation of the program's effectiveness (Heckman, 2000: 83).

While this exchange is phrased in terms of the correct counterfactual to use, it can alternatively be interpreted as a debate as to whether or not the impact of a program should be assessed in terms of 'difference-making' or in terms of some notion of 'production'.

In summary, competing notions about the meaning of causation, and nature of causal inference, can greatly affect assessments of program impact. In the above example, a 'difference-making' account based on RCTs shows no impact of the JTPA program, while a 'production'-based analysis would come to the opposite conclusion. Our priors about the nature of causation matter a great deal for real-world issues of impact assessment.

THE CAUSATION OF POVERTY

To recall, the 'production'-based accounts of causation maintain that effects are linked by a continuous series of intermediate events linked in time and space while 'difference-making' approaches allow for the causal effect of omissions. In the context of the analysis of poverty, this same distinction appears in a slightly different guise. It is the contrast between viewing the causes of poverty as a lack or want of relevant variables or as an active process of impoverishment or perpetuation of poverty

The distinction between 'want-based' and 'process- based' accounts of the causation of poverty is central to the present discussion and to that of the following section which addresses duties to reduce or eliminate poverty. Accordingly, this section will focus on those process-based accounts related to impoverishment while the next section will examine those related to the perpetuation of poverty.

Two preliminary caveats are in order. The 'want' vs. 'process' distinction is not absolute. The two approaches can be easily combined, and in practice, overlap[6]. Nevertheless, there are differences in substance and emphasis between the two which justify the dichotomy. A similar point applies to the distinction between impoverishment and perpetuation of poverty, which are overlapping and also causally related.[7]

A 'want-based' analysis of the causation of poverty maintains that the causes of poverty consist of the lack or absence of variables which would facilitate income growth and poverty reduction. This approach figures prominently in historical and contemporary analyses of the causes of poverty. Arguably, it is the form of causal reasoning which informs a great deal of overseas development assistance along with popular perceptions of the roots of global poverty. A few examples serve to illustrate the approach.

Historically, the want-based approach is prominent in analyses which have emphasised characteristics of 17th or 18th century England, and Europe more broadly, which facilitated the industrial revolution along with their absence elsewhere. An example is provided by David Landes'(1999) bestselling book, *The Wealth and Poverty of Nations*, which attributes European success to such institutional factors as private property, personal liberty, rights of contract, stable, responsive, honest government and ultimately culture: 'if we learn anything from the history of economic development, it is that culture makes all the difference' (Landes 1999: 516). The corollary, that the present day low-income countries lack such attributes, finds notable expression in the literature. For example, it lies at the core of modernisation theory as evidenced by Rostow's (1959: 4) depiction of 'The Traditional Society' which has yet to enter the 'The Take-Off' stage: 'the central economic fact about traditional societies is that they evolved within limited production functions … they lacked, in short, the tools and the outlook towards the physical world of the post-Newtonian era.'

The 'want-based' depiction of the causes of poverty is equally prominent in well-known, contemporary analyses. Consider the causal analysis offered in one of the most influential, and best-selling, monographs on poverty in recent years, Jeffrey Sachs' (2005) *The End of Poverty*. Sachs' causal analysis of the 'poverty trap' is as follows:

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[6] For example, a focus on proximate causes related to say 'lack of education' may be combined with a more process-oriented analysis addressing underlying causes related say, to the political economy of public expenditure decisions.

[7] For example, the fear of impoverishment may lead to low risk/low return activities which perpetuate poverty, a phenomenon characterised as the 'Faustian' bargain (Wood, 2003).

> Poor rural villages lack trucks, paved roads, power generators, irrigation channels. Human capital is very low, with hungry, disease-ridden and illiterate villagers struggling for survival. … In these conditions the need is for more capital, physical, human, natural, but that requires more saving (Sachs 2005: 56).

The thrust of the causal analysis is 'want-based'. Villages and local populations are characterised by multiple 'lacks'. The policy or programmatic response, as detailed by Sachs, involves investments in agricultural inputs, basic health, education, power, transport, communication services, safe drinking water and sanitation and so forth. Such interventions are the standard micro elements in typical poverty reduction strategies.

In poverty analysis, the want-based approach is particularly prevalent in the applied tradition of microeconomics. Here, an expenditure function is estimated which represents the monetary value, or cost, of a given level of utility, appropriately adjusted for differences in household composition and prices (Deaton and Muellbauer, 1980). Next, determinants of (low) expenditure, or poverty, are estimated econometrically using variables representing such factors as household composition, physical assets, human capital, region, community characteristics and so forth. Such models may be interpreted as reduced form estimates of the underlying relationships generating expenditure and only require that the included variables be exogenous (Glewwe, 1991). A typical list of determinants of poverty include low levels of education, human capital and productive assets, lack of access to credit and irrigation, remoteness, high dependency ratios, and so on. In applied poverty analysis, determinants of this sort are often given a causal interpretation (Haughton and Khandker, 2009).

