

SCARCITY, ABUNDANCE AND SUFFICIENCY

CONTRIBUTIONS
TO SOCIAL AND ECONOMIC THEORY

Adel Daoud SCARCITY, ABUNDANCE AND SUFFICIENCY

[1, 2, 4, 8, 16, 32, 64, 128, 256,
1, 2, 3, 4, 5, 6, 7, 8, 9.

$$a + ax + ax^2 + \dots + ax^{n-1} = \sum_{k=0}^{n-1} ax^k$$

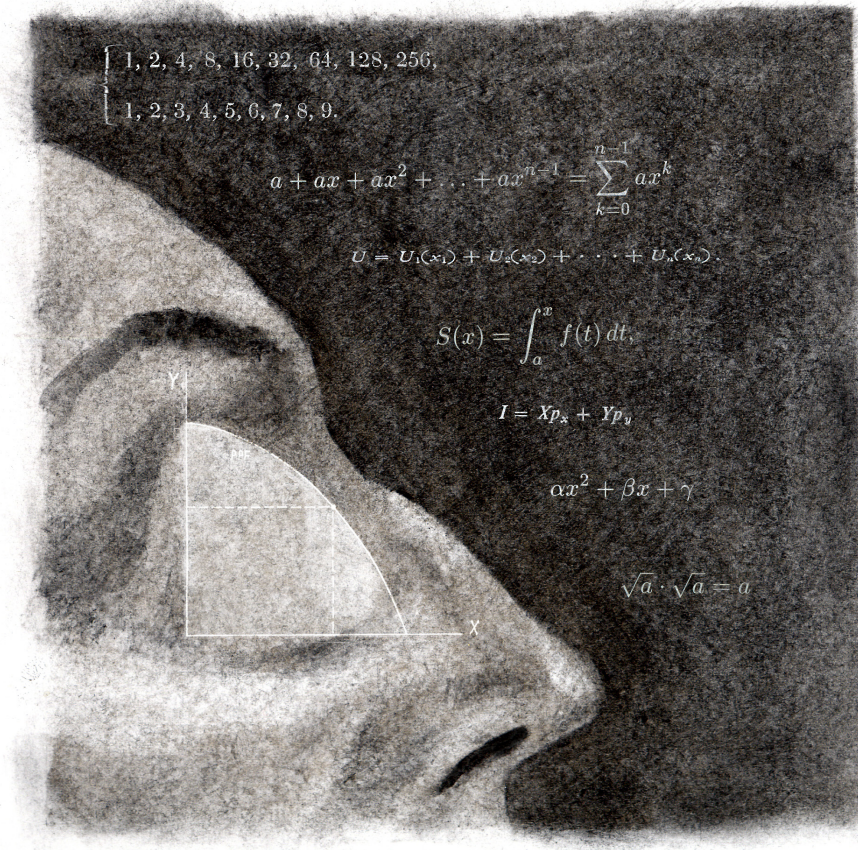
$$U = U_1(x_1) + U_2(x_2) + \dots + U_n(x_n)$$

$$S(x) = \int_a^x f(t) dt$$

$$I = Xp_x + Yp_y$$

$$\alpha x^2 + \beta x + \gamma$$

$$\sqrt{a} \cdot \sqrt{a} = a$$



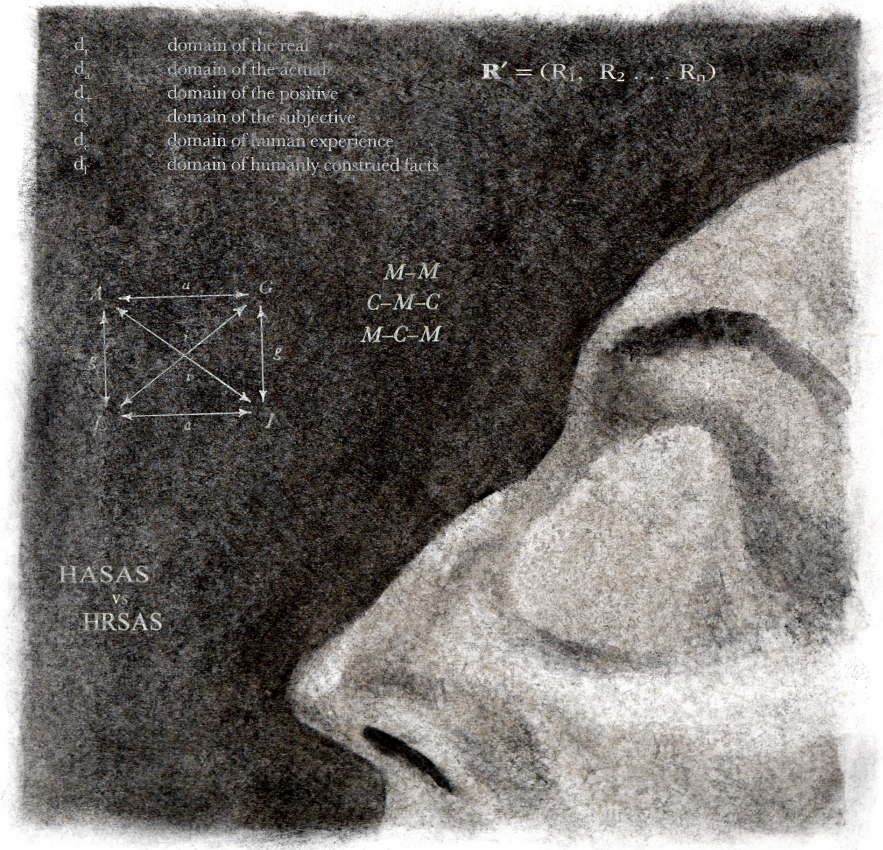
Adel Daoud



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d, domain of the real
d, domain of the actual
d, domain of the positive
d, domain of the subjective
d, domain of human experience
d, domain of humanly constrained facts

$$\mathbf{R}' = (R_1, R_2, \dots, R_n)$$

M-M
C-M-C
M-C-M

HASAS
vs
HRSAS

Scarcity, Abundance, and Sufficiency

Contributions to Social and Economic Theory

Adel Daoud

Göteborg Studies in Sociology No 46



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Distributed by:

Adel Daoud

Department of Sociology

University of Gothenburg

Box 720

SE 405 30 Gothenburg

Sweden

[E-mail: adel.daoud@sociology.gu.se](mailto:adel.daoud@sociology.gu.se)

Scarcity, Abundance, and Sufficiency – Contributions to social and economic theory

Author: Adel Daoud

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ABSTRACT

Title: Scarcity, Abundance, and Sufficiency: Contributions to Social and Economic Theory.

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Author: Adel Daoud

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Economic sociology has established itself as a strong and vibrant field in the social sciences. A number of significant studies have been conducted on the relation between the economy and society: on firms, markets, networks, money, and general action theory. But little has been done on the issues of scarcity, abundance, and sufficiency (SAS). Both economical and sociological approaches seem to assume scarcity as an important premise. But none seems to question the deeper nature of it. The SAS theme seems to be analytically underdeveloped in both disciplines.

This thesis aims to explore an alternative ground for critical economic sociology or more generally for social and economic theory. Instead of focusing on the problems of rational choice, which a number of sociological studies have done, the thesis starts even earlier in the set of assumptions that condition human agency, it focuses on the premise of scarcity. The central question posed is: 'What is the nature of SAS in social and economic theory?' Five studies have been carried out in order to answer this question. These studies focus on quite divergent empirical fields – famine, voluntary simplicity, and educational choice – in order to explore the varying importance of the sociocultural mechanisms underlying SAS.

Paper I deals with absolute SAS and the assumption of universal scarcity in neoclassical economics. A critical examination of this assumption is conducted by studying the empirical phenomenon of global hunger in relation to a theoretical elaboration of SAS. It also proposes a framework for explaining and understanding absolute SAS.

Paper II further tests the framework developed in Paper I. The food entitlement decline and the food availability decline are commonly seen as conflicting approaches to explaining famine. The paper analyses the relation between these two approaches and argues that these approaches can in fact be reconciled under

one framework by outlining their causal sources. This analysis also shows that there is a third causal source that needs to be incorporated with the other two approaches. The whole analysis is exemplified by the Bengal Famine of 1943.

Paper III focuses on relative SAS. It studies how voluntary material simplicity countervails the causal effect of relative scarcity generated by the environment of a consumer society. Analyses of both interviews and texts were carried out. It is shown that voluntary material simplifiers manage, though with difficulty, to neutralize the causal effect of the consumer society. This is achieved by mediating the cultural properties of the economic ethic of material simplicity, which promotes the deflation of human wants. They actualize what has been called the *modus vivendi* of material simplicity, a practical state of relative abundance.

The aim of *Paper IV* is to study the formation of wants based on interviews with upper secondary school pupils. The paper shows that an organic view of decision-making is in better accordance with observations than is a hierarchical view and thus supports previous research claiming that pragmatic rationality (based on habitus and reflexivity) plays a more important role in students' decision-making processes than does instrumental rationality.

Paper V compares two classical economists and their views on scarcity, namely Thomas Malthus (1766-1834) and Lionel Robbins (1898-1984). However, both scholars' views tend to naturalize and universalize scarcity, and thus to overlook abundance and sufficiency, which are important states in the social provisioning process. It is argued that this is due to neglect of the sociocultural causal underpinnings of SAS.

Hence, the thesis offers three main contributions to social and economic theory in general: (1) a tentative typology of SAS; (2) a holistic (multi-causal) explanatory approach to SAS; and (3) an alternative foundation for social and economic theory, based on what has been called the SAS theme. It is shown that this theme contains various socioeconomic phenomena that are intimately linked to SAS (famine, want, property, market, justice, poverty, action, conflict, etc.), which then set the stage for new kinds of socioeconomic inquiries as well as new relationships between existing ones. Hopefully, this will enable an even deeper understanding of how SAS conditions social and economic life.

To my parents – for their unconditional love.

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One of the nice things about writing a thesis that is a collection of publications is that it is easier to collaborate with your colleagues. One of the papers in this thesis came about through such a collaboration. I want to express my gratitude to Goran Puaca for all the lunches, many hours of intellectual discussions over Skype, and for his support during the actual field work we did. It is actually a real comfort to have somebody with whom to share the joy of writing and some of the despair of the peer review process. Working with you was truly a pleasure, and I am looking forward to much more collaboration in the future.

Another nice thing about writing a thesis in this way is that you obtain a large number of comments from both editors and anonymous colleagues, many very constructive and a smaller portion less constructive. All of them, however, require a great deal of the time and effort. I therefore wish to thank all the editors and anonymous reviewers who have commented on various manuscripts I have

submitted to various journals – a special thanks to those who put in extra effort. One of these persons is Martha Starr at Boston University.

Earlier versions of all five papers have been presented at various international conferences: I have been a frequent visitor to at least two such conferences, the Annual Conference of the Association of Heterodox Economics and the International Conference for Critical Realism. I want to thank all the delegates who showed an interest in and commented on earlier versions of my papers. Many valuable ideas have emerged from these presentations. I would like to give a special thanks to Roy Bhaskar, Margaret Archer, Andrew Mearman, Paul Downward, Steve Fleetwood, Caroline New, Wendy Olsen, Fred Lee, Mervyn Hartwig, Andy Denis, Brendan Sheehan, Eric Berr, Jack Reardon, Björn-Ivar Davidsen, Pär Engholm, Elias La Grand, Ismael Al-Amoudi, and John Latsis. I also want to thank Richard Swedberg for arranging the very stimulating seminars in economic sociology, at Stockholm University, and for his comments on an early draft on the topic of my thesis.

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I also wish to thank the technical and administration staff at the Department of Sociology for their valuable assistance, and for helping me to find my way through the bureaucratic jungle that parts of academia have now become. I to thank in particular our former head of department Anna-Karin Kollind, for taking time to listen and help me to accomplish various things I needed to do. Karen Williams has helped me make my English look better than it actually is – thanks for the professional proof reading (all remaining obscurities are of course my responsibility).

My family and friends have been an invaluable foundation for my academic work. My deep gratitude goes to my parents, to whom my thesis is dedicated – thank you for doing your best to save us from war and for giving us a life enveloped in peace. My brotherly love goes to my sisters Safaa and Nedda. My sincere love to my dear wife Silvana, and her family. They have all made this thesis possible.

Adel Daoud, Uddevalla – February 2011

Frequently used abbreviations

- Paper I* = Daoud, Adel (2007). (Quasi)Scarcity and Global Hunger: a Sociological Critique of the Scarcity Postulate with an Attempt at Synthesis, *Journal of Critical Realism* Vol. 6 no. 2
- Paper II* = Daoud, Adel (submitted). Linking Food Requirements, Entitlements, and Availability: exemplified by the 1943 Bengal Famine.
- Paper III* = Daoud, Adel (forthcoming). The Modus Vivendi of Material Simplicity: Counteracting Scarcity via the Deflation of Wants, *Review of Social Economy*.
- Paper IV* = Daoud, Adel and Puaca, Goran (submitted). An Organic View of Want Formation: Rational Choice, Habitus, and Reflexivity on want-formation.
- Paper V* = Daoud, Adel (2010). Robbins and Malthus on Scarcity, Abundance, and Sufficiency: The Missing Sociocultural Element, *American Journal of Economics and Sociology* Vol. 69 Issue 4.
- HASAS = The holistic model of absolute scarcity, abundance and sufficiency
- HRSAS = The holistic model of relative scarcity, abundance and sufficiency
- SAS = Refers to the various dimensions and conceptual differentiation of Scarcity, Abundance, and Sufficiency in general (e.g., relative, absolute, micro, macro, natural, social).
- The SAS theme = Refers to the set of issues that are directly related to SAS (e.g., famine, poverty, conflict, solidarity, markets)

Introduction

More than a billion people experience hunger in a world where there is more than enough food to go around. At the same time, obesity is a growing problem. Some people are on the verge of death from starvation, while others engage in gluttony. How is this possible? Some researchers argue that starvation is caused by ever-increasing food prices, poverty, climate shocks, or political unrest. Irrespective of the cause, starvation radically effect individuals' possibilities to develop their capacities, and to participate in social life (Sen 2006): Ultimately people's life and well-being hinge on having access to various resources in society.

Food is only one of the essential goods that people require, and that they may be excluded from accessing. There is also water, land, medicine, energy, oil, jobs, capital, money, time, housing, clothing, knowledge, education, the Internet, roads, seats in a bus, mobile phones, candy, cakes and so on and so forth. Individuals want various things, from essential to non-essentials goods, and things with different characteristics and varying social effects when they are used. Governments will go to war to control some essential resources, and conflicts between individuals may arise over that last piece of cake. It would seem that the availability of resources, their absence or presence, fundamentally conditions human action and interaction. These are all issues associated with scarcity, abundance or sufficiency.

The purpose of this thesis is to study the nature of *scarcity*, *abundance*, and *sufficiency* (SAS). It provides a critical analysis of these concepts as they are used in economics and sociology. The thesis also suggests an alternative way of explaining SAS. It provides a theoretically driven, but empirically exemplified account. It constitutes an attempt to elaborate a general socio-economic account of SAS that is both sociologically as well as economically relevant. This work is thus intended for both sociologists and economists. Ultimately, it regards the contemporary division of labour of the social sciences as artificial, and so hopes to transcend this division. As they stand today, it seems to me that both disciplines can learn valuable lessons from the other (cf. Swedberg 1990). Therefore, this work has focused on some of the central assumptions underpinning economics (heterodox and neoclassical)

and sociology, and attempts to bring them closer together via a foundation based on the SAS theme.¹

The problem of the nature of SAS is reformulated into the research question ‘What is SAS?’ This is an ontological question (Archer 1995; Bhaskar 1997; Lawson 1997), a question about being. It is a question about what constitutes, structures and differentiates SAS both as concepts and as real entities. This general question, ‘What is SAS’, gives rise to at least three more specific research questions – which of course does not exhaust all possible questions that can be posed about the nature of SAS:

- (a) Are there different kinds of scarcity, abundance, and sufficiency?
- (b) How could scarcity, abundance, and sufficiency be properly explained in relation to real events?
- (c) How could a sociological theory of want formation be developed?

The thesis consists of this introductory chapter accompanied by five articles; taken together this chapter and the articles offer three main contributions to socioeconomic theory.

1. A tentative typology of SAS.
2. A holistic (multi-casual) explanatory approach to SAS.
3. An alternative foundation for socioeconomic theory based on the SAS theme.

The new set of problems generated via this thesis is denominated *the SAS theme*.² It is a theme that shows how various socioeconomic phenomena (famine, want, property, market, justice, poverty, action, conflict, etc.), which seemingly have very little in common, if anything, can actually be seen as cases of the same thing, namely cases of SAS. Accordingly, the elaboration

¹ This attempt also means that there is some risk for misunderstanding or miscommunication. This thesis needs to balance arguments from economics (heterodox and neoclassical) as well as sociology. What appears to be a trivial argument from one perspective can be original from another. For example, it is sociologically trivial to claim that ‘the economy is embedded in society’ or to claim that ‘culture is important in order to explain changes in preferences’ (Polanyi 1977), but this is somewhat controversial from a neoclassical point of view (Becker 1996). Similarly, economically it is a basic fact that a rational choice is also the most optimal or efficient choice under conditions of scarcity, but this is relatively controversial from a sociological perspective (Bourdieu 2005). Therefore, I urge the reader to consider both the sociological as well as the economical arguments not separately, but in totality.

² As kindly suggested by Professor Richard Swedberg.

of this theme is one of the main contributions to both economics and sociology.

The thesis has the following disposition: The background section discusses why the research problems presented here are important and how they are related to a number of other problems in the SAS theme. I have found eight main problems that I will discuss in this section, some more extensively than others. These will of course not exhaust all possible problems that can be linked to the SAS theme, but they will provide a good introduction to this field of study. Nevertheless, the thesis will limit itself to studying one of these eight problems: namely, the nature of SAS. Thereafter the main contributions of the five papers will be outlined and discussed in the results section; all contributions are obviously related to the problem of the nature of SAS. Finally, the implications of the first and second section are discussed, as well as how the study of the SAS theme may be taken further.

CHAPTER 1

Background

There are at least two excellent reviews of the literature on SAS, especially of the classics and their authors' views on the issue – Hume, Smith, Marx, Mill, etc. The first was given by Hegeland (1967)³ and the second by Xenos (1989). Because they give a general picture of how SAS has been conceptualized in social and economic theory, I will focus here on what research problems one might pinpoint or derive from this general picture of SAS. Eight problems will be discussed, originating from different fields: one problem is generically related to various disciplines of the social sciences (the effects of SAS); another problem is related to neoclassical economics (the problem of allocation), three to heterodox economics or an internal critique of neoclassical economics (*viz.* the universalization of scarcity, the limits to growth, and the assemblage of resources), and three to sociology or an external critique of neoclassical economics (the problem of foundations of the social sciences, the origins of human wants, and the nature of SAS). This thesis, however, will study one of these eight in depth, namely the problem of the nature of SAS.

These eight problem areas of SAS should not be understood in a categorical sense. Many of the issues originating from one problem area may overlap with another problem area. Accordingly, even if six of the problems of the SAS theme have been characterized as originating from either inside or outside neoclassical economics, I wish to emphasize that this distinction should be understood only in a loose sense. Some heterodox economists' arguments could be seen as essentially sociological, and vice versa. Take the work of Karl Polanyi, for example. He was trained as an economic historian and thus heavily influenced by a historical methodology – he is thus by definition a heterodox economist (Stanfield 1980). However, his work did not only influence economic history, and institutional economics, but also economic sociology (Smelser and Swedberg 2005, p. 3). He is very much regarded as a classical scholar of this subfield of sociology. The same view is true of thinkers such as Adam Smith, Karl Marx, Max Weber, Talcott Parsons and Amartya Sen. They have influenced the formation of concepts, perspectives and

³ It is written in Swedish.

applied research in both (neoclassical and heterodox) economics and sociology. The first problem of the SAS theme, that is, the effects of SAS, is a token of that.

Problem 1. The effects of SAS

The somewhat surprising vastness of the SAS theme can be briefly highlighted – just as an appetiser – in the first problem of this theme, namely what I call *the problem of the effects of SAS*. Various socioeconomic phenomena seem to presuppose, hinge on or arise as a causal effect of SAS. Some central examples are: market (Menger 2004), private property (Tchipev 2006), justice (Hume 1896, pp. 494-495), public good (Héritier 2001; Sandler 2001, p. 165), poverty (cf. Clark 2002), power (Cook, Cheshire and Gerbasi 2006), action (Balla 1982), liberalism (Macpherson 1973; Wolin 2004; Xenos 1987), time (Burenstam Linder 1970; Gordon 1980), citizenship (Turner 1999, p. 262 ff.), and history itself (Sartre 1991). Sartre, for instance, claimed that ‘In the framework of scarcity, constitutive relations are fundamentally antagonistic. If one considers their temporal development, they manifest themselves in the form of the event constituted by struggle...this is the very definition of the *historical process*, in so far as it is an ongoing temporalization of *human history*’ (Sartre 1991, p. 15: original italics). In this perspective, scarcity of resources is one of the fundamental conditions of why struggle exists; but at the same time, struggle and antagonism are only examples of one essential principle of social life, that is, social exclusion. There is a social need for inclusion as well. As Turner argued, ‘Societies face two contradictory principles. They are organized around issues of scarcity, which result in exclusionary structures such as gender divisions, social classes and status groups, but they must also secure social solidarity...citizenship functions as a major foundation of social solidarity’ (Turner 1999, p.262). Citizenship is a mechanism that controls the access or entitlement process of individuals and groups to scarce resources in society. There are social needs for defining excluding and including mechanisms, which citizenship is only one example of. However, one might ask: Do these mechanisms arise as a consequence of private property or scarcity? Or does private property also arise because of scarcity? These questions are only examples of some issues related to the problem of the effects of SAS; additional issues will be discussed more extensively in the review of the other problems of the SAS theme. More generally, one of the main questions related to the problem of

the effects of SAS is: In what way is SAS causally related to other social phenomena?

The neoclassical perspective on scarcity: problem 2, efficient allocation

I believe that *the problem of allocation*, or more specifically the problem of *efficient allocation* of neoclassical economics, sets the scene for the SAS theme in general. This is so because both heterodox economists and sociologists have to various extents related their accounts to this problem as defined by the neoclassical school (Beckert 2002; Lawson 2006). The existence of scarcity has been taken as the central point of departure for neoclassical economics since the establishment of the marginalist revolution in the late nineteenth century, which in a sense also marks the beginning of the end of classical political economy (Sandelin, Trautwein and Wundrak 2001, p. 132; Schabas 2001; Tribe 2001). All three pioneers of marginal utility theory – Walras, Jevons, and Menger – referred to scarcity as the starting point for economic analysis (Jevons 1888, p. 37; Menger 2004, p. 94; Walras 1954, p. 65). Through the work of these pioneers, especially Menger's⁴ marginal utility theory, the centrality of scarcity became an important theoretical premise for the advancement of contemporary neoclassical economics (Hayek 1994, p. 18; Robbins 1998, p. 277; Roll 1973, p. 387).

As a result, virtually every neoclassical economic book and textbook refers to scarcity – and this is so even though economics is becoming increasingly differentiated (Ashenfelter 2001; Backhouse and Medema 2008; cf. Becker 1993; Beckert 2002; Davis 2006). The following overview of scarcity definitions demonstrates the various articulations this may take.⁵ They have been organized according to six basic ontological premises that I have found.