In contrast, the process-based causal account of poverty directs attention to actual processes of impoverishment. As with the want-based perspective, there are both historical and contemporary examples. In recent years, in fact, considerable attention has been directed to this form of causal analysis in the context of poverty dynamics.

Historically, process-based approaches figure prominently in analyses which point to deleterious effects of colonial or pre-colonial policies on the Global South. In the context of Asia, a good example is provided by Mike Davis in his analysis of the 'making of the Third World':

> The relevant question is no so much why the Industrial Revolution occurred first in England, Scotland and Belgium, but why other advanced regions of the eighteenth-century world economy failed to adapt their handicraft manufactures to the new conditions of production … The looms of India and China were defeated not so much by market competition as they

were forcibly dismantled by war, invasion, opium and a Lancashire-imposed system of one-way tariffs (Davis, 2002: 295).

With respect to sub-Saharan Africa, similar analysis has directly attention to the harmful effects of the slave trade (Lovejoy, 2000) and to colonial policies. For example, in Walter Rodney's provocatively entitled *How Europe Underdeveloped Africa*, the author identifies a range of mechanisms of colonial impoverishment, aptly summarised as follows: 'Colonialism had only one hand- it was a one-armed bandit' (Rodney, 1974: 205).

This emphasis on processes of impoverishment has also figured prominently in debates about the relationship between growth and poverty reduction. In the 1970s and 1980s, one locus of such debates concerned the poverty effects of agricultural growth in rural India. A number of potential processes of impoverishment were identified to explain the apparent lack, or slow pace, of poverty reduction, including: i) labour-displacing machinery; ii) eviction of small tenants; iii) increased dependence on purchased inputs and privately controlled irrigation; iv) shifts in demand from local handicrafts to mass-produced urban consumer goods; v) the use of mechanised pumps by richer farmers which depleted water tables; vi) increased political dominance by richer farmers in village affairs and so on (Bardhan, 1985: 77).

A partial rerun of these debates has occurred over the past decade in the context of pro-poor or inclusive growth, with similar lists arising[8]. Robert Eastwood and Michael Lipton and (2000) for example, identified an overlapping set of processes of impoverishment including: i) shifts of demand away from products made by immobile poor (Coarse-Cloth Effect); ii) labour-saving technical change (Tractor Effect); iii) slow technical change in sectors in which immobile poor are concentrated (Handloom-Weavers Effect); iv) change in relative prices of traditional and poor products, making the latter uncompetitive (Millet-to-Milk Effect).

A final contemporary example of the shift from a 'want-based' to a 'process-based' causal account of poverty concerns the recent upsurge in interest in poverty dynamics[9] and the attendant concept of

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[8] Examples include: Besley and Cord (2007), Ravallion (2004) and UNDP (2007).

[9] Recent examples in the literature include: Baulch and Hoddinott (2000), Baulch (ed) (2011), Khrishna (2010) and Narayan and Petesch (eds) (2007).

vulnerability[10]. Historically, most causal analysis of poverty has focussed on the stocks of poverty at one or more points of times. Poverty dynamics, however, is about the flows of households between welfare categories which facilitates the distinction between households that stay poor, 'chronic poverty', escape from and enter into poverty, 'transitory poverty', or stay non-poor. Data permitting, it allows for additional distinctions between those who fall in and out of poverty over the course of an agriculture season, 'seasonal poverty' or at longer intervals, 'conjunctural poverty', and those who descend into poverty for a protracted period, 'impoverishment'. It also allows for detailed analyses of trajectories of change in question, distinguishing, for example, between smooth, saw-tooth, single step and multi-step processes, which may be either upward or downward trending (Baulch and Davis, 2008).

Vulnerability is the likelihood of falling into poverty or greater poverty, or 'downside risk'. It is a function of exposure to shocks along with individual or community response. Six of the most prevalent shocks in the Global South are illness, violence and conflict, natural disasters, harvest failure, terms of trade deterioration, and loss of employment (Sinha et al., 2002). The analytical relevance of the focus on vulnerability is to shift causal analysis from 'want and lacks' to active processes of impoverishment triggered by shocks.

In summary, the distinction between 'production' and 'difference-making' as a depiction of the causal relationship maps closely onto the distinction between 'process-based' and 'want-based' accounts of the causation of poverty. These differences matter for policy because different measures are often appropriate for reducing chronic and transitory poverty, for example. They also has normative significance when considering the responsibility for reducing or eliminating poverty, a point to which we now turn.