First, economics is said to be *about scarcity* (Estrin et al. 2008, p. 1), or 'how society manages its scarce resources.' (Mankiw 2007, p. 284). Economics is '...the study of resource allocation under conditions of scarcity' (Waldman 2004, p. 2); 'how societies use scarce resources to produce valuable commodities and distribute them among different people' (Samuelson and Nordhaus 2001, p. 4), or it deals with 'the allocation of limited resources to satisfy unlimited human want' (Besanko and Braeutigam 2008, p. 3). This has implications for how resources are used, as scarcity is related to 'unlimited and competing uses' (Burkett 2006, p. 1), which means that economics

⁴ *Paper I* deals with Menger in depth.

⁵ I took a random sample of 17 economic books from the Marshall Library, Faculty of Economics, University of Cambridge (February 2010), all contained a reference to scarcity.

studies choices that ‘individuals, businesses, government, and entire societies make as they cope with scarcity’ (Bade and Parkin 2002, pp. 4-5), or ‘to attain their goals, given their scarce resources’ (Hubbard and O’Brien 2006, p. 4).

Second, scarcity is believed to be *general* (Himmelweit, Simonetti and Trigg 2001, p. 4), *universal* (Parkin 2000, p. 36), or even ‘the fundamental economic fact of every society’ (Salvatore 2003, pp. 4-5). This means that ‘unfortunately, most of the good things in life are scarce – we can’t all have as much as we want’ (Perloff 2009, p. 1). We are said to ‘...live in a world of scarcity’ (Hubbard and O’Brien 2006, p. 4), and thus, ‘...scarcity is the mother of economics’ (cf. Begg, Fischer and Dornbusch 2008, p. 16; Perloff 2009, p. 1).

Third, universal scarcity arises because we have *unlimited wants* and *limited resources* (Hubbard and O’Brien 2006, p. 4; Parkin 2000, p. 36).⁶ ‘By assuming scarcity as a fundamental human condition, neoclassical theory presupposes that there is an inevitable imbalance between limited resources and the extent of human desires’ (Himmelweit, Simonetti and Trigg 2001, p. 5). These two facts are said to ‘dominate our lives, We have limited resources, We have unlimited wants... resources available are insufficient to satisfy people’s wants’ (Parkin 2000, p. 36), ‘Scarcity means that society has limited resources and therefore cannot produce all the goods and services people wish to have’ (cf. Bade and Parkin 2002, pp. 4-5; Mankiw 2007, p. 3). The notion of unlimited wants is exemplified in the following way: ‘Think of human wants as being all the goods and services that individuals desire, including food, clothing, shelter, and anything else that enhances the quality of life. Since we can always think of ways to improve our wellbeing with more or better goods and services, our wants are unlimited’ (Besanko and Braeutigam 2008, p. 3; cf. Estrin et al. 2008, p. 2).

Fourth, because resources are limited and our wants are virtually unlimited, all ends are seen as competing ends. In other words, there are *trade-offs* or *alternative uses*; ‘Scarcity means that trade-offs are a basic fact of life’ (Stiglitz and Walsh 2006, p. 7) and ‘When there are no alternatives, there is no problem of choice and, therefore, no economic problem’ (Becker 1971, p. 1). Thus, ‘people must make choices. We cannot have everything we want’ (Ruffin and Gregory 1997, p. 6), and ‘choices have to be made between competing ends which require alternative uses of scarce resources, and between alternative ways of achieving those ends’ (Himmelweit, Simonetti and Trigg

⁶ Nevertheless, it is not unusual to find economists who argue that wants or preferences are fixed (cf. Becker 1996). See also *Paper IV*.

2001, p. 5). We might ask, ‘Why do individuals have to make choices? The ultimate reason is that resources are scarce’ (Krugman and Wells 2009, p. 6). Economics is then ‘...the study of the choices people make to cope with scarcity’ (Parkin 2000, p. 36). But society also must make (public) choices: ‘society must choose which commodities to produce and which to sacrifice. In short, society can only satisfy some of its wants’ (Salvatore 2003, pp. 4-5).

Fifth, accordingly, these definitions claim that *choice confronts any individual, organization, or human endeavour*: ‘This simple fact applies to societies as well as to individuals. It applies to the rich and to the poor (Ruffin and Gregory 1997, p. 6), ‘...[it] confronts each one of us individually, and it confronts our families, local communities, and nations...’ (Parkin 2000, p. 36). ‘Just as a household cannot give every member everything he or she wants, a society cannot give every individual the highest standard of living to which he or she might aspire’ (Mankiw 2007, p. 3). The point is sometimes illustrated by examples from our contemporary consumer culture similar to the following:

The poor and the rich alike face scarcity. A child wants a \$1.00 can of soda and two 50c packs of gum but has only \$1 in his pocket. He faces scarcity. A millionaire wants to spend the weekend playing golf *and* spend the same weekend at the office attending a business strategy meeting. She faces scarcity. A society wants to provide vastly improved health care, install a computer in every classroom, explore space, clean polluted lakes and rivers, and so on. Society also faces scarcity. Faced with scarcity, we must make choices (Bade and Parkin 2002, pp. 4-5; cf. Sloman and Sutcliffe 2003, pp. 4-5).

Sometimes this is illustrated by a comparison between different kinds of societal organization:

No matter what the mix between socialism and private enterprise in any specific society’s economic organization, then, the fact of scarcity and the choices it imposes will impinge upon individual agents, be they people, families, capitalist firms, co-operative or state-owned enterprises, government departments, etc. All and any such agents must make choices about how to use the scare resource under their control (Estrin et al. 2008, p. 2).

Sixth, by positioning scarcity as the general or universal point of departure for economics, the *existence of abundance* (and sufficiency) is placed outside the set of possible objects of study, at least implicitly: ‘If human want were limited or resources unlimited, there would be no scarcity and there would be no need to study economics...’ (Salvatore 2003, pp. 4-5); ‘If each of us could get all the food, clothing, and toys we want without working, no

one would study economics' (Perloff 2009, p. 1). In the real economy, 'People would not worry about stretching out their limited incomes because they could have everything they wanted...since all of us could have as much as we pleased, no one would be concerned about the distribution of incomes among different people or classes. In such an Eden of affluence, all goods would be free, like sand in the desert or seawater at the beach. All prices would be zero, and markets would be unnecessary. Indeed, economics would no longer be a useful subject' (Samuelson and Nordhaus 2001, p. 4). However, even in affluent countries, abundance is not the economic reality some neoclassical economists believe:

But no society has reached a utopia of limitless possibilities. Ours is a world of scarcity, full of economic goods. A situation of scarcity is one in which goods are limited relative to desire. An objective observer would have to agree that, even after two centuries of rapid economic growth, production in the United States is simply not high enough to meet everyone's desires...Moreover, outside the United States, particularly in Africa and Asia, hundreds of millions of people suffer from hunger and material deprivation (Samuelson and Nordhaus 2001, p. 4).

Of course, the second ontological premise, the one concerning universal scarcity, effectively eliminates the possibility of a world of abundance in the first place. Thus, the analytical circle is closed, and hence, the economic approach is universalized.

In summary, the six ontological premises are: (1) economics is about scarcity, (2) scarcity is general or universal, (3) universal scarcity arises because of unlimited wants and limited resources, (4) all wants or ends are competing, there are trade-offs, or alternative uses, and thus choices have to be made about which wants to satisfy, (5) scarcity and thus the necessity to make choices confront all levels of organization (individual, household, firm, and society), (6) a situation of abundance and sufficiency is not part of economic analysis. The next section will address the question of what role scarcity plays in neoclassical economics in relation to the problem of efficient allocation.

The function of scarcity in economic theory

The function of scarcity, it seems, is to conceptualize certain kinds of conditions or constraints that an individual needs to consider when acting or choosing. In a general economic approach to social behaviour, that is rational choice theory, constraints can be anything that restricts the choice opportuni-

ties of an individual. Constraints are not only economical in nature (e.g., income), but can also be social (e.g., norms) (Becker and Murphy 2000) or psychological (e.g., self-bounding) (Elster 2000). These kinds of social or psychological constraint, however, are not necessarily solely a matter of scarcity of resources. It seems that all scarcities are about constraints in the perspective of economic theory, but not all constraints are about scarcity in a general social scientific perspective. Scarcity is a specific kind of constraint in so far as it refers to the set of means or resources that can be directly used to satisfy a set of wants or needs (Menger 2004, p. 77 ff.).

In what has been criticized as an overly mathematical economic theory (cf. Lawson 1997; Weintraub 2002), the notion of scarcity is translated into basic mathematical constraints, assumptions or principles. Most notably, it seems that the concept of scarcity is translated into budget constraints in various optimizations problems. In economics, a budget constraint describes the possible consumption bundles, usually defined by income, an individual, household, or any other organization faces (Samuelson and Nordhaus 2001). Two textbook examples will illustrate more concretely how scarcity functions in economic theory.

The first example deals with how choice is analysed with reference to utility, indifference curves and budget constraints. Robinson Crusoe's situation is the classical textbook example of this (cf. Robbins 1945, p. 11 ff.). Imagine Crusoe living alone on an island, where the satisfaction of his needs depends upon the supply of fresh water.

For the sake of simplicity, let us assume that Crusoe has only two needs: his first need is 50 units of water for his personal use (water for drinking and maintaining a good hygiene), and his second need is 35 units of water for the animals who provide him with milk and meat. In total, Crusoe needs 85 units of water to fully satisfy his two needs (Menger 2004, p. 104). Now assume that the supply of water available to Crusoe is only 40 units, which constitutes a situation of scarcity. In this case, Crusoe's well-being and existence are threatened, and therefore he is forced to economize his use of water in order to make the best of the situation. Crusoe's situation could be analysed in the following way.

In principle, the problem is how to allocate scarce water among Crusoe's two needs. In other words, two different ends are competing relative to scarce means. Consequently, a portion of both of these two needs has to be foregone, but how large a portion? Figure 1 is a graphical illustration of Crusoe's situation. The horizontal axis represents water that may be allocated to Crusoe's second need and the vertical axis represents water that may be allocated to Crusoe's first need.

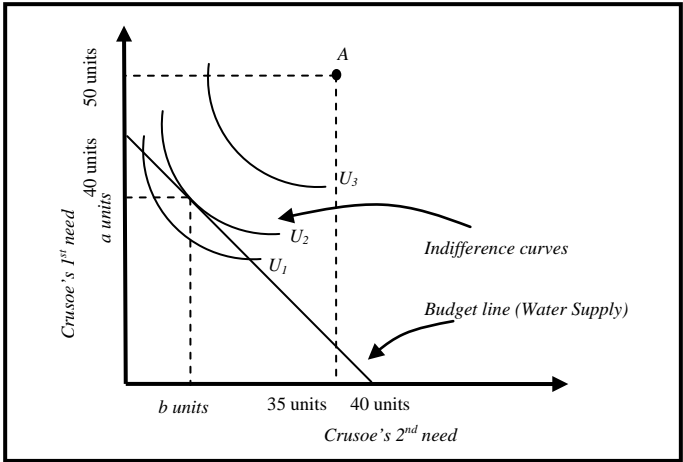


Figure 1 Crusoe's preferred consumption choice in a situation scarcity.

The indifference curve represents any combination of allocation or consumption possibilities that Crusoe is believed to be indifferent to at that level of satisfaction, given his water supply restrictions: the three indifference curves represent the utility Crusoe derives at different levels of consumption. Naturally, Crusoe would prefer to consume or chose point A where he would be fully satisfied⁷ or a point as close as possible to point A (say along curve U_3), but that is not possible given his budget restriction which is represented by the budget line (Crusoe's water supply). It is possible to choose a consumption bundle below this line (say, along curve U_1), but this is an ineffective way of utilizing scarce means (which could in other case be a government's finances or a household's total income). Therefore, a rational economic actor will choose the point at which that actor's indifference curve is tangent to the budget line (which is U_2). This tangent point, also called an equilibrium point, is the predicted allocation or consumption combination that an economic actor will choose. In Crusoe's case, it is likely that he will value his first need more than his second, owing to the larger utility he derives from such consumption. If so, Crusoe will allocate a larger portion of the water supply to his first need, say about 30 units (point a) and the rest 10 units (point b) to his second need. Accordingly, given these conditions, there

⁷ This is also called a bliss point (cf. Barnett 1973). I want to thank Andy Denis, City University of London, for making me aware of this problem.

is a well-defined unambiguous solution to the problem of how to allocate scarce resources.⁸ Now one might ask, how are these indifference curves constructed?

In applied economics, the construction of indifference curves, budget lines and the analysis of consumer preferences depend on various factors (prices, income, etc.) (Böhm and Haller 2008; Samuelson and Nordhaus 1985, p. 422 ff.; cf. Walras 1954). In this Crusoe example, we just stipulated the conditions, that is, his available budget and how much he needs. In a real analysis, what a consumer wants or needs is often measured as what that consumer has chosen or bought. Preferences are neither given in this straightforward way nor are consumers interviewed about what they want to buy: preferences are often measured in terms of observed consumer behaviour, that is, preferences are revealed (cf. Richter 2008; Wong 2006). Nevertheless, these kinds of issues, about how preferences are formed, have been dealt with in more depth in *Paper IV*.

Naturally, Crusoe's case is an unrealistic approximation of real-life events, but still this case illustrates the basic rationale behind how neoclassical economics regards the problem of allocation; it also shows how the premise of scarcity plays a crucial role in the neoclassical analysis. In a case of abundance (say that the budget is now 4000 units of water), there is really no economic problem, as there are more resources than needed. Given the specified needs of Crusoe, he will always choose to consume at point A.⁹ Crusoe does not have to relinquish any of his needs. He reaches his maximum satisfaction at 85 units of water, and even if he uses more than 85 units of water, there is still no real economic problem in the neoclassical sense.¹⁰ In other words, the main neoclassical focus is allocation of resources under scarcity: questions about the origins of these needs, how resources are socially defined, or questions about rationality are not of primary interest here.

The above illustration is an example of how the assumption of scarcity functions in microeconomics. The function of scarcity can also be shown in an example from macroeconomics. It deals with how the output of an econ-

⁸ It should be stressed that it is not uncommon for economic problems to contain solutions with more than one equilibrium. Generally, nevertheless, one or a few solutions are preferred over many.

⁹ Even if we do not define Crusoe's needs as specifically as we did, there will be some interval (say that he needs 40-60 units for his first need, and 20-50 units for his second need) in which he will choose different consumption combinations depending on factors other than economic ones (e.g., habit). In this case, there will be infinite solutions given within the continuous interval.

¹⁰ An economic situation may re-arise if we add further needs. This could be the case if we assume that Crusoe starts hoarding water because he is expecting a drought, or that he wants to build a dam. Or this could occur if he simply cannot freely dispose of all the excess water, for example, in a situation of flood. He then must make an effort (a cost) to clear away the water.

omy is analysed in terms of a production possibility frontier. This is an important example because ‘the production-possibility frontier provides a rigorous definition of scarcity’ (Samuelson and Nordhaus 1985, p. 30). Very briefly, one could claim that it is a textbook problem similar to that faced by Crusoe, but with a different task. The task is now to answer to the question: ‘What should society produce?’

Real economies produce thousand of goods and services, but let us imagine an economy in which only two goods are produced: guns and bread; see Figure 2. The production possibility frontier defines the combinations of goods (X and Y; or guns and bread) an economy can produce at a certain time, which is in turn defined by the available factors of production in the economy (land, labour, capital) (Stiglitz 1988, p. 10 ff.). Production at point D is not possible because of scarcity. If all resources were used to produce guns, this economy will produce 600 units of guns and no bread. At point C, this economy will produce 200 units of guns and 200 units of bread. But this point is regarded as an inefficient output, because the economy is not using its resources to a maximum (this could arise because of a financial crisis, mass unemployment or any other problem).

So which point along this frontier is most efficient? All points along the production possibility frontier represent output in which the resources of this economy are used to a maximum. Accordingly, all points along the production possibility frontier give productive or technical efficiency. These points are efficient in terms of utilization of this economy’s resources, but this does not say much about the social welfare (or Pareto efficiency) any of these points might produce (cf. Beckert 2002; Markovits 2008). For example, producing at point E (550 guns, 200 bread) might be rational in times of war, but less so in times of peace. Consequently, one cannot derive a straightforward solution to which production bundle along this line is most beneficial if one only uses the production possibility frontier – more information is needed about, for example, the aggregate preferences of the individuals populating this imagined economy.¹¹ This is one of the central issues in welfare econom-

¹¹ Nevertheless, there is the problem of tradeoffs or opportunity costs, which is represented by the shape of the production possibilities frontier curve. A rational individual or economy is assumed to seek to lower the opportunity costs as much as possible (Elster 2007, p. 214 ff.). At point A, the economy produces 400 units of guns and 410 units of bread; if the economy shifts its production towards guns, to point B (410 guns, 400 bread), this imagined economy then has to give up or trade off bread for guns. This trade-off or opportunity cost means 10 units less bread and 10 units more guns. Each gun costs 1 bread (the ratio bread/gun). The farther towards guns production this economy moves, the higher the opportunity cost is in terms of bread. From point B to E (550 units of guns, 200 units of bread), the economy has to pay in terms of 200 units less bread but gains 140 units more guns: in this exchange each gun costs about 1.4 units of bread, which is about one and a half as much as compared to the move from A to B (where the exchange ratio is one gun for one

ics that I will not go into here (see, e.g., Feldman 2008). The central point here is to show how scarcity plays a central role in economic analysis.

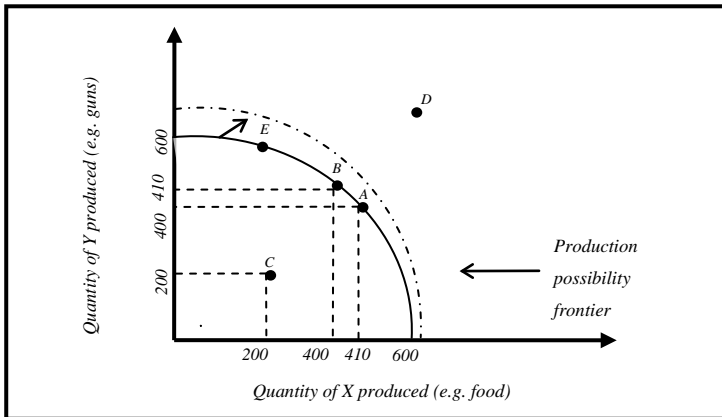


Figure 2 Production possibilities frontier and scarcity

As the economy grows, say because of investments in technology and capital, the production possibilities frontier moves outwards, which reflects the increased capacity of the economy; see Figure 2. This also reflects the notion that it is possible to reduce the strain of scarcity. Subsequently, some even believe, as Keynes did, that ‘...the economic problem may be solved, or be at least within sight of solution, within a hundred years’ (Keynes 1963, p. 365; Smith 1982, p. 333), if the economy expands sufficiently.¹²

Both examples show how scarcity plays an important role in economic theory. Scarcity functions as a kind of constraint. It is basically an assumption, a premise in an optimization problem. This problem of efficient allocation is in itself not unimportant, I maintain. However, one of the major problems of the neoclassical approach is that it reduces the general study of socioeconomic affairs to being mainly about the problem of efficient allocation under conditions of scarcity (cf. Beckert 2002; Bourdieu 2005; Etzioni 1988; Lawson 1997; Polanyi 1977). For example, it usually does not account for how various constraints and preferences, and so scarcity, arise in the first place – which is crucial to a deeper understanding of SAS. In the following

bread). Consequently, the opportunity cost is lower around the belly of the production possibility frontier, and so, one could argue that this imagined economy benefits from choosing a production combination around this belly. Nevertheless, if this economy is related to another neighbouring economy, it could still be efficient to produce merely guns or bread in terms of comparative advantage and specialization (Findlay 2008).

¹² See discussion below, on heterodox economics.

two sections, I wish to highlight six additional problems associated with the SAS theme. These problems are drawn from two kindred lines of critique of neoclassical economics, one internal and one external.

Heterodox economists on abundance and sufficiency: the internal critique

The internal line of critique comes from within economics and is made by economists who argue that economic studies in general should concern wider issues than the neoclassical focus if a deeper understanding of the economy is to be achieved (e.g., Hodgson 1998; Lawson 2003; Lee 2009; Sen 2006). Economic theory should go beyond the neoclassical perspective and embrace a wider array of economic schools, for example post-Keynesian economics, feminist, Marxist, Austrian, institutional, ecological and green economics. This is the heterodox critique. ‘Heterodox’ is an umbrella term for the various non-neoclassical economic schools (Lawson 2006; Lee 2009). This line of critique presents at least three additional kinds of problems associated with the SAS theme that I would like to discuss in this section: namely, the problem of the universalization of scarcity, the limits to growth, and the assemblage of resources.

Problem 3. The universalization of scarcity

There exists a vibrant tradition of heterodox economists (Davis 2008; Lee 2008) who have criticized the assumption of and the exaggerated focus on scarcity in neoclassical economics, this is *the problem of the universalization of scarcity*. This universalization of scarcity also implies that the problem of abundance and sufficiency is largely neglected. This sole focus on the assumption of scarcity is not surprising, from a neoclassical perspective on economics, because its main problem of efficient allocation completely hinges on it – as shown above. However, it is not clear why some non-neoclassical approaches ignore the concepts of abundance and sufficiency (e.g., Turner and Rojek 2001). It is apparent that abundance and sufficiency are important concepts (Dugger and Peach 2009). They sometimes play an even more important role than scarcity does. Chase illustrated this point: ‘Two men are lost on a great desert. One has a full bottle of water, the other a bottle quarter filled. As they move wearily onward, hoping for an oasis, justice demands that they pool the water supply and share it equally. Failure to do so will undoubtedly result in a fight’ (Chase 1934, p. 51). In a situation of abundance, conflict is unnecessary, Chase argued:

Now let us transport these two men to a row-boat on Lake Superior. Again they are lost, and again one has a full bottle of water, and one a bottle a quarter full. The full bottle man refuses to share and a battle ensues. Maniacs! There is a plenty of fresh water over the side of the boat. The desert is the Economy of Scarcity; the lake, the Economy of Abundance. The choice between sharing or fighting is chronic in the former, pointless in the latter. Today, throughout western civilization, men in boats are fighting, or preparing to fight, for fresh water. They do not know they are in boats; they think they are still on camels. The lake...is not limitless, but nobody need go thirsty. (Chase 1934, p. 51)

In line with Chase's argument, some social scientist, a majority of them economist by training, have gone beyond the neoclassical approach and advanced studies of abundance (e.g., Benammar 2005; Bronfenbrenner 1962; Dugger and Peach 2009; Fricker 1999; Galbraith 1958; Hoeschele 2008; Horner 1997; Sheehan 2010; Sherburne 1972). These studies have focused, among other things, on unemployment, which is seen as abundance of labour power (Dugger and Peach 2009, pp. 41 ff., 173 ff.; Perelman 1979; Perelman 1987), on consumer society with its cornucopia of goods and services (e.g., Xenos 1989), on the possibilities of a post-scarcity society as well as on emancipator reasoning (Bataille 1991; Bookchin 1971; Giddens 1990, p. 164; Gowdy 1998; Sherburne 1972; Stoekl 2007). Most of these accounts rest on the assumption that continuous technological development accompanied by deeper self-awareness of what our actual needs are may enable a society that harbours an abundance of resources.

In his famous essay *The Economic Possibilities for our Grandchildren*, Keynes, for instance, argued that the past has been characterized by plague, war, and famine – in short, a struggle for subsistence. The future, however, may bring about the abolition of this problem:

Now for my conclusion, which you will find, I think, to become more and more startling to the imagination the longer you think about it. ... assuming no important wars and no important increase in population, the economic problem may be solved, or be at least within sight of solution, within a hundred years. This means that the economic problem is not – if we look into the future – the permanent problem of the human race (Keynes 1963, p. 365).