POSITIVE VS. NEGATIVE DUTIES

Over the past decade or so, a major initiative spearheaded by the United Nations System and others has been to conceive of poverty as a violation of human rights. A sizeable literature has resulted[11]. Rights offer a new dimension to concepts traditionally associated with poverty, such as basic needs, in that they imply a duty for their fulfilment. Certain debates about the nature of the duties in question turn on the distinction between 'difference-making' and 'production' as a depiction of the causes of poverty.

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[10] This discussion draws on Shaffer (2008).

[11] Examples include Bilchitz (2007), Pogge (2002, 2005a, 2005b, 2007), UN-OHCHR (2004), Vizard (2006a), Vizard et al. (eds) (2011).

The previous section made a preliminary distinction between 'want-based' and 'process- based' accounts of the causation of poverty and a secondary distinction between process-based accounts related to impoverishment on the one hand, and to the perpetuation of poverty, on the other. This section focuses on processes which actively perpetuate poverty. In the context of the discussion of duties, such processes are distinguished from the corollary of a 'want-based' account of the causation of poverty, namely the failure to alleviate poverty.

This discussion will draw largely on the works of Thomas Pogge who has written extensively on the relationship between human rights and poverty relying heavily on the above distinction.[12] Baldly stated, Pogge argues for negative duties to eradicate poverty on grounds that the international economic order actively produces foreseeable and avoidable harm, relative to that of a just social order. Pogge is not necessarily arguing for worsening global poverty, or impoverishment, but for the perpetuation of global poverty on a massive scale.

The 'process-based' analysis of the perpetuation of poverty has deep historical roots. Consider the comments of the eminent historian and Fabian socialist, R.H. Tawney, at the inaugural lecture of the Ratan Tata Foundation in 1913:

> the problem of poverty, as our generation understands it, is not primarily why certain persons fall into distress. It is why the product of industry is distributed in such a way that, whether people fall into distress or not, large groups among them derive a meagre, laborious, and highly precarious living from industries which smaller groups appear to derive considerable affluence … what thoughtful rich people call the problem of poverty, thoughtful poor people call with equal justice the problem of riches (Tawney, 1913: 10-11).

This focus on broader social structures and processes as causes of the perpetuation of poverty is central to the Marxian tradition of political economy (Harriss-White, 2005). For example, in the Marxian tradition of agrarian political economy, analysis has focused on processes inhibiting the accumulation of a surplus by the peasantry including rent paid in labour, cash and kind and surplus appropriation by landlords, employers or the state in the form of wages, prices, usury or taxation (Deere and de Janvry, 1979).

[12] See note 11.

Contemporary examples of similar analysis figure prominently in the adverse incorporation literature[13] whose core thesis is aptly summarised by Harris (2009: 220): 'processes of accumulation bring about the reproduction of poverty. The wealth of some is causally linked to the crushing poverty of others.'

Pogge's argument in support of negative duties for poverty reduction relies on similar reasoning. It holds that the global economic order is causally responsibility for the active perpetuation of global poverty. The argument is complex and has been the subject of much debate.[14] I focus on three issues with direct relevance to the question of causation, namely, the distinction between positive and negative duties, the nature of harm and the perpetrator of harm.

Pogge places emphasis on negative duties not to harm, as opposed to positive duties to protect, aid or promote, in order to develop a position which is 'widely acceptable'. He is agnostic about the role and/or existence of positive duties to reduce global poverty. Accordingly, he states:

> Let me focus exclusively then on negative duties correlative to human rights: duties not to harm others in certain specific ways …such an examination highlights the minimal constraints one's conduct must controversially meet if it is not to be human rights violating. That these constraints are negative duties means that they require only omissions, no acts, and that they can be violated only by acts, not omissions. Agents must refrain from (actively) causing others' human rights to be unfulfilled (Pogge 2007b: 20).

Pogge is acutely aware of the difficulties in maintaining the distinction between acts and omission and discusses resulting ambiguities. Nevertheless, he concludes that 'in most cases, agreement on how to apply the [act/omission] distinction can be achieved in a way that sustains the near-universal conviction that detrimental relative impact of our acts is morally more significant than equally detrimental relative impact of our omissions' (Pogge, 2007b: 22).

What then is the nature of the harm which is actively being inflicted? Here, Pogge mentions two forms of harm, namely diachronic accounts, whereby someone is made worse off over time, and subjunctive accounts, whereby someone is made worse off than they would have been in the absence of the intervening action. It is a third form of harm which is central to Pogge's argument:

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[13] See duToit (2009), Green (2009), Harris (2009) and Mosse (2010).