Progress, Keynes argues, is mainly a function of capital accumulations (trade) and technological innovation (via science and innovation). A number of modern classics concur with Keynes's account, such as those by economic anthropologist Marshall Sahlins and economist John Kenneth Galbraith, but

they even argued that the possibilities of abundance are already present in contemporary society (Galbraith 1958; Sahlins 1972, p. 5). They claim that the problem of the universalization of scarcity in neoclassical economics prevents us from seeing this (at least in Western societies). Nurit Bird-David, when commenting on Galbraith and Sahlins, argued that ‘...the assumption of scarcity continues to influence economic conduct in the increasingly wealthy West and thereby acts to preserve poverty’ (Bird-David 1998, p. 133).

Problem 4. The limits to growth

In terms of sustainable development or the problem of *the limits to growth*, all three concepts play a major role, that is, scarcity (e.g., Baumgartner et al. 2006), abundance (e.g., Hoeschele 2008) and sufficiency (e.g., Princen 2005). There are fundamental limitations to how much consumption the planet can handle. Fred Hirsch (2005) argued that there are not only physical limits, but also social limits to growth – even with unparalleled economic growth. He refers to social scarcity as part of the explanation of the social limits of growth. The term social refers to the intrinsic properties of what Hirsch called the positional economy. The positional economy ‘...relates to all aspects of goods, services, work positions, and other social relationships that are either (1) scarce in some absolute or socially imposed sense or (2) subject to congestion or crowding through more extensive use’ (Hirsch 2005, p. 27). This kind of economy can be contrasted with the material economy, which is defined ‘... as output amenable to continued increase in productivity per unit of labor input’ (Hirsch 2005, p. 27). Social scarcity is divided into direct and incidental (Hirsch 2005, p. 20).

Direct social scarcity refers to a want that derives its satisfaction from the phenomenon of scarcity itself. Hirsch gave the example of an art snob: if the satisfaction of owning a Rembrandt comes only or mostly from the fact that the object is scarce, then we have a case of direct social scarcity. If, however, a replica of a Rembrandt gives equal satisfaction as the original, then there is only physical scarcity, which could be mitigated by producing further replicas of Rembrandt.

Incidental social scarcity arises more or less as a by-product of social interaction. Congestion, both physical and social, is an example of this kind of scarcity. Physical congestion refers to crowds and queues of various sorts. This kind of congestion arises not only because of the physical limitation (of highways, in the football arena, or similar), but also because of their extensive social use. Social congestion, conversely, arises purely from social rela-

tionships: job opportunities, leadership positions (e.g., captain of a football team, head of departments), or partnerships (e.g., monogamous or best-friends relationships). These social positions are intrinsically scarce (Hirsch 2005, pp. 19-22). You can of course have many friends, but what defines a best-friend? Similarly, there could of course be shared positions, two persons in the position as head of department, but what if there are five persons, ten or a hundred sharing the same position as head of department?

As long as material deprivation is common, economic growth will have a dominant role. This is not to say that social scarcity is not present in materially deprived conditions, especially in terms of incidental social scarcity. But as society reaches material saturation, direct social scarcity will be more prevalent, for example, in the form of conspicuous consumption (Hirsch 2005; cf. Veblen 2007).

I believe that Hirsch's concept of social scarcity captures something essential about economic and social life. Nevertheless, one might ask in what ways this concept differs from the concept of scarcity used in other accounts, for instance the neoclassical approach, or say the neo-Malthusian approach. There seem to be some differences.

Contemporary ideas about the natural or physical limits to growth build on an elaborate account of Thomas Malthus's notions (Malthus 1826). Malthus's original concern was overpopulation, but the same principles Malthus developed apply to other fields as well: for example, energy use, environmental degradation or water scarcity. The neo-Malthusian approach critiques the classical (specifically Smith's version) and the neoclassical conviction that markets can fully solve or at least mitigate the problems of scarcity. This links directly to the problem of efficient allocation in the SAS theme. Julie Mattheai argued that '...contemporary neoclassical economics views the market economy as the optimal solution to the universal human problem of scarcity.... The market's invisible hand 'allocates scarce resources among competing ends' by adjusting prices...' (Matthaei 1984, p. 82). But markets cannot fully solve the problem of scarcity, neo-Malthusians have argued, because it does not consider absolute availability or final limitations of various resources (Daly 1974; Daly and Farley 2004).

The rejection of the Malthusian approach was emphasized by Karl Marx, among others. He rejected the notion that scarcity is a necessary part of the human condition. Marx argued vigorously:

Malthus's theory, which incidentally was not his invention...is altogether false and childish ... because he regards overpopulation as being of the same kind in all the different historic phases of economic development; does not understand their specific difference, and hence stupidly reduces these very complicated and varying relations to a single rela-

tion, two equations, in which the natural reproduction of humanity appears on the one side, and the natural reproduction of edible plants (or means of subsistence) on the other, as two natural series, the former geometric and the latter arithmetic in progression. In this way he transforms the historically distinct relations into an abstract numerical relation, which he has fished purely out of thin air, and which rests neither on natural nor on historical laws (Marx 1978b, p. 276)

Marx saw the problem of scarcity differently, at least when it comes to the problem of unemployment. In order for the ruling class to secure their power over the production apparatus of the economy, they need a “reserve army of the unemployed”. One way of achieving this is by promoting population growth in the lower classes. The result is overpopulation, lower wages and poverty. Hence, Perelman wrote ‘...In place of overpopulation, he [Marx] taught us to see the reserve army of the unemployed. Instead of allowing us to become bogged down in concepts of resource scarcity, he demanded of us that we grasp the social content of each situation’ (Perelman 1979, p. 86).

Despite these differences, John Gowdy argued that the Malthusian and Marxian approach are complementary (Gowdy 1986): the former considers the natural mechanisms (e.g., carrying capacity) of scarcity, while the latter focuses on the social mechanisms (e.g., class interests). He argued that ‘With a few exceptions, both Marxian and neoclassical economics take the position that the natural world, in the long run, imposes no constraints on economic activity’ (cf. Georgescu-Roegen 1973, p. 38; Gowdy 1988, p. 34). Marx, however, declares in *The Critique of the Gotha Programme* that ‘Labour is not the source of all wealth. Nature is just as much the source of use values (and it is surely of such that material wealth consists!) as labour, which itself is only the manifestation of a force of nature, human labour power’ (Marx 1978a, p. 525). Nevertheless, one might ask: How is value related to the creation of resources in society?

Problem 5. The assemblage of resources

This discussion about the limits to growth shows by the same token the importance of the problem of *the assemblage of resources*. The concept of resources is central to the SAS theme (De Gregori 1987; Peach and Constantin 1972). It is scarce resources that neoclassical economics seeks to allocate optimally, and it is abundance of resource that some heterodox economists seek to draw our attention to; but what is a resource anyway? A precise definition of the term ‘resource’ or ‘good’ can be found in the writings of one of

the pioneers of neoclassical economics (Menger 2004, p. 51 ff.),¹³ but it seems to be more or less given in modern neoclassical economics. A study of the concept of resources is often neglected because it is assumed that only natural scientists can provide an appropriate answer (Peach and Dugger 2006, p. 8). But, as shown via the problem of the limits to growth, there are social as well as cultural processes that condition how resources are created and defined (cf. Hacking 1999; Pinch and Swedberg 2008).

Accordingly, one can pose several questions here: What is a resource, and how is it related to technology?¹⁴ How do social, cultural and natural mechanisms interact in order to create a resource (cf. Callon 2001; Callon 1998; MacKenzie, Muniesa and Siu 2007; Swedberg 1993)? How does society in total (macro) or groups in society (micro) combine, control, guard, share, merge, duplicate, produce, create, invent or simply assemble resources.¹⁵ These kinds of questions are of great interest for the SAS theme.

In this section on the internal line of critique of neoclassical economics, I have discussed three of the eight main problems of the SAS theme: namely, the universalization of scarcity, the limits to growth, and the assemblage of resources. The next section will deal with the sociological perspective on scarcity, or more specifically, in which way the concept of scarcity has figured in sociological theory. By doing this, the remaining problems of the SAS theme will be discussed.

Sociological perspectives on scarcity: the external critique

The external line of critique comes from outside the economic tradition (e.g., philosophical, psychological, and sociological critiques). I will focus more specifically on the sociological critique of neoclassical economics. This line of critique has many similarities to the internal critique, namely, it holds that economic theory should embrace a wider array of problems, beyond the problem of efficient allocation. But it is unique with regard to at least one feature. Whereas heterodox economics has focused more on the economy as such (e.g., what is inflation, the role of central banking, conditions for development, etc.), a considerable part of the sociological critique has focused on the relation between the economy and society (Parsons and Smelser 1956; Smelser and Swedberg 2005). Generally speaking, the sociological perspective

¹³ See *Paper I*.

¹⁴ See, e.g., the special issue on technology, *Cambridge Journal of Economics*, volume 34 issue 1, 2010.

¹⁵ These kinds of issues, not traditionally defined as sociological, raise various questions, not least ontological ones. There is unfortunately no space to discuss these in this thesis; see e.g. Lawson (2008).

argues that the economy is essentially social in nature and should therefore be studied as any other social relationship. With the SAS theme in mind, I would like to discuss at least three more problems that stem from the sociological approach: namely, the foundations of the social sciences, the origins of human wants, and the nature of SAS.

The sociological discipline was established partly as a response to neo-classical economics. Sociologists developed theories, at a macro level, to supplement the problem of efficient allocation with issues such as solidarity, social integration and conflicts of interest; at a micro level, it questioned the universality of instrumental rationality by introducing concepts such as traditional and value-oriented action (Swedberg 1998; Turner 1999). However, the assumption of scarcity seems to be present in sociology as well. If scarcity functions as constraints in various optimization problems for neoclassical economics, it seems to function in parts of sociology as an important element of establishing it as a legitimate field of study.

Problem 6. The foundations of the social sciences

Bryan S. Turner and Chris Rojek wished to advance sociology as the discipline that is based on principles of scarcity and solidarity (Turner and Rojek 2001). They claimed that, 'If sociology is to survive it must establish a position of disciplinary boundaries which is both defensible and practical. We hold that the principles of scarcity and solidarity must be the foundation of such a position' (Turner and Rojek 2001, p. 23). This is achievable, according to them, through a reinterpretation of the sociological literature and particularly Parsons's work (Turner and Rojek 2001, p. 68). Through Parsons's work, there is a unique answer to the Hobbesian problem of order (Parsons 1949, p. 89), which only sociology may provide. Whereas economics concerns the allocation of the scarce resources of a system, political science is about the coercive dimensions of that system, and psychology is about the study of individual cognitive dispositions; consequently, none of them addresses the importance of common norms, values and culture for the establishment of social order (Turner and Rojek 2001, p. ix). Accordingly, Parsons's approach establishes the appropriate conditions for a division of labour within the social sciences.

Turner and Rojek's account may be sound, but my primary reason for highlighting Parsons's work is not only because he can '...be considered the last sociological theorist whose work is formed by the debate with economics' (Beckert 2002, p. 133), but because his account rests on the assumption of scarcity. This assumption, it seems, is unwarily imported via the Hobbe-

sian formulation of the problem of social order. Hobbes claimed that ‘...if any two men desire the same thing, which nevertheless they cannot both enjoy, they become enemies; and in the way to their end, which is principally their own conservation, and sometimes their delectation only, endeavour to destroy, or subdue one another.’ (Hobbes 1839, p. 111; cf. Parsons 1949, p. 89).

It is not clear whether Parsons was aware of many of the issues associated with the concept of scarcity. Both classical and neoclassical economists regards scarcity as fundamental prerequisite for the existence of economics, but is scarcity equally fundamental to sociology? How is Parsons’s account altered if we introduce abundance and sufficiency into his analysis? What if scarcity, as a phenomenon in society, can be created and manipulated by actors to serve some vested interest?

Thus, one of the main points of asking these questions is to make the reader aware of the fact that some of the main problems of the SAS theme require a more elaborate view of SAS and its role in social and economic theory.

I argue that a problematization of SAS casts a different light on Parsons’s thoughts on social order. This claim is not really new; the early criticism of Parsons (and functionalism) attacks him for not providing a proper sociological understanding of the issues of social conflict, social change and dialectical contradictions (cf. Habermas 1985, p. 199 ff.; Holmwood 2005). Nevertheless, a focus on SAS rather than on conflict takes a slightly different grip on the critique of Parsons, in so far as it questions the assumed reasons for why conflict arises in the first place (the assumption of scarcity) rather than criticizing the absence of an account of how conflict should be integrated into social and economic theory. Even the concept of conflict seems to harbour or assume the notion of scarcity: ‘Conflict refers to a situation in which there is disagreement over how to divide scarce resources’ (Citrin 2001, p. 2547), which resonates well with traditional thinking on why large scale armed conflicts arise (Gleditsch 1998); it is thus not surprising that some sociological theories also assume the relevance of scarcity for social conflicts (cf. Turner 1975). Accordingly, from the perspective of this thesis, both Parsons and some of his critics simply assume scarcity without really questioning the deeper nature of the concept. I do not doubt that scarcity, conflict and social order are causally related somehow; what I am questioning is the internal working of the concept of scarcity, which in turn may have some bearing on how we understand social order as well as conflict.

This also means that in order to be better fit to provide some answers to *the problem foundation of the social sciences*,¹⁶ and to the other problems outlined, we need an elaborated conceptual understanding of what scarcity actually is: With some exceptions, neither sociologists nor economists (neo-classical and heterodox) seem to accomplish this.

Problem 7. The origins of human wants

Turner and Rojek offered three possible explanations of why Parsons did not define scarcity properly. The first explanation is that Parsons simply assumed that nature is niggardly,¹⁷ there are simply too few resources available in the global ecosystem, and left the question for the natural sciences to study (biology, ecology, etc.). The second explanation is that scarcity exists because human beings having infinite wants. This is an idea partly based on his reading of, among others, Durkheim, Hobbes, Marshall¹⁸ and Freud (Parsons 1970; cf. Turner and Rojek 2001, p. 96). The third explanation is that scarcity exists because of the social plasticity of wants (cf. Veblen 2007; Xenos 1989). The difference between the second and third explanation is that, in the former, human beings are seen to be, by their very nature, equipped with infinite wants or desires,¹⁹ whereas the latter assumes that it is society that plants infinite wants in the minds of individuals. Nevertheless, whether nature or society is the root cause, the result is similar, namely an insatiable human being (Levine 1998; Marglin 1998).

With reference to the literature that interested Parsons, Turner and Rojek argued that it is the second explanation that is the most probable position of Parsons. It is also this position that they themselves embrace. It is the hedonistic nature of man, not the plasticity of wants, that accounts for general scarcity. They argue:

...that sexual appetite is the underlying reality of the notion of hedonism. It is human sexuality which is infinite, unsatisfied, excessive, vicious and uncontrolled...it is hedonis-

¹⁶ There are of course numerous issues related to the foundation of the social sciences not discussed here (e.g., the nature of causality, ontology, methodology), but SAS is clearly part of it.

¹⁷ This is a position taken by many economists it seems (cf. Hegeland 1967, p. 9); see also *Paper V*.

¹⁸ Marshall, nevertheless, did not take this hedonistic position fully; even if there is an assumption in his account that man ‘...desires not merely larger quantities of the things he has been accustomed to consume, but better qualities of those things; he desires a greater choice of things, and things that will satisfy new wants growing up in him’ (Marshall 1920, p. 73). He based his ideas about preference formation on the relationship between activities and wants (Aspers 1999, p. 655; Chasse 1984, p. 382). It is a relatively simple idea: ‘...the preferences (wants) are generated; by activities. Activities must be understood broadly embracing most of what men do in business and in every-day life’ (Aspers 1999, p. 656).

¹⁹ Culture, then, tames these infinite wants, and culture makes human beings civilized (cf. Freud 1961).

tic sexuality which produces wants in the form of an absence or lack with the result that man appears as a perpetually unsatisfied animal. (Turner and Rojek 2001, p. 97).

This does not mean that Parsons or his proponents disregarded cultural influences. On the contrary, culture is the source that restrains or constrains infinite wants. Content can thus only be found through submission to the social forces of society; one of the most important forces is morality, as claimed by Durkheim. He argued ‘...the passions...must be limited. Only then can they be harmonized with the faculties and satisfied. But since the individual has no way of limiting them, this must be done by some force exterior to him...society alone can play this moderating role; for it is the only moral power superior to the individual, the authority of which he accepts’ (Durkheim 1979, pp. 248-249). Sociology has as its object of study to account for how the constraining force of morality functions, how various ultimate ends are grounded in rituals and ceremonial acts, enchanted with meaning. Sociology studies how these acts essentially link, glue or tie different individuals or social classes together, among other things, through studies on the processes underlying how the restraining of impulsive desires as well as the formation of common wants occurs in society.

Irrespective of how one conceptualizes the human being and her wants (hedonistic, rational, culturally determined, etc.), it seems to me that scarcity as a concept depends on the existence of some sort of want, lack or craving (cf. Heller 1976; Peterson 2001; Springborg 1981; Townsend 1985). Therefore, a study of SAS will have to deal with this problem in one way or another. I shall call this problem *the origins of human wants*. Accordingly, one of the main questions here is: ‘Where do human wants come from?’ or ‘How are wants generated?’

Problem 8. The nature of SAS

As shown, specifically in relation to the problem of the foundations of the social sciences, the assumption of scarcity can be found in both classical (e.g., Parsons) as well as modern definitions of sociology (e.g., Turner and Rojek). Nevertheless, there are other important social theorists who define their subject matter with reference to scarcity, but without really questioning the relevance of the concept of scarcity – with the exception of Polanyi.

For example, scarcity can be found in Weber's definition of socio-economics. Weber regarded socioeconomics as consisting of three closely interrelated disciplines: namely economic theory, economic sociology and economic history (Swedberg 1998, ch. 2). The object of study of all three disciplines refers to scarcity:

Most roughly expressed, the basic element in all those phenomena which we call, in the widest sense, "social-economic" is constituted by the fact that our physical existence and the satisfaction of our most ideal needs are everywhere confronted with the quantitative limits and the qualitative inadequacy of the necessary external means, so that their satisfaction requires painful provision and work, struggle with nature and the association of human beings. (Weber 1949, pp. 63-64)

Needs, desires or individuals' interest are not give, Weber claimed. They are conditioned by subjective factors. They are related to the cognitive and cultural environment of specific societies. According to Weber, the general problem of the social sciences is that, 'By a social science problem we mean a task for a discipline the object of which is to throw light on the ramifications of that fundamental social-economic phenomenon: the scarcity of means' (Weber 1949, p. 64). In other words, understanding and explaining scarcity is one of the central tasks of social science. But one might ask: What is actually meant by this concept? Should it be defined in terms of a neoclassical understanding²⁰ or in a Malthusian fashion?

Conversely, Polanyi used the concept of scarcity to distinguish between the formal and substantive meaning of the term 'economy' (1957; 1971); which he then also used to distinguish his approach to studying the economy from the neoclassical one. The substantive meaning refers to individuals' dependence on each other and on nature for their livelihood. It is a basic fact of social and economic life. The formal meaning refers to the logical relation between the categories 'means' and 'ends'. It is a situation of choice, under scarcity. This latter meaning of 'economic' is thus basically equivalent to the

²⁰ Which I think Weber leans towards.

neoclassical view of scarcity, which he is critical of (Polanyi 1957, p. 243; Polanyi 1971). He writes that neoclassical economics ‘...fuses the ‘subsistence’ and the ‘scarcity’ meaning of economic without a sufficient awareness of the danger to clear thinking inherent in that merger’ (Polanyi 1957, p. 244). This fusion reduces all activities in the economy to being merely about the formal meaning of the term economic. This fusion might be consistent in a capitalistic system, because capitalism is partly about instrumental and maximizing behaviour, but this is not in any way representative of economic activity in a historical perspective. Polanyi wrote:

The use of the term "economic" is bedeviled by ambiguities. Economic theory has invested it with a time-bound connotation that renders it ineffective outside of the narrow confines of our market-dominated societies. Terms like supply, demand, and price should be replaced by wider terms such as resources, requirements, and equivalencies. The historian will then be able to compare the economic institutions of different periods and regions without running the danger of foisting upon the bare facts the market shape of things. (Polanyi 1977, p. xl)

Accordingly, one might ask: If scarcity gives rise to economizing behaviour (cf. Robbins 1945), do the various sociological references to scarcity then refer to the substantive or formal meaning of the term economic, or both? Or is there some third meaning of the term economic (cf. Holton 1992, pp. 11-14; Luhmann 1982, p. 194)? Nevertheless, some critical question might be posed in relation to Polanyi’s account as well: Is the concept of scarcity really only relevant when it comes to the formal meaning of economic? What about the relevance of abundance and sufficiency for social and economic theory?

Nevertheless, the concept of scarcity has apparently also influenced the definition of contemporary economic sociology. Consider Smelser and Swedberg’s definition of economic sociology:

Economic sociology...is the application of the frames of reference, variables, and explanatory models of sociology to that complex of activities which is concerned with the production, distribution, exchange, and consumption of *scarce* goods and services (Smelser and Swedberg 2005, p. 3: my italics)

Accordingly, scarcity seems to be an important concept for sociology, but it is unclear what is meant by this concept and how it should be used in sociological theory, compared to, say, neoclassical economics. Should scarcity be assumed to be similar to neoclassical theory? The sociological approach, it seems to me, does not hinge on the existence of scarcity in the same way as

the neoclassical approach does. Neoclassical economics explicitly focuses on allocation of scarce resources, whereas sociology does not really specify its 'scarcity focus'. There is sufficient support to suspect that both disciplines do not regard scarcity in the same manner, but both still assume it. This suspicion is fuelled by the fact that several adjectives are combined with the concept of scarcity, often without being properly defined. To mention a few: absolute scarcity, relative scarcity (Baumgartner et al. 2006; Raiklin and Uyar 1996), anti-scarcity (Foucault 2009, p. 54), social scarcity (Hirsch 2005), external scarcity, internal scarcity (Zinam 1982), post-scarcity (Bookchin 1971; Giddens 1990), scarcity-*scarcity* (Dobkowski and Wallimann 2002, p. vii), subjective-objective scarcity (Baumgartner et al. 2006, p. 491; Weber 1978, pp. 63-34), artificial scarcity (Menger 2004, p. 104), general scarcity (Daly 1974), universal scarcity (Polakoff 1958) and natural scarcity (Hegeland 1967, p. 9). Accordingly, these questions highlight the importance of the eighth and last problem of the SAS theme, namely, the nature of scarcity, or generally *the nature of scarcity, abundance and sufficiency (SAS)*. The main question here is: 'What is SAS?'

Do different theoretical accounts, say Parsons's, Webers's, Malthus's and Menger's, refer to the same kind of scarcity? If they do, why does neoclassical economics become useless under a situation of abundance, while other kinds of economic approaches are still applicable (e.g., some heterodox approaches, or economic sociology)? If they do not refer to the same kind of SAS, does this also mean that there are actually different kinds of scarcity, or merely different ways of approaching and using these concepts?

Research problems and demarcation

To reiterate, there are at least eight major research problems that are intricately related to the SAS theme. One of the purposes of discussing these eight quite different problems is to show that they all, in one way or another, spring from questions about SAS. These eight main problems are merely different areas or dimensions of the same thing, that is, the SAS theme. Hence, the discussion in the background section creates an analytical space for the five studies I have conducted.

The SAS theme, I argue, has implications for how social scientists view various empirical cases (Ragin 1987). Cases such as famine or voluntary material simplicity are very different from each other: They have very different causes (frustration of basic food needs vs. satisfaction of some economic ethics) and different effects (starvation and death vs. simple living); and in terms of normative judgment, the former can be viewed as socially catastrophic whereas the latter may be ecologically desirable. Still, what the SAS theme suggests is that they are actually not so very different with respect to one thing: namely, that they are both about SAS.

Hence, my primary intention has not been to challenge all the research and theories presented, but rather to reconceptualize some central problems in the social sciences in terms of the concepts of SAS. Through this reconceptualization, we may obtain an Archimedean vantage point from which solutions to or explanations of old problems can be seen in a different perspective, and from which, consequently, new kinds of problems may be articulated.

Nevertheless, I need to limit the aim of the thesis in order to more carefully explore specific issues concerning the SAS theme. I have traced the following problems, and they are outlined according to one important element: whether or not they, as a research area, tend to assume scarcity:

Tend to assume scarcity

1. The effects of SAS
2. The problem of allocation
3. The universalization of scarcity
4. The limits to growth
5. The foundation of the social sciences

Tend not to assume scarcity

6. The assemblage of resources
7. The origins of human wants
8. The nature of SAS

In terms of an explanatory approach to SAS, logically speaking, the origins of human wants, the assemblage of resources and the nature of SAS are more central in the SAS theme. This is because they tend not to assume scarcity, whereas the other five problems tend to. For example, one of the most central questions in relation to the problem of the nature of SAS is: 'What is scarcity' (or SAS). It is a question that seeks to illuminate how scarcity, abundance and sufficiency are constituted as concepts as well as how they appear in real cases. These sorts of questions cannot assume the exact form of scarcity, because you cannot assume what you are going to explain: or more correctly formulated, one needs to ask 'in which ways does scarcity exist', 'how is it constituted', 'in what situations does it exist and in what situations does it not exist', and so forth. These kinds of questions require both theoretical and empirical engagements.

Conversely, the problem of the foundation of the social sciences does assume scarcity of some sort. Naturally, this problem contains much wider issues than the issue of scarcity; it encompasses wider ontological (what exists in the social domain), epistemological (theoretical propositions) and methodological issues (what appropriate methods can be employed). Nonetheless, as argued in the previous section, a subset of the problem of the foundation of the social sciences comes down to questions about SAS, and this seems to be the case regardless of whether we follow some central sociologists, or neoclassical or heterodox economists. In a similar manner, in regard to the problem of the universalization of scarcity, researchers do ques-

tion the general usage of the assumption of scarcity, but they tend to do the opposite, namely, they tend to universalize or assume the importance of abundance instead (cf. Bataille 1991; Galbraith 1958; Hoeschele 2008). I argue that the concept of abundance needs as much scrutiny as scarcity does.

I maintain that of the three problems that tend not to assume scarcity, we can even focus on the problem of the nature of SAS. If we do so, we will also necessarily study some central elements of the problem of the origins of human wants and the assemblage of resources. The problem of human wants contains questions about scarcity, but it also leads to much wider questions about philosophical anthropology and thus the nature of human being (cf. Wolfe 2000, p. 1233); although important, these kinds of issues stand outside the main concern of this thesis. Similarly, the problem of assemblage of resources leads to much wider issues, for example, about human ecology and sustainability, as discussed in the previous section. If we manage to illuminate some of the issues surrounding the nature of SAS, we may also gain some insight into the remaining problems in the SAS theme – still, a more thorough study about linking the nature of SAS to the other problems will be left for future studies.²¹

The problem of the nature of SAS could be reformulated into the question: ‘What is SAS?’ It is an ontological question (Archer 1995; Bhaskar 1997; Lawson 1997), a question about being. It is a question about what constitutes, structures and differentiates SAS, both as concepts and as real entities. This general question – ‘What is SAS?’ – elicits at least three more specific research questions – which of course does not exhaust all possible questions that can be articulated concerning the nature of SAS:

- (a) Are there different kinds of scarcity, abundance, and sufficiency?
 - This was one of the foci of *Paper I, III and V*.
- (b) How could scarcity, abundance, and sufficiency be properly explained in relation to real events?
 - This was one of the foci of *Paper I, III and II*.
- (c) How could a sociological theory of want formation be developed?
 - This was one of the foci of *Paper III and IV*.

Questions (a) and (b) are more obviously related to the general problem. As discussed in the literature review, the question about human wants is an important part of the study of SAS, and question (c) seeks therefore to un-

²¹ What this thesis will offer to these problems that tend to assume scarcity is at least what different forms SAS may take and at which analytical levels it may exist.

CHAPTER 3

ravel some of the issues associated with it. It seeks to understand how wants are formed rather than explicitly focusing on the origins of human wants, because the latter problem is a more extensive issue. Five articles have been written in an attempt to answer these three questions. In turn, even more specific research questions have been formulated, each with regard to their own particular research context.

Results and discussion: the five papers

Before presenting the results from each paper, I would like to say something about the use of empirical cases. All empirical cases referred to in the papers, except one (*Paper IV*), should be seen more as empirical examples than as original empirical inquiries. I have selected various critical²² cases that exemplify something crucial with respect to SAS (Ragin 1992). For example, we already know that global food production is enough to meet global food needs (cf. Devereux 2007; FAO 2004; Shaw 2007); what *Paper I* does is to take that observation and reconceptualize it order to make a theoretical point about SAS. A great deal of research has already been done about the Bengal famine of 1943 (cf. Bose 1990; Islam 2007; Sen 1981), but what *Paper II* aims at is a theoretical synthesis of competing explanations of famines via the framework of SAS developed in *Paper I*. We already know, as studied in *Paper III*, that there are people who voluntarily reduce their consumption (Etzioni 2004: cf. Rudmin and Kilbourne 1996), but what we know less about is how this behaviour is related to SAS. There is also a great deal we already know even with regard to *Paper IV*, namely that people tend to violate transitivity when ranking their preferences (cf. Archer and Tritter 2000; Kahneman and Tversky 2000); what is original, however, is that this violation may arise because of a personal epistemological opaqueness and that want formation could be conceptualized in terms of a organic view instead of a hierarchical view. *Paper V* does not use any empirical cases at all, but it provides the reader with some of the background knowledge needed to understand the message of the other papers.

²² 'Critical' with respect to some theoretical problem I wished to illuminate.

CHAPTER 4

Table 1 Overview of the five papers

	Purpose	Field		Material & Method	Main results (keywords)
		Empirical engagement	Theoretical engagement		
<i>Paper I</i>	To formulate a sociological critique of "scarcity" in mainstream economics by synthesising conceptions with greater explanatory power than the current mainstream explanation	Hunger	Entitlement approach, Carl Menger, Critical realism	Descriptive statistics Secondary sources: FAO, WHO, and UN data	Universal scarcity, Absolute SAS, Holistic model
<i>Paper II</i>	To analyse if food availability decline (FAD), food entitlement decline (FED), and food requirements increase (FRI) are reconcilable	Famine	Entitlement approach, food decline approach	Descriptive statistics Meta-analysis Secondary sources	Test of the holistic model of absolute SAS
<i>Paper III</i>	To study how voluntary material simplicity may countervail the causal effect of relative scarcity generated by the environment of a consumer society	Consumerism	Consumer Studies	Interview & document analysis Primary sources: Interviews (n=3), books (n=3)	Relative SAS, Economic ethic, Modus vivendi of material simplicity
<i>Paper IV</i>	To develop an economic sociological account of want formation	Education	Rational choice, Habitus, Reflexivity	Interviews & survey Primary sources: focus interviews (n=27) solo interviews (n=8) school staff (n=6) Want lists survey (n = 27)	Transitivity, Organic want formation, Personal epistemological opaqueness
<i>Paper V</i>	To explore two different views of scarcity, abundance, and sufficiency (SAS); in which way they overlap and vary	n/a	Thomas Malthus, Lionel Robbins	Conceptual study	Absolute SAS, Relative SAS, Sociocultural mechanisms

In this section, I will outline the main results of the five papers and the various choices made during the actual research process. Table 1 gives an overview of the basic characteristics of all five papers – it is perhaps helpful to consult this table while reading the main results. The starting point of the thesis was the research question (a): *Are there different kinds of scarcity, abundance, and sufficiency?* As outlined in the background section, there do seem to be different kinds of scarcity. One of the most important distinctions is the one between absolute and relative scarcity (Baumgartner et al. 2006; Raiklin and Uyar 1996). These seem to refer not only to different objects (physical vs. social), different states (post-scarcity), or different spatial positionings of resources (extrinsic vs. intrinsic), but actually to different *kinds* of scarcities. This distinction, therefore, seemed to be a reasonable starting point for the thesis.

According to both Raiklin and Uyar (1996) and Baumgartner *et al.* (2006), the needs-wants distinction is an important element of the definitions of absolute and relative scarcity. Baumgartner *et al.* added substitutability of resources as well. That is, if a resource can be substituted or allocated differently, then we can talk about relative scarcity: if not, then we have a case of absolute scarcity (Baumgartner et al. 2006, p. 490). Both accounts claim, consequently, that ‘absolute scarcity is not the *raison d’être* of neoclassical economics; it is relative scarcity, the paradoxical scarcity of abundance that is the focus of this kind of economics’ (cf. Baumgartner et al. 2006; Raiklin and Uyar 1996, p. 55). Nevertheless, this distinction between relative and absolute scarcity does not seem to be widely utilized.

The distinction between ‘absolute’ and ‘relative’ has been widely discussed among poverty researchers. In this case, the distinction is related to the notion of basic needs. That is, people are in absolute poverty if they are denied access to resources that are absolutely necessary to maintain bodily functions, whereas relative poverty relates to situations where people, owing to limited economic resources, are socially excluded (e.g., Rowntree 1902; Sen 1983; Townsend 1979). However, this distinction is far from clear because of the difficulties of defining basic bodily needs and of separating them from social needs (Halleröd 2006; Marmot 2004).

This thesis questions whether the concept of needs is really important to differentiating between relative and absolute scarcity. Even if the focus of this thesis has partly been on famines and the failure to satisfy basic food

needs, the concepts do not seem to call for the need-want distinction.²³ For example, in *Paper I*, I used needs and requirements, in *Paper II* requirements, in *Paper III* wants, in *Paper IV* wants, and in *Paper V* I used requirements for describing both relative and absolute SAS. Consequently, there seem to be some strong arguments for regarding absolute and relative SAS not as defined in terms of the needs-wants distinction, contrary to what has been suggested by a number of researchers, but in terms of how the analytical categories are related to each other when defining SAS.

Nevertheless, this distinction calls for further exploration, both theoretical and empirical. Accordingly, for the studies I have conducted, I chose empirical cases that were ambiguous in terms of their scarcity character in order to allow for the concepts of abundance and sufficiency to play a role in the analysis. This appeared to be enough of a challenge for deepening our understanding of the nature of SAS. Accordingly, different areas of research were selected to investigate their relation to SAS: *global hunger, famines, voluntary material simplicity* and *decision-making in education*. These cases have nothing in common except the fact that they are all cases of SAS, by virtue of the SAS theme (Ragin 1992).

Paper I

Paper I deals with absolute SAS and the assumption of universal scarcity in neoclassical economics. There are three main results or contributions of this paper. First, it criticizes the universality of scarcity. It does this by using the empirical case of global hunger. There is extensive research showing that there is enough food to go around, yet people still starve. This indicates that the assumption of universal scarcity is too strongly emphasized by neoclassical economists. This paper does not criticize existence scarcity in all possible cases (e.g., scarcity of money, land, water, etc.), but it shows that the assumption of scarcity is misplaced in some cases (e.g., global hunger), which is enough to question the universalistic assumption of scarcity. Accordingly, if we accept that the assumption of scarcity does not apply to some cases, then we have, by the same token, questioned the universalistic importance of scarcity. This allows for an introduction of the concepts of abundance and sufficiency into the analysis.

Second, this paper answers the question: ‘How can there be starvation despite there being enough food?’ It does that by differentiating the systemic

²³ Take our Crusoe example above; it does not seem to matter whether he is allocating his water supply to imaginary needs or real needs. The problem of efficient allocation remains, that is how to allocate the scarce water supply to Crusoe’s preferences, whatever those preferences may be.

level from the individual level. In this way, we can more clearly see that there is an abundance or sufficiency of food on a systemic level, but that there is socioeconomic exclusion of people on the individual level. People are, for some reason (e.g., gender, ethnicity, class), not given access to available food; they are not entitled to such access. This is the definition of a situation of quasi-scarcity (viz. enough food on the systemic level, but invalid entitlements on the individual level) – that is, it looks like scarcity of food, but it is not. This reasoning is adopted from Amartya Sen’s entitlement approach.

The first two contributions were arrived at in a fairly straight forward manner; the third one required a more creative research manoeuvre. *Paper I* proposes a framework or model of how one can understand and explain not only absolute scarcity, but also absolute abundance and sufficiency: on both the systemic and the individual level. I called this model *the holistic model of absolute scarcity, abundance, and sufficiency* (HASAS). This model was developed in three analytical steps. The first step was to study one of the most important contributions to neoclassical economics with regard to its being founded on the assumption of scarcity, that is, the work of Carl Menger (Menger 2004). The second step was to integrate Menger’s account of SAS with one of the most important contemporary contributions to social and economic theory, namely Amartya Sen’s entitlement approach (Sen 1981). The third step was to ground this model in a wider ontological perspective inspired by critical realism – which is also an approach that has informed the thesis in general (Archer et al. 1998; Bhaskar 1997; Bhaskar 2005; Fleetwood 1999; Fullbrook 2009; Lawson 2003; Seldén 2005). Whereas the scarcity postulate of neoclassical economics causes us to accept the problem of efficient allocation as the starting point of economic analysis, this model instead makes us ask why scarcity arises in the first place. The neoclassical perspective assumes scarcity, whereas this model seeks to explain how SAS emerges. Hence, this model compels us to ask different questions, not only about scarcity, but also about abundance and sufficiency.

However, there were some unresolved issues. One of these issues is the following: It is not clear how the developed framework would be suited to other more empirical cases, because it was still relatively abstract. This became the task of *Paper II*.

Paper II

The framework developed in *Paper I* (HASAS model) needed further testing. Upon working on *Paper I*, I came across several important cases of famine, and there was one case in particular that piqued my interest, namely, the Great Bengal Famine of 1943. There was, and still is (see, e.g., Islam 2007),

a rather infected controversy over whether this famine was caused by a food availability decrease (essentially a Malthusian argument) or by a food entitlement decrease (Sen's entitlement approach). The HASAS model was designed to deal with both kinds of approaches, and my research question was, accordingly, whether it is possible to transcend this controversy by using the HASAS model.

I believe that Paper *II* arrives at the following somewhat overlapping three results. First, it is indeed possible to transcend the 'food availability decrease'-'food entitlement decrease' debate. This was done by arguing, via the HASAS model, that these causal accounts actually focus on different dimensions of the same thing, namely, how famines arise. The HASAS model shows, as a general ontological map of the chain of causality of famines, that absolute scarcity can arise from the following three causal sources: (1) food availability decreases on the systemic level, (2) decreases in people's food entitlements on the individual level. This overlaps neatly with the 'food availability decrease'-'food entitlement decrease' debate. It seems to me, then, that some of the confusion surrounding the research on the Bengal Famine could be resolved by differentiating the systemic from the individual level. These two levels have their own distinct causality, but both make up famines, and more generally SAS. Nevertheless, this model also shows that there is a third causal source of SAS, namely (3) food requirements can increase on the systemic level. The academic debate on the Bengal Famine, accordingly, focused only on the first two, and very little on the third causal source.

Second, by developing the first result, one can argue that there are not two but three causal sources of how absolute SAS can emerge. Accordingly, there are three main causal sources, each of which can cause scarcity on its own, for example: climate shocks may lower food availability; changes in the labour market may cause mass unemployment and thus affect people's entitlements to access food; or, continuous growth in the population increases food requirements in that system.

Third, *Paper II* offered a specific hypothesis or explanation of the Bengal Famine, synthesized from the literature, based on a study of the underlying human actions related to famines. It was a 'sudden shift in government priorities' that should be seen as the focal explanation – but only in a causal context of other factors (e.g., population increase, Japanese aggression, colonialism). In summary, the government of Bengal, supported by the central government of India and the British authorities, was controlling the food market from the middle of 1942 until March 1943, when it suddenly decided to de-control it. This was unexpected and caused a steep inflation on foodstuffs,

despite there being enough food, which enforced social unrest, resulting in socioeconomic exclusion of the urban population (mass unemployment, and little or late arriving help from the local authorities), and which ultimately resulted in starvation and death. Hence, similar to *Paper I*, this is a situation of quasi-scarcity. There was sufficient food on the systemic level, but people were excluded from accessing these supplies. Hence, *Paper II* arrived at this conclusion by focusing more on different actors' priorities, as suggested by more recent famine research (Devereux 2007), and less on agricultural data and entitlement mapping.

There is another point, which is not necessarily a result because this was only indicated and not shown. If HASAS, as applied in *Paper II*, could be regarded as a successful way of transcending this kind of controversy, then it might also be useful in relation to famines other than the one in Bengal. In fact, it might even be useful in non-food-related issues, for example, water, housing, transportation, education, medical service, Internet access, jobs, and so on and so forth. It is difficult to say at this stage how far one could take the HASAS model, but it certainly represents an interesting attempt at utilizing the SAS theme – additional research is needed to find out more about this question.

Paper III

Paper III focused on relative SAS. The point of departure was a combination of research questions (a) and (b). It focused on a conceptual differentiation of relative SAS, namely, on internal and external SAS, adopted from Oleg Zinam (1982).²⁴ Relative external scarcity means that the resource that is going to be allocated to alternative ends is located outside or external to the point of reference. The point of reference is the individual who is going to perform the act of allocation (a person, a household, an organization). The resource that is going to be allocated could be, for example, money, land or water. Conversely, relative internal scarcity means that the resource that is going to be allocated is located inside or internal to the point of reference. This resource could be, for example, an individual's own labour power, cognitive capacity, or time. Essentially, it seems to me that the difference between external and internal scarcity refers to whether the resource that is going to be

²⁴ Observe, however, that Zinam uses the concept of relative and absolute SAS in a different way compared to how it is used here. For Zinam, absolute abundance occurs when both internal and external scarcity have been eliminated (Zinam 1982, p. 64), whereas relative abundance occurs when external or internal scarcity has been eliminated. His argument is, though, that relative external abundance may be achieved (via technological development) but not relative internal abundance, because 'As long as human beings are mortal and have to live within time and other limits imposed on them by their nature, internal scarcities cannot be removed' (Zinam 1982, p. 64).

allocated is the property of the individuals who will allocate the resource or the property of an entity external to that individual. The aim of *Paper III* was a focus on the material aspects of external SAS, the primary question being: Is it possible to achieve relative abundance in an environment characterized by the consumer society?

As argued in the beginning of *Paper III*, considerable research has been devoted to voluntary reduction of consumption. However, little research has linked insights about voluntary simplicity to issues related to SAS. Even if research shows that voluntary simplicity leads to lowered consumption, it does not discuss whether this also leads to a state of abundance. Moreover, it is not certain what status abundance has as a normative ideal of the ideological core of some social groups (as an empirical phenomenon).

In line with these questions, *Paper III* arrives at the following four results or contributions. First, it does show indeed that individuals or voluntary simplifiers may seek to achieve a state of abundance or sufficiency as a socioculturally desired state. Thus, from the perspective of these simplifiers, scarcity is regarded as something undesired. The specific economic ethic that these simplifiers followed, which I called the economic ethic of material simplicity, normatively encourages individuals to reduce their wants in order to achieve relative abundance.²⁵ This shows the importance of abundance and sufficiency as a real phenomenon for social and economic theory. This links directly to the second contribution.

Second, abundance can be achieved within the conditions of the consumer society, and not by working more but by wanting less – what I have called *the modus vivendi of material simplicity*.²⁶ Some individuals do not only reduce their consumption, but also achieve a state of relative abundance (which refers to resources relative to wants or needs), which is not the same as affluence (which implies having plenty of resources regardless of what you want or need). For social and economic theory, this means that there is another solution to the problem of efficient allocation: Neoclassical economics argues that in situations of scarcity, the best thing one can do to cope with scarcity is to use one's resources as efficiently as possible – here, means and ends are given; conversely, these voluntary simplifiers try to abolish a situation of scarcity altogether by wanting less.²⁷

²⁵This concept was informed by Weber's ideas, namely, the idea that a certain kind of economic ethic (culture) could condition actual socioeconomic events (economy and society).

²⁶The use of the concept of *modus vivendi* was inspired by Margaret Archer's work (Archer 2003, p. 148).

²⁷One could argue that poor people often tend to do the same thing, that is, they adjust their preferences to what they can afford (cf. Halleröd 2006). However, there is one crucial difference, simplifiers voluntarily choose to reduce their preferences even if they have more, or much more, resources than they require. Poor individuals

Third, whereas *Paper I* and *II* focus more on the systemic level and on how SAS emerges, this paper focuses on SAS on the individual level. This shows that SAS is not solely a macro phenomenon (Malthus's primary focus), but exists both on the micro and the macro level.²⁸ Of course, famines and voluntary simplicity are very different things, but they nevertheless share some essential characteristics with respect to SAS. They are both cases of SAS. This also shows the relevance of SAS to different units of analysis. These questions, about the various divergent cases of SAS as well as the fact that SAS is found in various units of analysis, have not been properly developed in this thesis or the papers. I believe that this needs to be analysed further in order to properly illuminate what constitutes the various cases of SAS, not least for reasons of comparison (cf. Ragin 1987).

Fourth, this paper developed a framework to explain relative SAS that I called *the holistic model of relative scarcity, abundance, and sufficiency* (the HRSAS model). This model, similar to the HASAS model, encourages an explanatory stance on SAS, rather than assuming scarcity, as is done in neo-classical theory. It focuses on how a situation of SAS emerges, and what underlying mechanisms generate it. Moreover, the HRSAS model demonstrates the concrete difference between relative and absolute SAS. Relative SAS focuses on the alternative use of a resource relative to competing requirements, whereas absolute SAS focuses on the actual use of a resource in relation to one kind of requirement. Nevertheless, as discussed in *Paper V*, there is some conceptual overlapping between relative and absolute SAS, which brings up the question of whether the concepts of absolute and relative actually constitute different kinds of SAS or merely different views on the same thing.

However, some important issues have still not been fully addressed in this paper. The first issue is that only the material aspects of voluntary simplicity were studied; the immaterial dimensions was omitted. The individuals studied in *Paper III* may have achieved relative abundance of material or external resources, but not of immaterial or internal, especially their time resources. For example, the individuals I interviewed often felt unsatisfied about the more immaterial things they wished to do, because they lacked the time or energy to do them: They wanted to spend more time with their family, meditate more and study more, but felt they had no time – their scarcity was time. This is what Zinam (1982) would call relative internal scarcity. Accordingly, they did not need to allocate their material resources, but it seems as though

do not choose to live in poverty, they are forced to live in poverty (Rudmin and Kilbourne 1996, p. 169 ff.; cf. Sen 1983).

²⁸Cf. *Paper V*.

they really needed to allocate their time (cf. Becker 1965; Larsson 2007). This point highlights the fact that the neoclassical problem of allocation does not easily disappear.

The second issue is that although voluntary material simplicity is an interesting phenomenon that contributes to our theoretical understanding of SAS, it is relatively hard to make any empirical generalizations on the basis of this paper. Research shows that consumption has increased steadily, for different reasons, without any strong indication of weakening (Bauman 2007; de Grazia 2001; Sennett 2006); this is so even in a post-materialistic value system (Inglehart 1997; Inglehart and Welzel 2005). The real or more general relevance of this case is thus questionable. This is something that needs to be accounted for through more research, which I unfortunately lacked the resources for in this context.

The third issue is that *Paper III* used a basic sociological claim that human wants could vary or change altogether, via the influence of a certain kind of economic ethic (viz. via social and cultural mechanisms). But this influence was only assumed to exist, not really accounted for. This third issue motivated the aim of *Paper IV*.