[14] See contribution in the Special Issue of *Ethics and International Affairs* (Vol. 19, No. 1), and Pogge's (2005b) response to the critics.

> we are harming the global poor if and insofar as we collaborate in imposing an unjust global institutional order upon them. And this institutional order is definitely unjust if and insofar as it foreseeably perpetuates large-scale human rights deficits [poverty] that would be reasonably avoidable through feasible institutional modifications' (Pogge 2005b: 5).

Clearly, the referent with respect to harm is the perpetuation of massive poverty, and not necessarily impoverishment.

Finally, the core perpetrator of harm is the international economic order. Pogge proposed a three-fold categorisation of the causes of severe poverty based on intentional acts, intentional omissions, or failures to alleviate, and social institutions. It is the latter which are critical for his argument:

> In the modern world, the rules governing economic transactions – both nationally and internationally– are the most important causal determinants of the incidence and depth of poverty. They are most important because of their great impact on the economic distribution within the jurisdiction to which they apply (Pogge 2007b: 26).

According to Pogge, examples of the harm committed directly by such institutions include provisions within of the World Trade Organisation and Trip Related Aspects of International Property Rights (TRIPs) agreements which work to the systematic disadvantage of poorer countries. Indirect harm is inflicted through conferring resource, borrowing, treaty and arms privileges on corrupt and undemocratic rulers in the Global South.

It is unclear if Pogge's causal analysis can bear the weight of his conclusions, as a number of commentators have noted.[15] The key point however, is that the argument turns on the distinction between 'difference-making' and 'production' as a representation of causation. The reliance on negative duties, not to harm, as opposed to positive duties, to protect, aid or promote, shifts the burden of the argument to the causation of poverty in so far as it must be shown that the global economic order actively perpetuates poverty. In the language of the previous section, it requires a process versus a want-based analysis of the causes of poverty. More generally, it requires a 'production'-based account of causation and not a 'difference-making' one which allows for omissions.

[15] Gilabert (2005), Patten (2005), Vizard (2006b).

WHY FOUNDATIONS MATTER

It has been argued that the distinction between 'production' and 'difference-making' lies at the root of applied debates about how to assess the impact of development programs, how to understand the causation of poverty and how to conceive of duties to eliminate or reduce poverty. As such, it constitutes an interesting heuristic device which links quite disparate debates in ways hitherto not explicitly recognised. There are other reasons, however, why foundations matter, some of which have been suggested in the preceding analysis. To be clear, understanding foundational differences about causation is important in at least four additional ways.

First, it exposes mistaken positions in applied debates related to impact assessment. Consider, for example, the above- mentioned depiction of causation held by leading proponents of randomised controlled trials. According to Duflo et al. (2008: 3899), 'any attempt at drawing a causal inference … requires answering essentially counterfactual questions: How would individuals who participated in a program have fared in the absence of the program?' This statement is unremarkable as a characterisation of a counterfactual notion of causation. It is incorrect, however, as a depiction of causation *tout court*. As discussed throughout this article, a 'production-based' account of causation does not impose this same counterfactual requirement on causal relations. Arguably, a better understanding of the literature on causation, in particular the distinction between 'difference-making' and 'production', would forestall errors such as these and embed greater modesty in claims about the merits of RCTs.[16]

Second, an understanding of foundational differences helps to explain *actual* methodological choice when analysing the causation of poverty. Consider, for example, the aptly entitled paper 'From Correlates and Characteristics to Causes: Thinking About Poverty from a Chronic Poverty Perspective' by Maia Greene and David Hulme (Green and Hulme, 2005). The core argument in favour of a methodological reorientation of poverty analysis rests on something very similar to the distinction between production and difference-making. Specifically, they argue for a 'resituation of poverty studies … [to consider] what kinds of social relations *produce* [my emphasis] what kinds of poverty effects' (Green and Hulme, 2005, p. 868). Such an approach stands in opposition to analyses of poverty in the applied tradition of

[16] RCTs have been portrayed in the academic literature as the 'gold standard', 'guarantors' of internal validity, exemplars of 'hard evidence', etc. Media coverage has included such headlines as "Making Economics Relevant Again" (New York Times, 2008, Feb. 28), "Towards a New Development Economics" (Boston Globe, April 1, 2007) and "Numbers that Can Change the World" (Boston Globe, April 14, 2008).

microeconomics which focus on characteristics or correlates of poor households such as low educational levels, large family size and so on (as discussed above). According to the authors:

> Poverty is increasingly presented as caused by a *lack* [my emphasis] of immediate assets …This standardized representation of poverty as the social conditions, rather than the social relations, which *produce it* [my emphasis] has restricted the way in which development studies and related disciplines have been able to grasp the fundamental relation between poverty and society (Ibid, p. 870).