Paper IV

The aim of *Paper IV* (co-authored by Goran Puuca²⁹) was specifically to study the formation of wants. The thesis thereby moved from studying research question (b), to focusing on research question (c): *How could a sociological theory of want formation be developed?* The formulation of this question reveals that we did not doubt that a sociological theory of want formation could be developed. In fact, there are already versions of such theories in addition to Parsons's early attempts, especially in consumer research (see, e.g., Bauman 2007; Brekke and Howarth 2000; Campbell 1987; Princen, Maniates and Conca 2002). The question was rather how this could be done in relation to theoretical advancements including a better understanding of human wants, from our perspective. In order to narrow down our research question, we focused on some critical problems associated with the concept of preferences in rational choice theory, and focused on students' decision-making process in education as an empirical field (not least because rational choice theory was, and still is, dominant in this field).

²⁹ A note about the division of labour: It is difficult to clearly define 'who did what', but in general terms, Goran had the main contact with the respondents when it came to planning the interviews; he also conducted most of the interviews with the staff at the studied school. I had the main responsibility for structuring and wrapping up the article. We were both equally involved in interviewing the students, transcribing, and analysing the material.

Paper IV makes one central contribution, which is essentially a theoretical innovation. It sought to combine three central concepts – *habitus* (Bourdieu 1984), *reflexivity* (Archer 2003), and *human practice* – in an explanation of want formation (Elder-Vass 2007). The main line of argument is that the habitus generates the set of wants that individuals manifest, whereas reflexivity creates the interrelations between various wants (work, friends, income, partner, etc.). We called all the wants with their crisscrossing links the *body of wants* or *an organic view of want formation*.³⁰ It is organic because each separate want serves a function within the totality of the body of wants. For example, wanting to work is not separate from wanting to form a family or to travel. The want to educate oneself is not separate from the want to work or follow the path of friends and family.

This might seem to be sociologically trivial, but from a rational choice point of view, the set of preferences may or may not have any interrelations. The important thing is to be able to rank them in a rational way. If Crusoe cannot rank his needs, he will not be able to rationally choose between them, regardless of whether there is any relationship between them. We called this view an atomistic or “hierarchical” view of wants. This view holds, accordingly, that each want can be separated and isolated from all other wants and put in a strict hierarchical order of priority. Nevertheless, instead of seeing rational choice as underpinning the decision-making process and human action, we argued that the body of wants guides it. It is this body of wants that forms, grows or changes according to a person’s life history.

Moreover, besides the fact that Crusoe is a factitious example, there is an important difference between his situation and the students we studied. In Crusoe’s case, the resource or the satisfier is very clear, explicitly defined. For example, in the case given above, water supply is clearly defined: he wants only water and he knows exactly how much he wants (see the discussion in the background section). For the students we interviewed, the situation is much more complicated – as they are embedded in an open system. Not only did they have difficulties articulating what they want, but there existed a kind of uncertainty about how to satisfy these wants. These satisfiers are unclear, undefined, or opaque, which makes decision-making inherently difficult. This is what we called *personal epistemological opaqueness*. Hence, the concept refers to the fundamental uncertainty involved in gaining knowledge about feasible means and desirable ends, from the agent’s own perspective. This problem concerns how resources are created and defined in

³⁰ These terms are indeed inspired by Durkheim’s concepts.

a given social context³¹ – which is both tangent to the problem of the assemblage of resources as well as the problem of human wants.

Hence, one of the central contributions to the thesis made by *Paper IV*, which was just touched upon in *Paper III*, is that the concept of wants is grounded more firmly in cognitive, social and cultural structures. Of course, many questions were left out of the paper. For example, what are the relations between needs and wants? What is a need anyway? Why merely use needs and wants – what about aspiration, attachment, attitude, caprice, craving, choice, concern, commitment, drive, desire, demand, end, incentive, feeling, goal, identity, intentionality, interest, meaning, motivation, objective, pleasure, passion, requirement, subjectivity, taste, urge, whim, and so on and so forth? Most of these questions come from the problem of the origins of human wants. These are indeed important questions, but they do not seem to affect directly the conceptual typology of SAS developed here.

³¹ One might ask, in which way are the satisfiers, or the resources, pre-defined by other agents, for example teachers, headmasters, or policy-makers?

Paper V

Paper V compares two prominent (classical) economists and their view of scarcity, namely Thomas Malthus (1766-1834) and Lionel Robbins (1898-1984). This paper makes two contributions. First, it shows the importance of integrating sociocultural mechanisms for further deepening our understanding of both relative and absolute SAS – thus emphasizing the embeddedness of the SAS theme (Polanyi 1977). This is also something indicated in the other papers, but further emphasised on in this paper.

Second, it discusses more thoroughly how absolute and relative SAS can be conceptualized, as well as some of the relationships between them. Basically, the relative dimension regards SAS in terms of the efficient allocation problem, or a resource's alternative use (what I call a one-to-several relation: how to allocate one kind of resource to several competing requirements); whereas the absolute dimension concerns the actual use of a resource (one-to-one: how one kind of resource is used to satisfy one kind of requirement).

Nonetheless, even after completing this paper and despite the tracked conceptual differences of absolute and relative SAS, I am still not fully convinced that these constitute different kinds of SAS. The analytical models that were developed, HASAS and HRSAS, suggest that they are different, but it seems that one can still regard the same empirical case as both a case of absolute SAS and a case of relative SAS. For example, the problem of global hunger discussed in *Paper I* was seen as a problem of absolute SAS. That is how people could access, become entitled to, food that already existed in the system they were embedded in as well as what conditioned the food production of that system. However, the same phenomena could be seen as a problem of relative SAS. One could argue, in neoclassical terms, that the factors of production might be misallocated on a systemic level in a situation of food scarcity – in terms of the production possibility frontier, a nation might be producing more guns and so less food (see Figure 2 above). This situation could arise, for example, because of political instability, war, or ambiguous property rights. In other words, hunger and famine can arise as a consequence of misallocation.³²

One can also employ the case of *Paper III* to question the absolute-relative distinction. To reiterate, the relative dimensions of SAS refer mainly to the problem of allocation. But once an individual transcends the problem of allocation, the problem of relative scarcity ceases to exist; and one might thus ask: 'What does relative abundance mean in this context?' Accordingly,

³² Or, conversely, one could argue that producing more guns in relation to food is more rational in terms of deterring enemies (in a war or cold war situation). Famine among some of the population, then, is just a price one has to pay.

there is a tension or overlap between relative and absolute SAS. Even if I believe that the distinction between absolute and relative SAS, as shown in *Paper V*, refers to something substantial, there is a clear need for further investigations of this problem, both theoretically and empirically. This calls for a deepening of the problem of the nature of SAS. It refers to the relation between other differentiations as well, for example, physical scarcity, social scarcity, internal scarcity, external scarcity, post-scarcity, objective scarcity, subjective scarcity, etc.

Summary

In this section, I have discussed some of the central results of the five papers; Table 1 above provides an overview of the papers. Each paper makes specific contributions to answering the three research questions derived from the general question: ‘What is SAS?’ I shall repeat a very brief response to each question.

Question (a) – *Are there different kinds of scarcity, abundance, and sufficiency?* – is answered through this thesis by stating: Yes there seem to be, but more research is required in order to investigate the relationship between relative and absolute SAS. Moreover, there are other kinds of SAS that have not been discussed extensively in the thesis.

Question (b) – *How could scarcity, abundance, and sufficiency be properly explained in relation to real events?* – is answered by the suggestion that HASAS and HRSAS are sound ways of explaining real cases of SAS, but further applications are needed to secure these explanatory models.

Question (c) – *How could a sociological theory of want-formation be developed?* – is answered by the provision of a theory of an organic view of want formation. Nonetheless, many issues have been necessarily left to future research, especially the question of human needs.

Contributions

The general contribution of this thesis has been to show the importance of the SAS theme for social and economic theory, but its specific contributions lie in the problem of the nature of SAS. Derived and highly condensed from the five papers, I wish to stress the following three contributions:

1. A tentative typology of SAS.
2. A holistic (multi-casual) explanatory approach to SAS.
3. An alternative foundation for general social and economic theory, based on the SAS theme.

The first contribution, a typology of SAS, shows that these concepts are applicable on different levels (macro, micro) and that they cover various situations (e.g., quasi-scarcity, which means that there are enough resources on the systemic level, but individuals are hindered from accessing them). This typology is, however, incomplete, because there are further differentiations of SAS not thoroughly studied here. The second contribution is that the underlying causality of SAS should be regarded in a holistic totality. Two such models, HASAS and HRSAS, have been developed, and it has been shown that they can be applied to different cases – it has also been indicated that they can be applied to the same case, but more research is needed to study this in depth. The usefulness of these models seems to depend on the case, the goal of analysis and the unit of analysis. The third contribution, which is probably the most profound, is that the SAS theme offers an alternative foundation for social and economic theory in general. It emphasizes the importance of not only scarcity, but also abundance and sufficiency. One can regard the SAS theme as an alternative foundation because many seemingly divergent social and economic problems have at least one common element, namely, that they concern how individuals provide for their wants or needs, what kind of resources are available as well as which individuals are entitled to access them (cf. Polanyi 1957) – these things are about SAS.

Let me give a brief summary of how this thesis arrived at these contributions and how a study of SAS may be taken further. This work can be summarized in three analytical steps. As a first analytical step, the thesis started from the fact that scarcity is treated primarily as an assumption in neoclassical economics, as well as in some central heterodox and sociological approaches. Instead of assuming scarcity, this thesis has sought to show the value of explaining it, along with abundance and sufficiency. As a second analytical step, by reviewing the literature, eight main problems were pinpointed. These seemingly different problems have at least one common denominator, I argued, namely that the element of SAS plays a central role in their formulation. This is the SAS theme. A set of problems that are all associated with SAS in various ways. As a third analytical step, however, I chose to focus on a smaller part of the SAS theme, namely the problem of the nature of SAS. Five studies were carried out in order to illuminate what SAS is and how it is manifested in some empirical examples. Consequently, some contributions have been made, but many questions remain unanswered, as the SAS theme elicits a myriad of research enquiries.

I shall briefly summarize some of these enquiries into the SAS theme that I believe are the more interesting ones, most of them discussed in the background section. This is done to emphasize the need for future research and thus serves as an invitation to the reader.

On conflict, social order and solidarity. This is a central issue in the social sciences (Turner and Rojek 2001). According to Hobbes, the war of all against all can only be ended by establishing a social contract enforced by a strong actor (the state). Parsons challenged this conclusion, and argued instead that social integration via common values is the answer. However, I have argued that the problem of social order, and thus the Hobbsian as well as the Parsonian answer, assumes the existence of scarcity in the first place. Both these answers surely have their merits, but one might question the use of the concept of scarcity here. Is the problem of social order only relevant under scarcity? What if scarcity is induced or created by a third party in order to serve vested interests (cf. Swedberg 2005)? After all, some would argue that '...The home of vested interests is amidst social scarcity. The term has no meaning in the context of natural abundance' (Archer 1995, p. 204). One might also ask whether scarcity always leads to conflict (cf. Gleditsch 1998; Homer-Dixon 1994). Some would say yes: 'To enter an age of scarcity ... is to enter an age of increased conflicts that contain a great potential for mass death and even genocide...' (Dobkowski and Wallimann 2002, p. xxix). But does this mean that there is no conflict when abundance of resources exists (cf. Chase 1934)? Is solidarity only relevant when scarcity exists?

On wealth and poverty. Regardless of whether poverty is defined in absolute or relative terms (Doyal and Gough 1991; cf. Halleröd 2004; Halleröd 2006; Sen 1983), the creation of wealth, according to Adam Smith, cures poverty. In other words, wealth could be seen as the reduction of scarcity (Xenos 1987). Smith envisions a future in which there is abundance of all kinds of goods, where no poverty exists. Smith writes that ‘...the object of police [policy, politics, governance] in general is the proper means of introducing plenty and abundance into the country, that is, the cheapness of goods of all sorts’ (Smith 1982, p. 333). Could there be an actual situation of sufficiency or abundance that would entail the end of the problem of allocation and so the end of poverty? Keynes, for instances, thought this was the case (Keynes 1972). But what kind of scarcity are they really referring to, micro or macro? Absolute or relative? What about the social limits to growth as defined by Hirsh (2005); and if the economic problem can be solved, how would that influence Hobbes’s problem of social order?

On allocation. The neoclassical approach is specifically tailored to account for the problem of efficient allocation under scarcity. But how is allocation of resources conducted under sufficiency or abundance? Neoclassical economics seems to have little to say here, as it needs to clearly define the scarcity constraints in any given optimization problem. Is there any meaning to the concept of efficient or rational allocation under abundance and sufficiency? Moreover, it is necessary to differentiate between the problem of *efficient* allocation and the problem of allocation in general (cf. Beckert 2002; Weber 1978, p. 65 ff.). From a sociological perspective, allocation of resources can occur in many ways, not only via rational choice. For example, allocation can occur through exercise of power (e.g., state coercion), be guided by norms (Parsons 1949), habits (Bourdieu 2005), or through mutual exchange (Holton 1992, p. 16; Polanyi 1977). Bourdieu, for instance, argued that ‘Homo oeconomicus, as conceived (tacitly or explicitly) by economic orthodoxy, is a kind of anthropological monster...It is one of the virtues of Gary Becker, who is responsible for the boldest attempts to export the model of the market and the (supposedly more powerful and efficient) technology of the neoclassical firm into all the social sciences...’ (Bourdieu 2005, p. 209). As an alternative, Bourdieu proposed a model of man based on habitus. Individuals do not allocate mechanically in terms of over-rationalized instrumentality, but in terms of a ‘...socialized subjectivity, a historic transcendental, whose schemes of perception and appreciation (systems of preferences, tastes, etc.) are the product of collective and individual history’ (Bourdieu 2005, p. 211).

On property, justice and emancipation. In terms of social and economic theory, scarcity and private property (and the call for justice when violation of private property occurs) have the same root in liberal thinking (Wolin 2004; Xenos 1989). David Hume, for example, argued that private property and justice are a consequence of scarcity. In a world of abundance, these two have little meaning. He writes:

...if every man had a tender regard for another, or if nature supplied abundantly all our wants and desires, that the jealousy of interest, which justice supposes, could no longer have place; nor would there be any occasion for those distinctions and limits of property and possession, which at present are in use among mankind. (Hume 1896, p. 494)

This also suggests that in a situation of abundance, private property is not a necessary institution.³³ This seems to be in line with Marx's emancipatory vision. John Elliott argued that '...the original Marxian image of communism presumes a level of economic and technological achievement so advanced as to "abolish" both scarcity and the division of labor' (Elliott 1980, p. 275). In fact, in this context even the market seems to be a superfluous institution, as it presupposes the existence of scarcity. One of the main questions is, then, from an emancipator point of view, what is desirable to achieve?

Naturally, all of these problems are not specific to sociology. If we accept that the SAS theme is one of the essential common denominators of several central problems in the social sciences, then we might also accept that this theme gives an alternative interdisciplinary (or even transdisciplinary) foundation for social science itself (Bhaskar and Danermark 2006; Max-Neef 2005).

The approach I am arguing in favour of is one that incorporates not only scarcity, but also abundance as well as sufficiency. It could utilize the formal as well as the substantive meaning of "economic" in order to illuminate the world we are living in (cf. Polanyi 1977). It prefers an explanatory stance (Lawson 1997; Lawson 2003), which does not merely add these concepts to an analysis, but puts them at the very heart of that theory: letting other relevant concepts (such as interests, action, choice, market, solidarity, conflict, etc.) revolve around SAS. These three concepts should exercise a power over the other analytical concepts comparable with that of a centrifugal force. Only neoclassical economics, as we have seen, is entirely dependent on the

³³ See Menger for a brief passage about communism, private property and abundance (Menger 2004, pp. 100-101).

scarcity postulate – it is not wrong to assume scarcity in some cases, but we should be aware of the limitations this assumption entails. Economic sociology or social and economic theory in general can explore the issues of the SAS theme in a freer manner.

Therefore, instead of positioning scarcity and solidarity at the centre of sociological inquiry (cf. Turner and Rojek 2001), I would like to propose that the SAS theme provides a more suitable foundation, that is, how SAS is conditioned by and conditions various social and economic events. It should also be emphasized that the various problems associated with the SAS theme are not new in themselves. A considerable amount of work has been devoted to many of these problems, e.g. the limits to growth, poverty, solidarity. Rather what this thesis argues is that they all essentially arise from a common denominator, namely, SAS.

By now, I hope the reader has realized that the approach advanced here is not merely different from the neoclassical approach, but also that it incorporates and reinterprets part of it. The approach advanced in this thesis is not fundamentally opposed to the allocation problem posed in neoclassical economics, but suggests rather that the SAS theme subsumes it.

CHAPTER 5

Sammanfattning på svenska: summary in Swedish

Ett antal viktiga studier har gjorts om relationen mellan ekonomi och samhälle inom fältet ekonomisk sociologi (jmf. Smelser and Swedberg 2005). Forskare har bland annat studerat centrala fenomen som företagens sociala organisering och marknadens inbäddning i sociala och kulturella strukturer, och nya teorier om ekonomisk och socialt handlande har utvecklats. Men alltför lite kraft har lagts på att studera knapphet, överflöd och tillräcklighet (SAS Scarcity, Abundance, Sufficiency), både som teoretiska begrepp och som fenomen i samhället.

Neoklassisk ekonomisk teori har i huvudsak fokuserat på problemet med allokeringen av knappa resurser. Det neoklassiska perspektivet tar sitt avstamp i teorier om rationella val och menar att en analys av ekonomiskt handlande bör baseras på idén om instrumentell rationalitet (Beckert 2002). Med detta menas att ekonomiska aktörer handlar med ett givet mål i sikte och att dessa individer avser att optimera sin nytta genom att maximera vinster och minimera förluster, oavsett vad dessa vinster och förluster är (investeringar, produktion eller konsumtion). Även om det neoklassiska angreppssättet har en dominerande ställning när det gäller nationalekonomiska frågor så har det varit föremål för kritik både inom och utanför den ekonomiska disciplinen. Kritiken inifrån den ekonomiska disciplinen, ibland också kallad heterodox ekonomisk teori (Lee 2009), har primärt fokuserat på en alternativ förståelse av ekonomin i sig. Kritiken utifrån – framför allt den ekonomisk-sociologiska kritiken – har i huvudsak fokuserat på att lyfta fram relationen mellan ekonomin och samhället, samt de problem som karakteriserar den rationella valhandlingsteorin. Både heterodoxa ekonomer och ekonomiska sociologer har således försökt att utveckla mer realistiska alternativ till neoklassisk teori.

Denna avhandling försöker använda inslag från både heterodox och sociologisk teori till att fördjupa vår förståelse om SAS. Men istället för att ta som utgångspunkt den kritik av begreppen rationalitet och mänskligt handlande som den klassiska sociologin har levererat, så utgår denna avhandling från de problem som själva knapphetsantagandet genererar för ekonomisk och socio-

logisk teori. Den generella frågan för alla fem studier som ingår i avhandlingen är, 'vad är knapphetens, överflödets och tillräcklighetens natur i social och ekonomisk teori?', eller helt enkelt: 'vad är SAS?'. Denna generella fråga innefattar i sig tre mer specifika frågor, vilka behandlas i avhandlingens fem studier:

- (a) Finns det olika sorter av knapphet, överflöd och tillräcklighet?
- (b) Hur kan knapphet, överflöd och tillräcklighet förklaras i relation till empiriska fenomen?
- (c) Hur kan en sociologisk teori om formationen av individers vilja eller önskemål utvecklas mot bakgrund av detta?

I introduktionen till avhandlingen (den s.k. kappan), diskuteras inledningsvis åtta olika problemområden som alla tillhör vad jag har kallat *SAS-temat*. Detta tema inbegriper alla substantiella frågor som går att relatera direkt till SAS som fenomen och begrepp. De åtta problemen som diskuteras är visserligen inte helt uttömmande för allt som går att relatera till SAS, men de samlar de frågor som varit de centrala i litteraturen om SAS. Dessa åtta problemområden berör sålunda olika frågor om ekonomin och samhället, men de har ändå det gemensamt att de är direkt relaterade till SAS-problematiken. Dessa åtta problem är: (1) Problemet med *SAS kausala effekter*, vilket handlar om hur ett antal andra sociala och ekonomiska fenomen är kausalt relaterade till SAS; (2) *allokeringsproblemet* som inbegriper den neoklassiska teorins huvudfråga, nämligen vad som är en effektiv allokering av knappa resurser; (3) *universaliseringen av knapphet* som rör föreställningen om knapphetens allmängiltiga existens, vilken kritiserats i teorier som försöker förstå överflödets roll i samhället; (4) problemområdet rörande *tillväxtens gränser* som behandlar huruvida ökad produktion kan lösa knapphetsproblemet överhuvudtaget; (5) problemet med *konstruktionen av resurser* som aktualiserar frågorna vad en resurs egentligen är och vilka sociala och kulturella processer är involverade i skapandet av resurser; (6) problemområdet *samhällsvetenskapernas grund* som rör frågan om på vilka grunder arbetsdelningen mellan olika discipliner kan relateras till knapphetsfrågan; (7) problemet rörande *ursprunget för människors vilja-önskningar* (the origins of human wants) som handlar om vilka processer genererar människans vilja och önskningar; samt (8) frågan om *SAS natur* som bland annat berör vilka begreppsliga differentieringar som finns inom SAS-problematiken.

Det har inte varit smöjligt att studera alla dessa problemområden i denna avhandling. Syftet med att ändå presentera dessa åtta breda problemområden är att aktualisera vikten av att studera SAS. Ett annat syfte är att visa att olika

problemområden egentligen handlar delvis om samma sak, nämligen SAS. För att avgränsa avhandlingen menar jag att en avgränsning omkring det åttonde problemet – *SAS natur* – är rimlig, då detta problemområde handlar just om att klargöra begreppen knapphet, överflöd och tillräcklighet. Genom att studera detta problemområde kan dock även vissa insikter ges som har relevans för de övriga problemområdena. Tre övergripande frågor formulerades utifrån denna avgränsning (se ovan). Fem studier (artiklar) utfördes för att besvara dessa tre frågor.

I *studie I*, "(Quasi) Scarcity and Global Hunger: a Sociological Critique of the Scarcity Postulate with an Attempt at Synthesis", undersöktes begreppet "absolut SAS" samtidigt som en kritik mot neoklassisk teori formulerades med avseende på knapphetsantagandet. Denna studie ger tre bidrag till forskningsområdet: Det första är en kritik av idén om universell knapphet. Denna studie använder världssvält som empiriska fall för att illustrera denna kritik. Beskrivande statistik (från förenta nationerna) visar att det globalt sett finns tillräckligt med mat, men att en betydande del av världsbefolkningen ändå svälter. Detta indikerar att antagandet om universell knapphet är alltför starkt formulerat. Det andra bidraget som denna studie gör är att den utvecklar begreppet "kvasi-knapphet" för att beskriva en situation där människor svälter trots att det finns tillräckligt med mat på systemnivå. Detta resonemang baserar på Amartya Sen's teori om svält. Det tredje bidraget är något mer omfattande än de första två. Det består av utvecklingen av en teoretisk modell kallad '*the holistic model of absolute scarcity, abundance, and sufficiency*' (HASAS). Denna modell representerar en ontologisk karta över kausaliteten i absolut-SAS. Tanken är att denna modell skall kunna användas i olika konkreta fall i förklarande syfte.

I *studie II*, "Linking Food Requirements, Entitlements, and Availability: exemplified by the 1943 Bengal Famine", testas HASAS-modellen. Detta test görs med avseende på svälten i Bengalen 1943. Även denna studie ger tre bidrag till forskningsområdet SAS: Det första består i ett försök att förena de två centrala konkurrerande perspektiven på hur svält uppstår. Dessa två perspektiv är Sen's 'entitlement approach', som fokuserar på människors socioekonomiska förmåga att byta till sig mat, och den Malthusianskt inspirerade 'food availability decrease' som fokuserar på mattillgången på systemnivå. Det andra bidraget är att denna studie med hjälp av HASAS-modellen visar att det egentligen finns tre kausala källor som svält kan genereras av: den totala tillgången på mat, populationens behov, samt enskilda individers tillgång till mat. De två konkurrerande perspektiven täcker endast två av dessa källor: den totala tillgången på mat samt individers tillgång till mat. Detta implicerar att det går att formulera ytterligare ett perspektiv, ett som fokuse-

rar på populationens behov på systemnivå. En sådan fokus är ju Malthus egentliga position, men modern svältforskning har mestadels fokuserat på produktionen av mat – speciellt gäller detta för Bengalfallet. Det tredje bidraget är den alternativa hypotes om hur Bengalsvälten kan förklaras som förs fram, baserad på den sociala interaktion som föregick svälten.

I *studie III*, "The Modus Vivendi of Material Simplicity: Counteracting Scarcity via the Deflation of Wants", fokuseras på "relativ SAS". Empiriskt handlar den om fenomenet frivillig enkelhet, mer specifikt en buddistisk version av frivillig enkelhet. I denna studie görs fyra bidrag till forskningsområdet: Det första är analysen av hur individer försöker uppnå ett tillstånd av överflöd eller tillräcklighet genom att följa en ekonomisk etik om materiell enkelhet. Detta visar också den teoretiska vikten av att studera begreppen "relativt överflöd" och "-tillräcklighet". Det andra bidraget är analysen av hur dessa individer försöker att upphäva knappheten, inte genom att skaffa sig mer resurser (t.ex. genom att arbeta mer), utan genom att reducera sina egna behov. Detta tillstånd har jag valt att kalla *the modus vivendi of material simplicity*: ett praktiskt tillstånd där man lyckats att nå materiell enkelhet genom reduktion av behov, vilket individen behöver fortsätta att kämpa för att upprätthållas. Det tredje bidraget är att SAS studeras på individuell nivå, till skillnad från de första två studierna som främst fokuserade på den systemiska nivån. Detta visar vikten av att fortsätta differentiera och nyansera SAS begreppet. Det fjärde bidraget är utvecklandet av en modell för att förstå relativ SAS, kallad '*the holistic model of relative scarcity, abundance, and sufficiency*' (HRSAS).

Studie IV, "An Organic View of Want Formation: Rational Choice, Habitus, and Reflexivity on want-formation", behandlar frågor gällande problematiken om individers vilje- eller önskningsformation. Fokus är alltså inte explicit på SAS som sådant utan mer på hur viljan eller önskemål produceras i sociala och kulturella processer. Det huvudsakliga bidraget i denna studie är en teoretisk innovation. Denna består i ett försök att (i samarbete med Goran Puaca) kombinera begreppen "habitus" och "reflexivitet" för att förstå hur gymnasieelever formerar sina viljor och önskningsformationer gällande framtiden. Det perspektiv som vi utvecklat kallar vi en *organisk syn* på viljeformation, i kontrast till den hierarkiska syn som präglar den rationella valhandlingsteorin. Den senare hävdar att en individ kan dela upp och rangordna sina viljor och önskemål för att sedan göra rationella val på basis av denna preferensordning. Den organiska synen menar däremot att individer tenderar att länka eller skapa relationer mellan olika viljor. Individer orienterar sig därmed gentemot totaliteten av dessa relationer och inte mot enskilda önskemål så

som den hierarkiska synen menar. Detta illustreras av vår analys av elevintervjuer (n=27).

I den sista studien, *studie V*, ”Robbins and Malthus on Scarcity, Abundance, and Sufficiency: The Missing Sociocultural Element”, jämförs begreppet *absolut* och *relativ SAS*, med utgångspunkt i två klassiska ekonomer, Thomas Malthus och Lionel Robbins. Två bidrag görs i denna studie: Det första är att visa vikten av sociala och kulturella mekanismer för hur både absolut och relativ SAS genereras, vilket varken Malthus eller Robbins kunde göra på ett tillfredställande sätt. Det andra bidraget är att kartlägga de centrala likheterna och skillnaderna mellan begreppet absolut och relativ SAS. En slutsats är att det inte är helt självklart att absolut och relativ SAS utgör olika sorter av SAS (ontologiskt), utan att de kanske bäst ses som uttryck för olika perspektiv på SAS (epistemologiskt).

Avhandlingen ger genom dessa fem studier följande tre övergripande bidrag till social och ekonomisk teori:

1. En tentativ typologi av SAS.
2. Ett holistisk (multikausal) och förklarande angreppssätt på SAS.
3. En alternativ grund för generell social och ekonomisk teori med utgångspunkt i SAS-temat.

Det första bidraget visar att social och ekonomisk teori behöver komplettera knapphetsbegreppet med begreppen överflöd och tillräcklighet – därav ’SAS’. I avhandlingen visas att alla tre begrepp är nödvändiga för att förstå det ekonomiska och sociala livet. dessutom är en vidare differentiering och nyansering av SAS-begreppen (kvasi-, mikro-, makro- osv.) möjlig och nödvändig för att förstå fenomenen i fråga. Denna typologi är som noteras tentativ i det att det finns utrymme för fler elaboreringar.

Det andra bidraget är utvecklingen av HASAS- och HRSAS-modellerna. Dessa förklaringsmodeller ger två versioner av en ontologisk karta som klargör de kausala samband som finns i verkliga empiriska fenomen av SAS.

Det tredje bidraget är det med störst implikationer för social och ekonomisk teori. Detta består dels i att jag i diskussionen om de åtta problemområdena i avhandlingens inledning visade att ett antal centrala problem i samhällsvetenskaperna har att göra med knapphet, överflöd och tillräcklighet på ett eller annat sätt. Detta är själva SAS-temat, och genom att klargöra dess olika aspekter och centrala begrepp läggs en alternativ grund för en generell social och ekonomisk teori.

Nu kan det visserligen hävdas att en del av de frågor som analyseras i denna avhandling inte är originella i sig, eftersom mycket forskning har redan

gjorts på många av de frågor som hör till SAS temat (t.ex. effektiv allokering, tillväxtens gränser eller samhällsvetenskapernas grund). Det som skulle kunna ses som originellt i denna avhandling är dock påståendet att många empiriska fenomen och teoretiska frågor som till synes inte har något med varandra att göra trots detta är relaterade genom att de är delar av samma problematik, nämligen SAS. Vad denna avhandling syftar till är att fördjupa vår förståelse av SAS, både som begrepp och som empiriska problem. Den har försökt att knyta an till resonemang som finns i olika traditioner och omtolkat delar av dessa inom ramen för en och samma övergripande teoretiska problematik. Det angreppssätt som här presenteras är alltså inte antagonistiskt inställt till allokeringsproblemet som återfinns i neoklassisk teori. Tvärtom, vad som föreslås här är att SAS temat inbegriper detta problem. Med SAS-temat som utgångspunkt så framkommer att sociologiska och ekonomiska frågeställningar ofta ligger närmare varandra än vad man först kan ana. Denna avhandling ger endast ett litet bidrag till detta stora forskningsområde, och mycket återstår förstås att göra när det gäller att utforska SAS-temats olika problemområden.

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Paper I

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(QUAS)SCARCITY AND GLOBAL HUNGER

A Sociological Critique of the Scarcity Postulate with an Attempt at Synthesis¹

BY

ADEL DAOUD

Abstract. The purpose of this essay is to formulate a sociological critique of the concept of scarcity in mainstream economics by synthesising necessary conceptions in the construction of a theoretical structure with greater explanatory power than the current mainstream articulation. Mainstream economics asserts the universality of scarcity (the scarcity postulate). A critical scrutiny of this assertion is conducted by discussing the empirical phenomenon of global hunger in relation to a theoretical elaboration of the concepts of scarcity and abundance. The historical origins of the scarcity postulate is traced to the work of Carl Menger (1840–1921). The concern of global hunger shows that there is abundance of food goods, but still frustration of human needs occurs. An alternative approach is developed through a theoretical synthesis of Menger, Amartya Sen and critical realism, which asserts an ontologically stratified, differentiated and geo-historically conditioned understanding of scarcity and abundance. It is proposed that this approach is more fruitful than the scarcity postulate in explaining the process and conditions of frustration and satisfaction of human needs. Merely postulating scarcity tends to veil the underlying causes of poverty in general and hunger in particular. Central implications of the new model for socioeconomic analysis are considered.

Keywords: abundance, emancipation, global hunger, human needs, mainstream economics, scarcity

1. Introduction

The notion of ‘universal scarcity’, in the shape of the scarcity postulate, is a lynchpin of contemporary mainstream economics (ME).² It is used to motivate

¹ I am very thankful for the insightful comments provided by Freddy Winston Castro, Bengt Larsson, the two anonymous referees and all colleagues who knowingly or unknowingly contributed to the notions presented here. All remaining obscurity is entirely my responsibility.

² Refer to the end of the paper for a full list of abbreviations.

mainstream analysis of the socioeconomic domain. However, this essay demonstrates, with an example from the same domain, that the postulation of universal scarcity leads to inconsistent and static reasoning, consistently neglecting alternative explanations of the frustration of human needs. Its main contribution is to offer an alternative dynamic explanatory theory of scarcity and abundance, informed by critical realist ontology.

Hence the purpose of this essay is to make a sociological critique of the concept of scarcity in mainstream economics; this is effected by synthesising necessary conceptions, grounded in the empirical case of global hunger, in order to construct a theoretical structure with greater explanatory power than the current mainstream conception. My interest is in given conceptions, their inconsistencies and the possibility of resolving them, rather than in seeing ME as a social element reproducing a given ideological apparatus in the economy. Consequently, the main approach is immanent critique rather than explanatory critique.³ This framework elicits four basic research questions: (a) what is the meaning of the concept of scarcity within ME; (b) what is the historical origin of this concept; (c) is scarcity of food an exhaustive explanation of the phenomenon of global hunger; and (d) how could a synthesis of necessary concepts be conducted?

The elaboration is carried through from the perspective of critical realism in economics (CRE).⁴ CRE uses the general methodological propositions of critical realism, but the difference is that CRE transforms these propositions into a specific methodology, namely 'economic methodology'. Hence, economic ontology focuses on the economic phenomena of reality. Nevertheless, according to Steve Fleetwood and Tony Lawson, CRE is not concerned with methodology for its own sake. It is the underlabouring for a more fruitful scientific approach that is the main concern.⁵ Fleetwood formulates the point: 'A distinguishing feature of the critical realist project is its concern *not* with methodology for its own sake, but with *underlabouring* for an alternative economics, one that is intended to be rather more relevant and fruitful than the current mainstream'.⁶ Hence, CRE can be seen as an alternative to the current mainstream, offering a richer socioeconomic analysis within general economic theory.

³ Cf. R. Bhaskar and A. Collier, 'Introduction: explanatory critiques', in *Critical Realism: Essential Readings*, eds M. Archer, R. Bhaskar, A. Collier et al. (London: Routledge, 1998), 385–9.

⁴ See, for example, S. Fleetwood, ed., *Critical Realism in Economics: Development and Debate* (London: Routledge, 1999); T. Lawson, *Economics and Reality* (London: Routledge, 1997) and *Reorienting Economics* (London: Routledge, 2003).

⁵ Lawson, *Reorienting*, 28–32.

⁶ Fleetwood, *Critical Realism*, 127.

The methodological tools used in this essay comprise different types of logical inferences, but mainly abduction and retroduction. Abduction will be used in terms of an analytical re-contextualisation of the phenomenon of global hunger within the framework of Carl Menger's theory of 'economic and non-economic goods'. Retroduction (transfactual reasoning) will be used with the assistance of a thought experiment.⁷ A retroductive question will be formulated: what must the global socioeconomic realm be like for frustration of needs to occur in a realm of abundance? Consequently, the assemblage of these logical types of inference will guide the elaboration and synthesis.

I start with a demarcation between relative and absolute scarcity, and then relate this to previous conceptualisations of scarcity and abundance. The discussion then focuses on global hunger as an empirical case. Next, an account of the scarcity postulate of ME is presented; this includes a study of its historical origins. Lastly, an elaboration and synthesis is attempted focusing on scarcity and abundance, and grounded in the features of the phenomenon of global hunger.

1.1. *Absolute and relative scarcity: a demarcation*

An important demarcation between 'relative' and 'absolute' scarcity has to be made. Relative scarcity refers generally to all wants and needs a human being has in relation to given resources under a particular 'time unit', whereas absolute scarcity refers only to one type of 'need', the basic necessities for the maintenance of life (e.g. food, water, air). Wants mainly refer to non-necessities (e.g. cars, sweets, films).⁸ Consequently, relative scarcity arises when 'many wants' (competing ends) are related to given means.⁹ Absolute scarcity is more visible than relative scarcity. As Ernest Raiklin and Bülent Uyar write: 'absolute scarcity ... manifests itself during times of social disturbance, economic crisis, revolution, war, or as a result of natural disasters; this is when the system fails to produce adequate amounts of items needed for survival'.¹⁰ According to Raiklin and Uyar, the focus of ME is, or should be, relative scarcity, which is

⁷ B. Danermark, M. Ekstörn, L. Jakobsen and J. Karlsson, *Explaining Society: Critical Realism in the Social Sciences* (London: Routledge, 2002), 96.

⁸ S. Baumgartner, C. Becker, M. Faber and R. Manstetten, 'Relative and absolute scarcity of nature: assessing the roles of economics and ecology for biodiversity conservation', *Ecological Economics* 59 (4) (2006), 487-98. Of course, the distinction between needs and wants is not clear-cut.

⁹ L. R. Robbins, *An Essay on the Nature and Significance of Economic Science*, 3rd edn (London: Macmillan, 1984), 14.

¹⁰ E. Raiklin and B. Uyar, 'On the relativity of the concepts of needs, wants, scarcity and opportunity cost', *International Journal of Social Economics* 23(7) (1996), 54-5.

its *raison d'être*. Maybe so, but there is a failure to distinguish it from absolute scarcity in many prominent books, I argue.¹¹ The critical identification of this absence is supported by Karl Polanyi, who distinguishes between the formal and substantial economy.¹² As a consequence of this absence, confusion arises about what kind of scarcity ME is actually referring to: absolute, relative or both? Irrespective of this, the issue of global hunger refers to absolute rather than relative scarcity, which is the main focus of this essay.

2. *The Relevance of Studying Scarcity and Abundance*

A brief exploratory overview of previous accounts of scarcity and abundance follows, thus relating this essay to a more general debate. The English word 'scarcity', according to Nicholas Xenos, is of medieval origin, deriving from the Old Northern French *escarceté*. It was used to specify a period of insufficiency and was seen as the antagonist of human being. 'Scarcity could then be cast as the antagonist of the human story, a story with a happy ending; the vanquishing of the antagonist and a life of happiness ever after amid abundance for all.'¹³ Conversely, abundance (or affluence) was the friend of human being. Scarcity was used in this sense until the late-nineteenth century, when (neoclassical) economics appropriated it as its essential postulate. Xenos writes that in the:

late nineteenth century ... neoclassical economics [ME] made the scarcity postulate its foundation and the term passed into general usage though its transformation into a concept signifying a general condition: not 'scarcity of', or 'a time of scarcity', but simply 'scarcity'. This etymology suggests a history that is discontinuous; that scarcity in the general sense is a modern invention.¹⁴

Accordingly, the scarcity postulate was born. It is arguable that there are two theoretical tendencies (crudely divided) concerning the assessment of scarcity, along a continuum between: (a) a positive assessment made by those who argue that scarcity is a non-revocable (necessary) condition of human existence (e.g. Smith, Malthus); and (b) a negative assessment that under the right conditions scarcity is a revocable (non-necessary) condition of human existence (e.g. Marx, Mill). This essay leans towards the latter tendency.

¹¹ See, for example, P. A. Samuelson and W. D. Nordhaus, *Economics*, 17th edn (Boston, MA: McGraw-Hill, 2001).

¹² See K. Polanyi, ed., *Trade and Market in the Early Empires: Economics in History and Theory* (New York: Free Press, 1957), 244–6.

¹³ N. Xenos, *Scarcity and Modernity* (London: Routledge, 1989), 35.

¹⁴ *Ibid.*, 3.

- (a) ME's postulate harbours a positive assessment of scarcity, because of the universality of scarcity.¹⁵ Adam Smith argues that the creation of new needs and wants creates the momentum of material progress. They will exceed the given resources, therefore scarcity arises. By industrial production the gap between needs and resources is reduced, and so scarcity diminishes. This diminishing is called wealth.¹⁶ Thomas Robert Malthus argues that the state of scarcity results in a struggle to survive. Malthus laid the theoretical foundation of the 'conventional wisdom' that has dominated the debate on global hunger and famine in general for almost two centuries.¹⁷ Malthus argues that God created a universe ruled by the 'principle of population', namely, the pressure of scarcity, in order to force people to use the power of mind to overcome the natural human tendency to indolence.¹⁸ This struggle for survival is the very pulse of civilisation.
- (b) Karl Marx argues that the third and final stage of the revolutionary transformation of society is the creation of a society founded on abundance, such that all people could flourish and freely develop without constraints of scarcity of resources. The first two stages, however, are characterised by scarcity and thus struggle.¹⁹ John Stuart Mill shared some of Marx's claims. Xenos writes:

John Stuart Mill and Karl Marx ... devised theories that looked to a process of historical progress that would fundamentally alter the human condition. Both theories entailed a notion of abundance as the necessary precondition for the full realisation of human capacities ... the hope of an abundant future to assuage their sense of the injustices of present-day scarcity.²⁰

Both Marshall Sahlins and John Kenneth Galbraith are critical of ME's scarcity postulate. Galbraith argues that affluence prevails in modern society. ME's assumption of scarcity of resources is erroneous, and this error leads to a misplaced focus on how to combat poverty in an affluent society.²¹ As this is not recognised, an endless stream of production is encouraged, while at the same time poverty continues to be reproduced.²²

¹⁵ See p. 208ff., below. See also Robbins, *Essay*, 15.

¹⁶ A. Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, vol. 1, eds A. S. Skinner, R. H. Campbell, and W. B. Todd (Oxford: Clarendon, 1976), 100-104.

¹⁷ P. L. Kutzner, *World Hunger: A Reference Handbook* (Santa Barbara, CA: ABC-CLIO, 1991).

¹⁸ T. R. Malthus, *An Essay on the Principle of Population*, ed. D. Winch (Cambridge: Cambridge University Press, [1798] 1992), xiii, 17-19.

¹⁹ G. A. Cohen, *Karl Marx's Theory of History: A Defence* (Oxford: Oxford University Press, 2000), 361-2.

²⁰ Xenos, *Scarcity*, 37.

²¹ J. K. Galbraith, *The Affluent Society* (London: Hamish Hamilton, 1958).

²² Cf. M. Sahlins, *Stone Age Economics* (Chicago, IL: Aldine-Atherton, 1976), 5 ff.

Hence the question of scarcity (and abundance) is a fundamental issue of human existence. Let us now bring the empirical case of global hunger into the analysis in order to see the real (actualised) relevance of the issue of scarcity and abundance.

3. *Global Hunger*

This part of the essay focuses on the case of global hunger, which serves as an empirical grounding for the ensuing elaboration and synthesis. Its main point is to illuminate the fact that hunger does not necessarily arise because of insufficiency of food supply, that is, scarcity of food.

The definition of global hunger is as follows. The human need for food is commonly operationalised into energy requirement in terms of calories per day. When sufficient calories are absorbed by the biological body then it is said that the energy requirement is fulfilled; if not, then the body is undernourished ('hungry'). According to the World Health Organization (WHO) and the Food and Agriculture Organisation of the United Nations (FAO), the explicit energy requirement approach (calories) assumes implicitly that not only energy requirements but also other vital nutrients (proteins, vitamins (A, B, C, D etc.) are fulfilled.²³

For the purposes of this paper we need one crude number of the average minimum energy requirement. WHO concludes that the average minimum energy requirement for the developing countries is approximately 2100 calories per day; and for the industrialised countries 2180 calories per day; the difference is mostly due to activity level. These numbers are used as a crude estimate for all individuals of all demographic groups (of whatever age, sex and activity level). From personal consultation from representatives of WHO, the United Nations World Food Programme (WFP) and FAO, I conclude that the average of these two numbers is sufficient. Consequently, *the minimum energy requirement* for the global population is set at *2140 calories per day*.²⁴ Importantly, this number is only used for comparison with global food supply.²⁵ As a result, 2140 calories is used as a complement to FAO's caloric estimations.

²³ United Nations University (UNU), World Health Organization (WHO) and Food and Agriculture Organisation of the United Nations (FAO). *Human Energy Requirements: Report on a Joint FAO/WHO/UNU Expert Consultation* (Rome: UNU, WHO, FAO, 2001), 4. www.fao.org/docrep/007/y5686e/y5686e00.htm

²⁴ This essay is not a critique of FAO or WHO methodological estimates. Therefore, a critical stance will be omitted. For critical reflections see, for example, T. Dyson, *Population and Food: Global Trends and Future Prospects* (London: Routledge, 1996), 35; Kutzner, *World Hunger*, 174.

²⁵ See Table 1, note b.

Hungry people do not have enough food to eat and so enough to sustain an active life. This is an involuntary and chronic situation. It is thus demarcated from being deliberately hungry (hunger strike, fast). Moreover, hunger is different from famine, but related to it. The main difference is that famine is sudden, or explosive, prevailing for a short time. Famine can lead to hunger, but not vice versa.²⁶ The focus of this paper is mainly on hunger. Why use the term *global* hunger? Besides the macro perspective adopted, the term 'global' in global hunger indicates that the phenomenon of hunger occurs in an interrelated global socioeconomic system, which is not restricted to one area (Africa). Hunger occurs in Asia, Latin America, Europe and North America. Yet the magnitude and the underlying causes of hunger is the differentiating factor. It is thus not suggested that all hunger situations have necessarily the same causes. The point is still that hunger occurs in the global system, and potentially regardless of time and space; hence the term 'global hunger'.²⁷

3.1. *Estimating global hunger*

FAO estimates that 852 million people globally were hungry around the year 2002. Table 1 summarises the figures. The essence of this summary is that all regions seem to produce enough food to feed their population, but still hunger occurs.

According to Table 1, 815 million of the 852 million hungry people, approximately 96 per cent of the total, live in developing countries. These countries include most of the countries in Asia, Africa, the Middle East and Latin America. Still, sub-Saharan Africa and Asia are particularly worrying, with 204 million and 519 million hungry people respectively. Almost 33 per cent of the sub-Saharan population and 16 per cent of the Asian population is classified as undernourished. The daily calorie supply as a percentage of requirements is 125 per cent for Asia and 106 per cent for sub-Sahara. Daily supply in Asia should be sufficient to feed everyone; although the 106 per cent is close to the minimum, it should also be sufficient to feed all in sub-Sahara.²⁸ There is hunger in the 'rich' countries as well; more precisely, nine million undernourished people. The daily calorie supply for these regions is 160 per cent; in other words, there is more than enough food supply.

²⁶ See A. K. Sen, *Poverty and Famines: An Essay on Entitlement and Deprivation* (Oxford: Clarendon, 1981), 40–41.

²⁷ J. Scholte, *Globalisation: A Critical Introduction* (New York: Palgrave Macmillan, 2005), 424.

²⁸ For this region the data are somewhat insufficient. There is a lack of governmental censuses and a considerable quantity of the food consumed is collected from wild plants and meat; see Dyson, *Population*, 34.