To be sure, the methodological position of Green and Hulme stems from a range of considerations including ideological and political commitments. Still, a core tenet of the argument is that the 'real' or 'underlying' causes of poverty are 'producers', driven by social relationships, and not simply 'lacks' or 'wants', which are 'difference-makers'. Foundational issues are indeed part of the explanation for actual methodological choice.

Third, foundational differences explain different research results. As discussed above, assessment of program impact may indeed turn on the distinction between production and difference-making. Recall the scenario where an entire population (or sample) are members of credit projects which are equally successful at increasing household income. On a difference-making account, based say, on the results of a RCT, no project impact would be found, as there are no differences in outcomes between treatment and control groups. On a production-based account, based on examining the linkages between credit receipt and household income, for example, positive impact would be found. The situation is not merely a hypothetical, but relates closely to the problem of substitution bias. The impact of the successful Job Training and Partnership Act (JTPA) program discussed above was 'missed' because equally successful substitute programs for program participants existed. The conflicting research results are driven by our prior conceptions of the nature of causation, based on either 'production' or 'difference-making'.

Fourth, foundational differences about causation also shed light on the choice of policy prescriptions related to poverty. Blocking, or mitigating the effects, of 'producers' of poverty may lead to different policies than addressing 'difference-makers'. This point is illustrated by revisiting the distinction between chronic and transitory poverty discussed above. The standard recipe of policies and programs to address chronic poverty takes aim at a range of 'difference-making' 'wants' including deficits of health, education, nutrition, water/sanitation, credit and so forth. As mentioned above, many of the prescriptions in Jeffrey Sachs' *The End of Poverty* provide an example. Such policies often differ from those designed to forestall descents into poverty (transitory poverty) by reducing the probability or mitigating effects of,

shocks which precipitate impoverishment ('producers'). For example, reducing the likelihood of shocks may involve macroeconomic measures to reduce currency risk, such as capital controls, or enforcement of workplace safety standards, to reduce occupational hazards. Mitigating the effect of shocks may entail a range of social protection measures including old age pensions, employment, health and crop insurance, seasonal public works and so on (Barrientos and Hulme, 2008). While there is undoubted overlap between policies aimed at 'producers' and 'difference-makers', they are not the same.

CONCLUSION

There are some concepts which seem to have explanatory power in quite diverse contexts. A classic example is Albert Hirschman's (1970) distinction between exit, voice and loyalty which was used to explain responses to the decline of firms but found to have wide applicability. In Hirschman's words:

> I have come upon a manner of analysing certain economic processes which promised to illuminate a wide range of social, political and indeed moral phenomena … as diverse as competition and the two-party system, divorce and the American character, black power and the failure of "unhappy" top officials to resign over Vietnam (Hirschman, 1970: vii).

It has been argued that the distinction within the philosophic literature on causation between 'production' and 'difference-making' also has wide-ranging explanatory relevance. Specifically, it was shown to be at the root of differences between counterfactual and mechanism-based approaches to impact assessment. It was also shown to underpin the distinction between process and want-based analyses of the causation of poverty. A variant of this same distinction between process and want-based analyses was shown to underlie the distinction between negative and positive duties to reduce or eliminate poverty in Pogge's proposal for a human rights-based approach to poverty reduction.

The distinction between 'production' and 'difference-making' does indeed appear to have cutting power when sifting through debates of relevance to poverty. As such, it constitutes an interesting heuristic device which links quite disparate debates in ways hitherto not explicitly recognised. In this way, there are parallels with Hirschman's distinction between exit, voice and loyalty.

But foundational differences about causation also matter for other reasons. They are important to expose error in applied debates about impact assessment as evidenced by mistaken claims in the literature on randomised controlled experiments which equate causation with counterfactual notions of causation. They serve to clarify the reasons for *actual* methodological choice among poverty analysts who argue that

analytical focus should be on the social relationships which *produce* poverty rather than the lack of assets which are only correlates of poverty. They explain conflicting research results concerning program impact in the context of situations of substitution bias, where programs *produce* (positive) effects, yet there are no differences in outcomes between treatment and control groups. They shed light on the reasons for differing policy prescriptions, when distinguishing between measures which block, or mitigate the effects, of shocks which *produce* transitory poverty from policies which take aim at 'difference-makers' responsible for chronic poverty. Foundations matter. Development Studies would benefit from a more direct engagement with foundational concerns of this sort.

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