Table 1 Measures of undernutrition (hunger) and calorie supply per region, around year 2002.²⁹

Region	Undernourished (millions)	Population undernourished (%) ^a	Daily per capita calorie supply	Daily per capita calorie supply as % of requirements ^b
Sub-Saharan Africa	204	33	2262	106
Middle East & North Africa	39	10	3110	145
Latin America & Caribbean	53	10	2865	134
Asia (excluding Middle East)	519	16	2682	125
Industrialised countries	9	- ^c	3410 ^d	160
Eastern Europe	28	7	3152 ^d	147
Globally	852	14	2804	131

Notes: (a) 'Population undernourished (%)' is a proportion of the *regional* total population, and not of the *global* total population.

- (b) 'Daily per capita calorie supply as % of requirements' is a proportion of 2140 calories (the minimum energy requirement for the global population).
- (c) 'Population undernourished (%)' for the industrialised countries is not given by FAOSTAT (the FAO online statistical service).
- (d) All numbers refer to the year 2002 except those for 'Daily per capita calorie supply' for industrialised countries and Eastern Europe, which refer to the year 1999 (data is not available for 2002).
- (e) Food supply refers mainly to cereal products.

Approximately 14 per cent of the global population is undernourished. The global food supply is currently (year 2002) at 2804 calories per capita per day. This is 131 per cent of the daily food requirement. At the same time, Figure 1 indicates that there has been a steady increase in global food in the years 1961–2002. Yet the absolute number of hungry people has increased from under 800 million for previous years to of 852 million (year 2004). What about future food production and food needs?

Consider Figures 1 and 2. Per capita food supply has increased steadily in spite of a big increase in population. Figure 2 illustrates the global population curve from 1950 (actual numbers) to 2050 (projected numbers). From this figure we can see that global population has increased from approximately 2.5 billion in 1950 to 6.3 billion by 2003, and by 2050 there will be 9 billion inhabitants of earth. At the same time, global food supply tends to increase.

²⁹ FAO, *The State of Food Insecurity in the World 2004: Towards the World Food Summit and Millennium Development Goals* (Rome: FAO, 2004); FAO online statistical service (FAOSTAT), *Food and Agriculture Organisation of the United Nations*, 2005, <http://faostat.fao.org>; UN, *World Population Prospects: The 2004 Revision and World Urbanisation Prospects*, <http://esa.un.org/unpp>

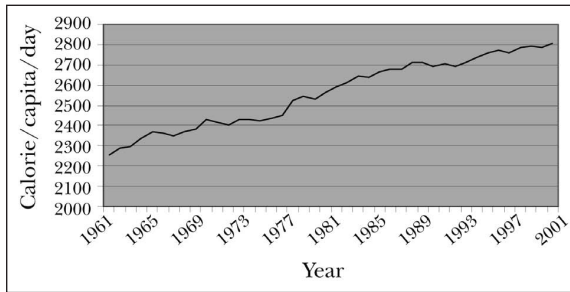


Figure 1 Global food supply in calories per capita per day, 1961-2002.³⁰

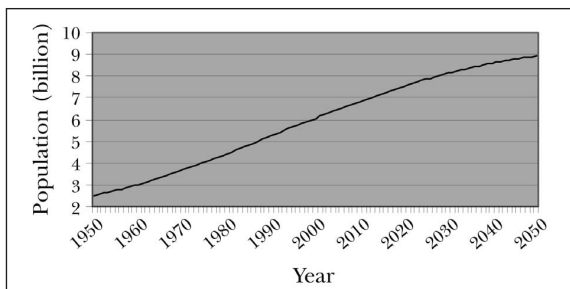


Figure 2 Global population tendency, actual and projected, 1950-2050.³¹

Complementing FAO numbers with Tim Dyson's makes a projection of food production towards 2020 possible. Still, the situation for sub-Saharan instills some doubt; this region will probably need to rely on other regions (e.g. aid, imports) to fulfil food needs. Nevertheless, the other regions and thus the global food supply should be sufficient, according to Dyson:

Assuming that levels of consumption in the two developed world regions remains constant, then nearly 3 billion tons of cereals will need to be harvested in 2020 in order to satisfy global demand ... Given no unforeseen huge calamity, the world's farmers will certainly be able to meet this volume of demand.³²

Hence hunger occurs in spite of an abundance of food. This actual event poses a serious anomaly, or challenge, to the scarcity postulate of ME. Is it possible to maintain this postulate in the face of this actuality?

³⁰ FAO, *Food*.

³¹ UN, *World*.

³² Dyson, *Population*, 204.

4. *Mainstream Economics and the Origins of the Scarcity Postulate*

According to Alec Gee, ME refers mainly to the neoclassical school. It is the dominant school of economics; university courses that major in economics are overwhelmingly grounded in the concepts of ME.³³ One of the fundamental principles of ME is the scarcity postulate. This postulate claims the existence of *universal scarcity*. It is found in every economic book and textbook related to ME. It claims that there are unlimited wants and needs in relation to limited resources; this generates universal scarcity, both at micro and macro level. ME is, then, the science of how people cope with this state of universal scarcity.³⁴ A world of abundance is characterised as follows by Paul Samuelson and William Nordhaus:

since all of us could have as much as we pleased, no one would be concerned about the distribution of incomes among different people or classes. In such an Eden of affluence, all goods would be free, like sand in the desert or seawater at the beach. All prices would be zero, and markets would be unnecessary. Indeed, economics would no longer be a useful subject.³⁵

They quickly suggest that such a Garden of Eden is not the case of the present world:

But no society has reached a utopia of limitless possibilities. Ours is world of *scarcity*, full of *economic goods*. A situation of scarcity is one in which goods are limited relative to desire. An objective observer would have to agree that, even after two centuries of rapid economic growth, production in the United States is simply not high enough to meet everyone's desires ... Moreover, outside the United States, particularly in Africa and Asia, hundreds of millions of people suffer from hunger and material deprivation.³⁶

As demonstrated, such formulations do not hold up to factual scrutiny. Scarcity of goods is not a necessary condition for hunger to occur. As a result, agreeing with Nurit Bird-David, such formulations tend to veil the real issues of our contemporary society, rather than illuminate them.³⁷ What are the reasons for this postulate? We find the origins of the scarcity postulate in the notions of the economist Carl Menger (1840–1921). Menger is principally interesting because he is the first economist (with references to David Hume) who most

³³ A. Gee, 'The neoclassical school', in *A Modern Guide to Economic Thought: An Introduction to Comparative Schools of Thought in Economics*, eds A. G. Miller and D. Mair (Aldershot: Elgar, 1991), 71.

³⁴ M. Parkin, *Economics*, 5th edn (Harlow: Addison-Wesley, 2000), 36.

³⁵ Samuelson and Nordhaus, *Economics*, 4.

³⁶ *Ibid.*

³⁷ N. Bird-David, 'Beyond "the original affluent society": a culturalist reformulation', in *Limited Wants, Unlimited Means: A Reader on Hunter-Gatherer Economics and the Environment*, ed. J. M. Gowdy (Washington, DC: Island Press, 1998), 133.

fully systemised the concept of scarcity, and thus greatly influenced the foundations of ME.³⁸ I shall focus on Menger's most important book, *Grundsätze der Volkswirtschaftslehre (The Principles of Economics)*.³⁹

4.1. Carl Menger and scarcity

The foundation of human economy is the actions directed towards the satisfaction of human needs by planning for the future, and not the augmentation of resources, according to Menger.⁴⁰ The entities that have the capacity to satisfy a human need are denominated *goods*. Consider the following quotation:

Needs arise from our drives and the drives are embedded in our nature. An imperfect satisfaction of needs leads to the stunting of our nature. Failure to satisfy them brings about our destruction. But to satisfy our needs is to live and prosper. Thus the attempt to provide for the satisfaction of our needs is synonymous with the attempt to provide for our lives and well-being. It is the most important of all human endeavours, since it is the prerequisite and foundation of all others.⁴¹

The quantities of goods a person must have to satisfy her needs are called *human requirements*. We need a certain quantity of food and water to ensure our well-being; for example, housing, food, clothing. The concepts of goods and needs express the qualitative relation, while the concepts of human requirement and available quantities express the quantitative relation of that given quality. In other words, quantified goods are called *available quantities*.⁴² The quantitative relations can take the following three forms:

- Human requirements (R) are quantitatively more than available quantities (A): ($R > A$).
- Human requirements (R) are quantitatively less than available quantities (A): ($R < A$).

³⁸ F. A. Hayek, 'Introduction', in *Principles of Economics*, eds J. Dingwall and B. F. Hoselitz (Grove City, PA: Libertarian Press, [1871] 1994), 18; L. R. Robbins, *A History of Economic Thought: The LSE lectures*, eds S. G. Medema and W. J. Samuels (Princeton, NJ: Princeton University Press, 1998), 277; E. Roll, *A History of Economic Thought*, 4th edn (London: Faber, 1973), 387.

³⁹ A further demarcation is required. I shall focus on the theory of 'economic and non-economic goods', leaving aside such other topics as exchange, price, value and commodity.

⁴⁰ C. Menger, *Principles of Economics*, trans. J. Dingwall and B. F. Hoselitz (Grove City, PA: Libertarian Press, [1871] 1994), 78, 190.

⁴¹ *Ibid.*

⁴² *Ibid.*, 51, 74–8.

- Human requirements (R) and available quantities (A) are quantitatively equal: ($R = A$).⁴³

In reality, $R > A$ is the most common situation, according to Menger. Goods in this quantitative relation are called *economic goods*, meaning that there are not enough goods to satisfy all needs in a system. *Non-economic goods* (or free goods) is in the opposite quantitative relation, namely $R < A$.⁴⁴ Imagine a village near a river that is dependent on water. The normal flow of the river is 200,000 pails per day (in rainstorms the flow is 300,000 pails per day, while in drought the flow is 100,000 pails per day). Imagine, moreover, that the village normally needs 200 pails per day, and at most 300 pails per day. In this case, and every other case, where the quantitative relation is $R < A$ there will neither be any need to economise nor any reason for struggle between the members of the society (the village) over the particular good (water), because the needs of all members can be fulfilled without any problem. There will be no reason to economise, and so these goods are not subjects of the human economy. According to Menger, the determination of whether a good is an economic or non-economic good is not an inherent property of the good itself. Instead, it is subjectively determined by the people who need it, that is, when R are quantitatively related to A ($R < A$). The character of goods will vary depending on where (spatially) and when (temporally) the quantitative relation is situated. In the previous example, water was a non-economic good. However, if the same village were situated in another time and space, say in a desert, water could easily become an economic good.⁴⁵

According to Menger, there are goods that are intermediate between economic and non-economic, which are of special scientific interest. For example, where nature does not make goods naturally abundant, governments (or other authorities) can, by organising the production of large quantities. He writes that:

such goods, in highly civilised countries as are produced by the government and offered for public use in such large quantities that any desired amount of them is at the disposal of even the poorest members of society, with the result that they do not attain economic character for the consumers.⁴⁶

State-supplied education, for instance, is such an intermediate good (non-economic). Or, pure healthy water available and accessible for drinking in the city

⁴³ Ibid., p. 94. Menger does not use the short forms given, that is, $R > A$, $R < A$ and $R = A$. I introduce them because I believe that they can simplify the outline without losing its essence.

⁴⁴ Ibid., 95.

⁴⁵ Ibid., 101-2.

⁴⁶ Ibid., 103-4.

fountains to all the members of the society; hospitals and medicine available for all the sick and needy. These goods take an intermediate position because they are *artificially* produced under the influence and command of people. By analogy, these goods are called *quasi-non-economic goods* (manipulated into $R < A$); the opposite is *quasi-economic goods* (manipulated into $R > A$). Quasi-economic goods arise when people in the economy are excluded, or hindered, from acquiring naturally abundant goods (non-economic goods).⁴⁷ If the quantitative relation is $R = A$, or near, and future development is uncertain, they are usually treated as quasi-economic goods. If an unforeseen diminution of the good causes frustration of needs, the future availability of the good is jeopardised.⁴⁸

In this way, (quasi)economic and (quasi)non-economic goods arise. In order to increase the well-being of the parties, nations, households and persons will engage in exchange (trade) when they have an abundance of one type of good but scarcity of another. Hence the individual will engage in the human economy to satisfy the needs that are inadequately provided for. This is the intrinsic purpose of human economy, according to Menger. The economising activity is not an end, or pleasure, in itself but a necessary activity that can mean the difference between well-being and suffering.⁴⁹

5. *Elaboration and Synthesis*

What follows is an attempt to synthesise some of Menger's and Amartya Sen's concepts with CRE's notions, using global hunger as a sounding board. By doing this we shall arrive at a 'model of (quasi)scarcity and (quasi)abundance' and consequently be able to offer a better socioeconomic alternative to the scarcity postulate. The elaboration and synthesis will be done in three analytical steps: the first constitutes, via abduction, the foundation of the model, and is inspired by Menger; the second consists, via retroduction, of a modification of the model to understand frustration of needs in abundance, and is motivated by Sen's concept of entitlements; and the third encompasses a final modification to understand the holistic connections (wider anchorage) and causal conditions of the first and second steps, and is stimulated by critical realism.⁵⁰

⁴⁷ Ibid., 104-5. Menger uses the term 'quasi' only as a suggestion (cf. *ibid.*, 105 n.11); here I will use it consistently.

⁴⁸ Ibid., 105.

⁴⁹ Ibid., 176-7.

⁵⁰ On Menger's methodology, see, for example, U. Mäki, 'Mengerian economics in realist perspective', in *Carl Menger and his Legacy in Economics*, ed. B. J. Caldwell (Durham, NC: Duke University Press, 1990); C. Lawson, 'Realism, theory and individualism in the work of Carl Menger', in *Critical Realism in Economics: Development and Debate*, ed. S. Fleetwood (London: Routledge, 1999).

5.1 First step: Carl Menger - re-contextualisation of global hunger

How would Menger explain global hunger? His conceptualisation can be graphically illustrated in a model (Figure 3):

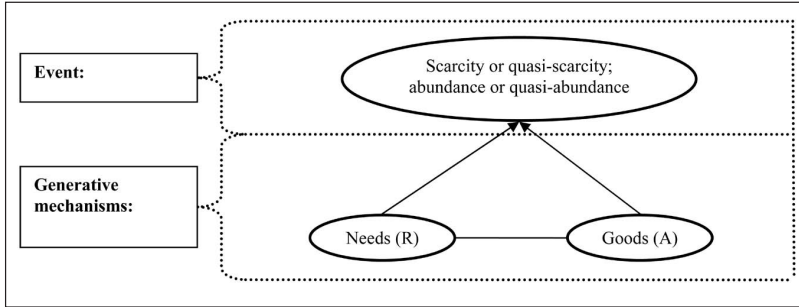


Figure 3 The first step. The Mengerian model of (quasi)scarcity and (quasi)abundance - (R-A) duality.

The model shows that scarcity or abundance as an *event* arises when goods (A) are quantitatively related to human needs (R). Consequently, when we claim that there is ‘scarcity of goods’ we must then mean, there is ‘not enough to satisfy all human needs’ in a given system. If so, frustration of human needs will occur. Accordingly, ‘scarcity of goods’ and ‘limited goods’ are essentially different. Limited resources do not automatically mean that resources are at the same time scarce. *They can be limited and scarce (insufficient), or they can be limited and abundant (sufficient)*. Limited goods are limited in the sense that there is a given quantity of such goods in a given system.

According to the Mengerian model, frustration of needs, and so global hunger, occurs in two situations: (a) an event of scarcity ($R > A$); and (b) an event of quasi-scarcity, that is, people are somehow excluded despite the quantitative relation $R < A$, abundant goods. Despite the somewhat doubtful situation of the sub-Saharan region food supply, the case of global hunger shows that there is an abundance of food goods, namely $R < A$. Subsequently, event (b) prevails. So food goods are not scarce goods; instead, they have somehow attained a kind of quasi-scarce (quasi-economic) character. Nonetheless, we have reached the explanatory limit of the Mengerian model, I argue. This model can claim that there will be frustration of needs, but cannot specify *whose* needs are going to be frustrated (respectively satisfied), and *why*. To correct this explanatory insufficiency, let us try to identify using a thought experiment the necessary conditions for the frustration of needs to occur in a system of abundance. This illuminates the next analytical effort, the second step.

5.1.1. The auction: a thought experiment⁵¹

Imagine an abstracted closed system (i.e. no other mechanisms are intervening in this system than the given) in order to examine the underlying logic, the basic mechanism, of frustration of needs in a quasi-scarce system. Visualise an auction in which all given actors are located in the same place (spatiality), with the following conditions:

(Ia) Primary conditions: actors with *equal* bidding possibility

Rules of the auction: The highest bidder acquires command over given food goods. Bidders must translate their need into the language of money.

Seller: (1) under the command of the seller there are sufficient (abundant) food goods to satisfy all the food needs in the auction and plenty more (thus, $R < A$). (2) The seller is interested in exchanging food for money, and maximisation of revenue in terms of money. (3) The seller has satisfied her food needs.

Bidder A: (4) Under the command of this bidder there is X quantity of money to acquire command over food goods. (5) This bidder has food needs and is intentionally engaged in satisfying them.

Bidder B: Equivalent conditions to those for bidder A.

(Ib) Chain of events (temporality)

T_1 – *the auction begins:* All bidders (A and B) are intentionally engaged in satisfying their needs. Accordingly, they have to translate their needs into the language of the auction and try to be the highest bidder.

T_2 – *interaction:* Both bidders A and B try to outbid each other in order to acquire command over food goods. It is impossible for them to do this, however, as A and B have exactly the same monetary possibilities and feel the same pressure to satisfy their needs. The seller sees the impossibility in the situation and decides therefore to end the bidding in a draw.

T_3 – *the satisfaction of needs:* Thus both bidders A and B transfer (exchange) an equal amount of money for an equal amount of food necessary to satisfy their needs. At this time, all actors can completely satisfy their needs in the auction.

T_4 – *post-bidding period:* After the satisfaction of all needs there are still more goods than the need for them ($R < A$). Either food goods are stocked (if

⁵¹ See N. Rescher, *What If? Thought Experimentation in Philosophy* (New Brunswick, NJ: Transaction Publishers, 2005), ch. 1, for a discussion of the limitations and possibilities of thought experimentation. See Danermark et al., *Explaining*, 101, on the compatibility of thought experimentation with critical realism.

they are durable), over-consumed, or wasted (their characterisation as goods is eliminated).

$T_{\text{etc.}}$ - *a new cycle begins*: A new cycle of bidding, interacting, satisfying and wasting begins.

(IIa) Secondary conditions: actors with *unequal* bidding possibilities

Ceteris paribus, only one additional condition is added, that is, a new actor (bidder C).

Bidder C: (6) In the command of this bidder there is Y amount of money. Compared to bidders A and B, bidder C's command over money is much less, thus $Y \ll X$.

(IIb) Chain of events (temporality)

T_1 - *the auction begins*: Equivalent to the primary conditions above (including bidder C).

T_2 - *interaction*: Bidders A, B and C try to outbid each other. Although C feels exactly the same pressure as A and B to satisfy her needs, C is being directly and chronically outbid: she has no chance of keeping up with the bidding (because $Y \ll X$ compared to A and B). The seller recognises this and thus directs attention and interest towards A and B. Bidder C is neglected. The logic of maximisation of revenue causes this. Again, it is impossible for A and B to outbid each other and the seller decides to end the bidding in a draw for A and B.

T_3 - *the satisfaction and frustration of needs*: A and B acquire food goods and completely satisfy their needs. Although food goods are not scarce in this imagined auction, because $R < A$, bidder C incompletely satisfies her needs. C goes hungry.

T_4 - *post-bidding period*: Equivalent to the primary conditions above.

$T_{\text{etc.}}$ - *a new cycle begins*: The imagined auction repeats itself. Bidder C is now once again chronically outbid in accordance with the conditions of the auction. Hence, frustration of needs occurs once again and C is now chronically hungry ...

5.2. Second step: Amartya Sen - the transfactuality of frustration of needs

What is the implication of the auction? Sen argues that starvation is:

the characteristic of some people not *having* enough food to eat. It is not the characteristic of there *being* not enough food to eat. While the latter can be a cause of the former, it is but one of many *possible* causes.⁵²

⁵² Sen, *Poverty*, 1.

This centrality is reflected in the auction. The first step (the Mengerian model) could only indicate under what conditions frustration of needs occurs, whereas the second step will do this as well as respond to the question of whose needs are going to be frustrated or satisfied. It is time to respond to the retroductive question we posed previously: what must the global socioeconomic realm be like for frustration of needs to occur in a realm of abundance? Let us think transfactually (retroduction) in order to reconstruct the underlying conditions (mechanisms) of frustration of human needs and thus the occurrence of global hunger.

I argue that there are three necessary mechanisms involved in the production of the given events. The first and the second are derived from the Mengerian model above, namely R and A. We know from global hunger that food goods are generally abundant, but still quasi-scarcity arises in respect of given individuals (bidder C), one of the main features of the thought experiment. Therefore, a third mechanism must exist in order to actualise frustration of needs. The auction reveals that in order to acquire command over goods (A) one must be the valid 'winner', or validly entitled (recognised by others). The third mechanism is something that mediates between R and A; I argue that the concept of 'entitlements' (E) is apposite for this function. E is thus derived from Sen's entitlement approach, which focuses on, 'each person's entitlements to commodity bundles including food, and views starvation as resulting from a failure to be entitled to a bundle with enough food'.⁵³ This is illustrated in Figure 4.

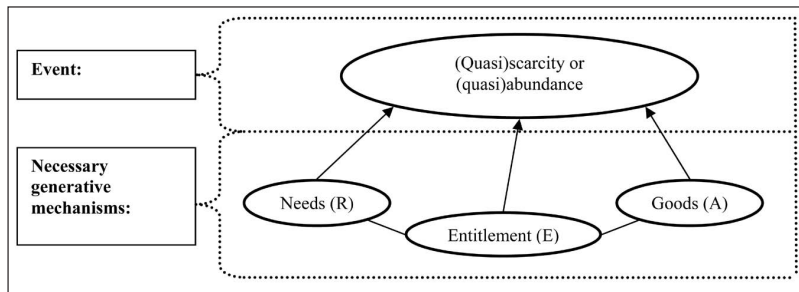


Figure 4 The second step. Sen's modification of the Mengerian model of (quasi)scarcity and (quasi)abundance: the R-E-A trinity.

This model is an elaboration of the Mengerian model; hence, it is a more complete proposal of the underlying necessary mechanism that generates (quasi)scarcity and (quasi)abundance. In the trinity of R-E-A, valid E gives

⁵³ Ibid., 45.

access to given A.⁵⁴ In this way, I argue, valid (or present) entitlement gives access to enough goods to satisfy given needs. Invalid (or absent) entitlement denies the acquirement of enough goods to satisfy given needs. Metaphorically, a valid entitlement can be seen as a key that opens up otherwise locked pantries or storerooms that are potentially filled with goods. Along this line, an invalid 'key' cannot open up locked storerooms that are potentially filled with goods. One of the central points in the thought experiment is that E is only an *indirect satisfier* (you cannot eat it) whereas A is a direct satisfier. That is, E cannot by itself fulfil or satisfy given needs. E gives only *access* to food goods. In other words, *both* valid entitlements *and* enough good are required in order to satisfy human needs in the socioeconomic domain. Consequently, as the quantitative relation is $R < A$, the suggested, general, explanation of global hunger must be invalid, or absent, E: people are denied a key that will open up the filled, pantries and storerooms. The trinity of R-E-A is a more complex relation than the duality of R-A, enfolding at the same time greater explanatory power. The mechanism of the model (see Figure 4) can attain six possible formations, creating events of either (quasi)scarcity or (quasi)abundance, at both the general system level and the lower unit of analysis situated in the system (individuals) (see Table 2).

Table 2 Six possible formations in the trinity of R-E-A implying six possible events.

Formation	Consequence	Event, on individual level	Event, on system level
(i) $R > A$ and invalid E	→	scarcity	general scarcity
(ii) $R > A$ and valid E	→	quasi-abundance	general scarcity
(iii) $R = A$ and invalid E	→	quasi-scarcity	general quasi-scarcity
(iv) $R = A$ and valid E	→	quasi-abundance	general quasi-scarcity
(v) $R < A$ and invalid E	→	quasi-scarcity	general abundance
(vi) $R < A$ and valid E	→	abundance	general abundance

According to Table 2, the quantitative relations $R > A$, $R = A$ and $R < A$ measure the needs and available goods in the *total system* (in a country, region, or globally). For example, in global hunger, A and R are given at the system level. However, the entitlements (E) are only seen from *the perspective* of the person or group of people that is in need; the relevant question is, does she or do they have valid entitlements to acquire enough goods? In our auction, the seller is validly entitled from the beginning to command given food goods (Table 2, point (vi)). The seller will thus experience abundance in a system were there is

⁵⁴ Sen does not use the terms valid (invalid). However, I believe that such terms can enhance our understanding of the issue.

general abundance. In the beginning bidders A and B will experience quasi-scarcity (T_{1-2}^-); it is not until T_3^- (when the bidding is over) that they will manage to access food goods validly (sliding from point (v) at T_{1-2}^- to point (vi) at T_3^-). Bidder C will experience quasi-scarcity during the whole process because of invalid entitlements (continuously being at point (v) at T_{1-3}^-) in a system where there is general abundance. It is suggested, in Table 2, points (i) and (ii), that although there is $R > A$ (general scarcity) in the total system, individuals with valid entitlements are individuals who are more successful and able to satisfy their needs (Table 2, point (ii)) in the socioeconomic system, compared to those with invalid entitlements (Table 2, point (i)). The more successful ones will thus experience quasi-abundance: 'quasi' because the general situation (the total system) is one of scarcity. Points (iii) and (iv) indicate a situation of uncertainty in the total system (see Menger), that is, general quasi-scarcity, and this will create ambiguity for the individual within the system. What influences one's chances of gaining valid and invalid entitlements? What is the wider contextualisation of R-E-A? In order to understand the underlying causality that conditions these mechanisms (R-E-A) we have to take a further analytical step, the third step.

5.3. *Third step: critical realism in economics – a holistic approach*

Let us now complete the analytical elaboration and synthesis, which entrains the generation of a holistic socioeconomic approach to (quasi)scarcity and (quasi)abundance. It is assumed that the logic of the imagined auction (and causality of the chain of events) is similar to the logic of the real global food market (i.e. global markets) situated in modern capitalism. The sellers are assumed to be analogous with the producers in the global food industry, and the bidders with the global population (consumers): bidders A and B represent the upper socioeconomic strata, whereas bidder C stands for the hungry and undernourished. Consequently, in reality different bidders possess different possibilities in relation to bidding and satisfying their needs. One's position in the social structure will condition one's ability to gain valid entitlements. Moreover, it is reasonable to assume that how entitlements are constituted and how they develop depend on the sociocultural structures of society.⁵⁵ This is not

⁵⁵ M. S. Archer, *Realist Social Theory: The Morphogenetic Approach* (Cambridge: Cambridge University Press, 1995), 165–70. In the contemporary system the dominant entitlements are money. But other kinds of entitlements are possible (e.g. family relations), which are not specified by Sen.

directly developed by Sen.⁵⁶ The mechanism entitlements are then anchored in these structures.

All entities are geo-historically mediated, depending on ‘geography’ (space) and ‘history’ (time).⁵⁷ Consequently, Figure 5 below (which is an elaboration of Figure 4) takes this fact into account. This is the final proposed model of (quasi)scarcity and (quasi)abundance, a multifaceted (multi-causal) and stratified one.

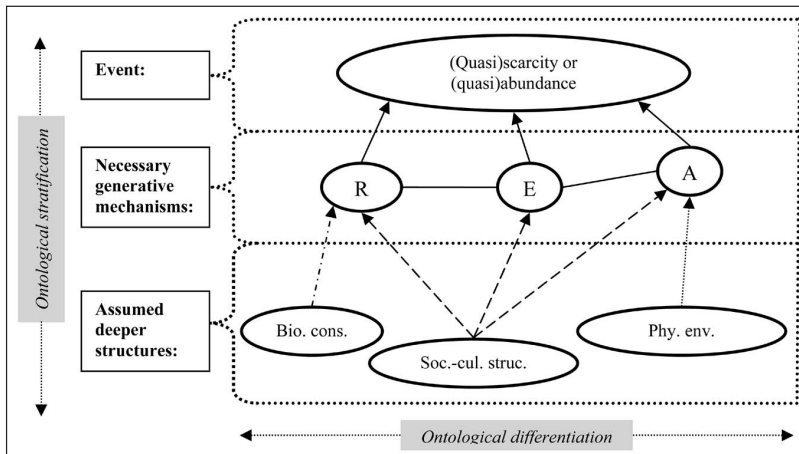


Figure 5 The third step: a proposed model. CRE's modification of the Mengerian and Senian model of (quasi)scarcity and (quasi)abundance.

The third step reflects the ontological stratification and differentiation of reality, the necessary mechanisms and assumed deeper structures, which in turn condition the event of scarcity or abundance. Furthermore, the proposed model suggests how the socioeconomic analysis of (quasi)scarcity and (quasi)abundance could be conducted (see Figure 6). First, the scientist identifies an event where frustration (or satisfaction) of needs occurs (e.g. global hunger) (arrow (c)); the analyst wonders what kind of mechanism is in play. Next, she makes an effort to answer this question and investigates the formations of the necessary mechanism (R–E–A) and pinpoints the kind of scarcity (or abundance) in Table 2 (arrow (b)), which is a preliminary explanation of the event in question. Then she again moves further in order to understand and explain the formation and the conditions of the deeper structures (arrow (a)). Still, the effects of frustration, or satis-

⁵⁶ Cf. W. A. Jackson, 'Capabilities, culture and social structure', *Review of Social Economy* 63(1) (2005), 101–24.

⁵⁷ A. Sayer, *Realism and Social Science* (London: Sage, 2000), 15.

faction, of needs are highly relevant (arrow (d)). They could lead to opposition of various types of interests in society, leading to different types of conflict or consensus, which is the very momentum of human action; this is largely unexplored in this essay – the reason for the parenthesis in Figure 6 – and so awaits further research.⁵⁸ Consequently, the direction of the chain of causality could be articulated as in Figure 6.

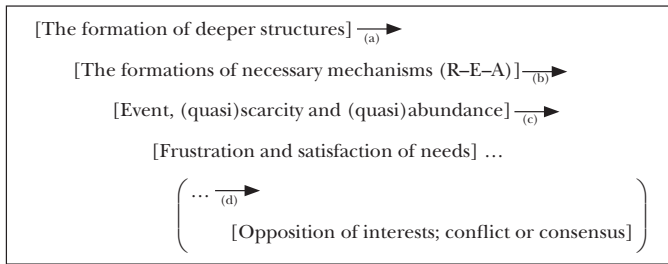


Figure 6 The chain of causality.

In this essay I have lingered at arrows (c) and (b), hence *assumed* deeper structures; the focus has not been primarily on explaining global hunger, but rather on developing a theory of scarcity and abundance. Still, let us briefly explore examples of the (assumed) deeper structures that condition the necessary mechanism in global hunger.

- *Example 1*: the physical environment conditions the general supply of A. This concerns the fluctuation and availability of supply relating from natural processes. Climatological explanations of hunger, for example, refer to ‘seasonality’, ‘global warming’, ‘cooling’, ‘drought’ and so on.⁵⁹
- *Example 2*: political stability conditions A and E, as in the case of the sub-Saharan region, where war and political instability are common.⁶⁰
- *Example 3*: sociocultural structures not only condition production (A) and distribution (E) of goods, but also people’s view of them. What we regard and define as a food good differs from culture to culture, as Sahlins argue: ‘In the United States, for example it is difficult to persuade people to buy cats and dogs for food, even though their meat is as nutritious and cheaper than other kinds’.⁶¹

⁵⁸ Cf. Menger, *Principles*, 97.

⁵⁹ S. Devereux, *Theories of Famine: From Malthus to Sen* (Hemel Hempstead: Harvester Wheatsheaf, 1993), 43.

⁶⁰ N. Alexandratos, *World Agriculture: Towards 2010, an FAO study* (Rome: FAO, 1995), 53.

⁶¹ Sahlins, *Stone Age*, 170–79, citing N. J. Smelser and R. Swedberg, eds, *The Handbook of Economic Sociology* (Princeton, NJ: Princeton University Press, 1994), 6.

- *Example 4*: our biological constitution conditions our needs. For example, age, sex and pregnancy will condition how much food we need.⁶²
- *Example 5*: property rights (and juridical structures) will affect the shape and the kinds of entitlements in society. For instance, in some hunter-gatherer societies property rights are not private, they are rather collective;⁶³ consequently, entitlements are affected in terms of validity.
- *Example 6*: cultural structures involve, inter alia, production of knowledge that will then affect the means of production. How technology is developed depends on knowledge and how it is organised depends on structurally positioned interests.⁶⁴ Consequently, mechanism A is affected.

These are only some examples of what could condition the outcome of R-E-A. The complexity described highlights the necessity to avoid a reductionism that takes into account only one type of mechanisms. As Patricia Kutzner vividly express this central point:

Nutritionists, economists, anthropologists, political scientists, sociologists, public health workers, head of state, community organisers, farmers, and agricultural scientist - all need to learn from one another, for no one profession and no one perspective has all of the tools or all of the answers needed to deal with hunger. More than ever before, the effort to end hunger is a cooperative venture among many different professions and institutions.⁶⁵

Menger and Sen do not claim that geo-historical consideration is redundant; on the contrary, I believe that they argue that it is important.⁶⁶ Still, what our synthesis effects is the explicit relation of vital concepts in one interdisciplinary theoretical framework in order to illuminate (quasi)scarcity and (quasi)abundance more fully. This will require a pluralistic methodology that is able to handle such ontological and epistemological complexities, a mission that CRE seems well suited to accomplish.

6. Conclusion

If we accept universal scarcity, we also implicitly legitimise the frustration of human needs on the basis that there is an insufficiency of goods. The reality of global hunger demonstrates that quasi-scarcity prevails rather than scarcity, that is, that there is a general abundance of food goods in the total economic

⁶² UNU, WHO, FAO, *Human*, 14, 28-9.

⁶³ Sahlins, *Stone Age*.

⁶⁴ Archer, *Realist*.

⁶⁵ Kutzner, *World Hunger*, 4.

⁶⁶ Cf. Menger, *Principles*, 102; Sen, *Poverty*, 113-31.

system but still frustration of needs occur in respect of given groups of people (see Table 2, point (v)). Therefore, the scarcity postulate of mainstream economics is an inconsistent and problematic proposition.

While the historical origins of the scarcity postulate (*viz.* Menger) are much more nuanced than the mainstream formulation, Menger's reasoning does not fully explain whose needs are frustrated or satisfied. This explanatory deficiency was complemented in the second step by Sen's concept of entitlements. Still, a third and final step was required in order to understand the wider and underlying structures that condition the mechanisms of entitlements (E), human needs (R) and available goods (A). This was achieved by critical realism in economics. If we accept this line of synthesis, then we arrive at a new approach to explaining (quasi)scarcity and (quasi)abundance that provides a holistic and dynamic framework with an invitation to interdisciplinarity and generates greater explanatory power.

Still, the critique of the scarcity postulate is incomplete, I maintain. This paper has focused solely on absolute scarcity and disregarded relative scarcity; a complete theory of scarcity would require both kinds of analysis. The study of relative scarcity especially will require a deeper understanding of consumerism and modern capitalism, which will among other things highlight the problematic relation between needs and wishes (wants). Moreover, the selected example of global hunger is chosen in order to support the arguments presented in this essay, which could be seen as a further analytical limitation. Yet this is done with one simple logical operation in mind, which exploits a deficiency of mainstream economics to raise new possibilities. Scarcity in mainstream economics is declared to be universal; analytically, to refer to *all* cases in a set. It is thus enough to find only *one* case in that set that is different (abundance) in order to falsify, or more conventionally, create serious anomalies in, this declaration. However, further research (on other cases as well as on relative scarcity and abundance) will be required in order to more fully complete the critique, the elaboration and the synthesis.

What difference do the proposed arguments make? Consider three main propositions advanced in this paper: (a) mainstream economics legitimises its practice using, among other principles, the notion of universal scarcity (which it considers its rational kernel); (b) this notion is shown to be inconsistent (c) given the new model presented. Taking these three points into account, we arrive at the claim: rather than inconsistently basing socioeconomic analysis in universal scarcity, we ought to (or, moderately stated, 'could') base it, where the focus is on scarcity or abundance, in the processes in which different groups of people, in relation to physical structures, attempt to 'create', 'maintain' and 'handle' (quasi)scarcity and (quasi)abundance in order to fulfil, or frustrate, given needs, interests or objectives; leading to explanatory critiques, if the

practices are ideologically maintained. Consequently, such analysis arrives at a new rational kernel with broader scope, embracing, for example, the analysis of how this process influences the reproduction and transformation of socio-economic structures (e.g. modern capitalism), socio-natural structures (the physical environment, sustainability), politico-economic structures (the political domain, political economy) and other domains of society (in general). This suggests the possibility that the new model is useful in understanding not only global hunger but also other types of phenomena. Furthermore, I would stress that there is an intrinsic link between (quasi)scarcity and (quasi)abundance and the notion of emancipation. Emancipation in critical realist theoretical perspective involves, according to Andrew Collier, a social science that:

also reveals human needs, their frustration, and the relation of those needs and that frustration to the social structure ... social science, then, generates practical emancipatory projects by showing there to be (a) a need, (b) some obstacles preventing its satisfaction, and (c) some means of removing this obstacle.⁶⁷

As this essay demonstrates, it is necessary on socio-scientific and emancipatory grounds to ask why events of scarcity emerge. This is a *sine qua non* of emancipatory reasoning. It is arguable that the assumption of *continuous* scarcity in ME muddies the analysis of hunger in particular and poverty in general. Bird-David claims that 'the assumption of scarcity continues to influence economic conduct in the increasingly wealthy West and thereby act to preserve poverty'.⁶⁸ In order to create practical emancipatory projects, we (as social scientists) have to develop our reasoning about real possibilities, accomplishable in our geo-historical moment. As Immanuel Wallerstein argues:

The possible is richer than the real. Who should know this better than social scientists? Why are we so afraid of discussing the possible, of analyzing the possible, or exploring the possible? We must move not utopias, but utopistics, to the centre of social science. Utopistics is the analysis of possible utopias, their limitations, and the constraints on achieving them. It is the analytic study of real historical alternatives in the present. It is the reconciliation of the search for truth and the search for goodness.⁶⁹

In the current reality, millions of children, women and men have so much food that they suffer and die from obesity. At the same time, millions of children, women and men suffer and die from hunger. There is enough food for all,

⁶⁷ A. Collier, *Critical Realism: An Introduction to Roy Bhaskar's Philosophy* (London: Verso, 1994), 182–3.

⁶⁸ Bird-David, 'Beyond', 133.

⁶⁹ I. Wallerstein, 'Social science and the quest for a just society', (1997), <http://fbc.binghamton.edu/iwquest.htm>, emphasis added. Cf. the Bhaskarian concept of concrete utopias.

but people are still hindered from acquiring enough food. Mainly as a consequence of structural conditions of sociocultural character, they lack the necessary entitlements or keys to open up locked storerooms filled with food goods. In the possible, however, everybody is granted the necessary keys. In the possible, all children, women and men can fulfil their needs and higher capabilities without fear of hunger. The possible is indeed richer than the real, but where global hunger is concerned the *real* and the *possible* can surely coincide.⁷⁰

Abbreviations

A	available quantity of goods
CRE	critical realism in economics
E	entitlements
ME	mainstream economics
R	human requirements
R < A	human requirements are quantitatively less than the available quantity of goods
R > A	human requirements are quantitatively more than the available quantity of goods
Quasi-scarcity	quasi-scarcity as such
(Quasi)scarcity	quasi-scarcity or scarcity or both

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⁷⁰ In critical realist terms, since the possible is a quality of the real, we should strictly speaking say that 'the possible is richer than the actual'.

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Paper II

Daoud, Adel (submitted). Linking Food Requirements, Entitlements, and Availability: exemplified by the 1943 Bengal Famine.

Linking Food Requirements, Entitlements, and Availability: Exemplified by the 1943 Bengal Famine¹

By

Adel Daoud

Abstract

The food entitlement decline (FED) and the food availability decline (FAD) are commonly seen as conflicting approaches to explaining famine. An important question is whether these approaches can be reconciled. Another related question is how FAD- and FED-based explanations relate to the classical Malthusian view, according to which famines arise not so much because of food availability decline and certainly not because of entitlement decline, but because of rapid food requirement increase (FRI), via a n e xponentially increasing population. The present paper analyses these questions and argues that these three approaches can in fact be reconciled under one framework by outlining the causal sources of FAD, FED and FRI. The analysis is exemplified by the Bengal famine of 1943. The wider applicability of this general account is yet to be tested in relation to other famines and ecological events (e.g., water, land, energy scarcity).

Keywords: Entitlements; Famine; Food shortage; Methodology; Population; Scarcity.

Frequently used acronyms

FAD	= Food Availability Decline
FED	= Food Entitlement Decline
FRI	= Food Requirement Increase
HASAS	= Holistic model of Absolute Scarcity, Abundance, and Sufficiency
R-E-A	= Requirements, Entitlements, and Available quantities

Introduction

There are various causal factors that can generate famine and food insecurity (Shaw 2007). The two most recognized are food entitlement decline (FED) and food availability decline (FAD). The FAD and FED frameworks are generally seen as incompatible perspectives (cf. Sen 1981). In a number of studies, various debates have raged between FAD and FED

¹ For the very helpful comments, I am grateful to Bengt Larsson, Freddy Winston Castro, and the participants of the Gothenburg Critical Realist Workshop.

sympathizers. See, for example, the Niger famine of 2005 (Rubin 2009), the Ethiopian Wollo famine of 1972-74 (Devereux 1988), the Soviet famine of 1931-32 (Wheatcroft 2007) and 1947 (Ellman 2000), the Chinese famine of 1959-61 (Kula 1989); and this debate can be found in more recent theoretical work (Alemu 2007; Khandakar Qudrat 2006; O'Grada 2008; Tauger 2009). Nevertheless, a crucial question is whether FAD- and FED-based explanations can be reconciled.

Another closely related question, but somewhat under-emphasized, concerns how FAD and FED explanations relate to the classical Malthusian view, according to which famines arise not so much because of food availability decline and certainly not because of entitlement decline (cf. Lee and Feng 1999; Wrigley 1999), but because of rapid food requirement increase (FRI). There are some overlaps between the FAD and FRI approach (most notably in terms of empirical measurements), but it seems that they involve relatively distinct underlying causal factors (the former focus being on food production, the latter on population and demographical trends). Accordingly, one of the most basic questions about famine causation concerns how FAD, FED and FRI factors are related to each other and whether they can be reconciled. I intend to explore these questions in the present paper.

I will use an actual case as an empirical example to analyse the above questions concerning FAD, FRI and FED. In order to make the analysis more concrete, I will focus on the Bengal famine of 1943. It may seem an odd choice to revisit such an old case, but I believe it is a particularly good case for three reasons. First, the basic causes of this case have been heavily disputed compared to other famines (Allen 1986; Allen 1983; Basu 1984; Bose 1990; Bowbrick 1986; Bowbrick 1987; Famine Inquiry Commission 1945; Goswami 1990; Greenough 1982; Sen 1977; Sen 1981; Sen 1986; Sen 1987; Sen 1993), and are still under dispute (Islam 2007; Tauger 2003; Tauger 2009). Second, this has mainly been a dispute between FAD and FED researchers, which makes the Bengal famine suitable given the present purpose. Thus, analysing whether this dispute can be transcended constitutes a sufficient challenge. Third, as will be demonstrated, the Bengal famine highlights the significance of FRI factors, and the importance of these factors has not been emphasized enough in the FAD and FED approaches. Nevertheless, one of the central questions addressed here is whether a reconciliation of FAD, FED and FRI into one framework will add anything new to our knowledge about the basic causes of famines, and scarcity events in general.

I will begin by emphasizing the importance of the analytical difference between an approach and a hypothesis. This will lessen some of the confusions surrounding the debate between FAD and FED. After that, I will briefly discuss the basic components of a general model of scarcity that may facilitate our understanding of the relation between FAD, FED and FRI. Hereafter, this model will be applied to the Bengal case in order to demonstrate the concrete relevance of our analysis. The paper concludes with a discussion about the wider implications of the account advanced, along with suggestions for further research and some policy recommendations.

A general framework for scarcity events

I wish to advance two propositions in this section: first, that Osmani's account of the distinction between an approach and a hypothesis is an important starting point in reconciling the FAD and FED view (Osmani 1995); second, that Daoud's account of a general framework for scarcity events, called the 'holistic model of absolute scarcity, abundance and sufficiency' (HASAS), provides an adequate basis for continuing to look at how this reconciliation could be further theoretically grounded (Daoud 2007).

Osmani differentiated between the entitlement or FED *approach* versus the FAD *approach*, on the one hand, and the FED *hypothesis* versus the FAD *hypothesis*, on the other.² The FED hypothesis proposes that 'modern famines are caused not so much by reduced availability of food, as by adverse changes in the entitlement mapping of the poor ...' (Osmani 1995, p. 260). This means that some famine cases are caused by FED and others by FAD. This hypothesis interpretation implies that a famine can either be explained by FAD or FED, but not by both.

Consequently, the FAD approach makes more far-reaching claims than does the FAD hypothesis. Osmani wrote:

The most persistent misunderstanding has been the notion that the essence of entitlement theory was to debunk the traditional 'food-availability-decline' (FAD) hypothesis of famine, and to replace it by the alternative hypothesis of entitlement failure. It is this hypothesis-view — i.e., the notion that the objective was to substitute one hypothesis of famine causation for another — that is responsible for a good deal of confusion and a lot of unwarranted criticism. In fact, what Sen was trying to substitute was not one *hypothesis* for another, but one *approach* for another. (Osmani 1995, p. 289)

Accordingly, and most importantly, the FED approach does not discredit the usefulness of the FAD hypothesis, but instead attacks the reductionist claim of the FAD approach. More precisely, in the FED approach, entitlement failure becomes the definitional centre of a famine. Consequently, it does not say a great deal about causation. It rather becomes the starting point of a research investigation. In this interpretation, according to Osmani, the entitlement approach is superior, at least conceptually, to the FAD approach. One of the reasons for this, which Osmani called 'asymmetry of impact', is that even if supply failure is a central causal mechanism in some particular case, the FAD approach can only claim that food will not be sufficient on a systemic level and cannot specify why some groups of people are affected by starvation more than others are. Hence, one central analytical conclusion of Osmani's argumentation is the following: an individual's entitlements are the mediating link between that individual and the available resources in the system he or she is embedded in (Devereux 2007; Drèze and Sen 1989; Osmani 1995; cf. Poulton et al. 2006; Shaw 2007).

I argue that Osmani's account needs to be complemented on at least two points. First, it is not clear how the FED approach could ontologically integrate the FAD hypothesis. By ontology I am basically referring to the set of presumed causal mechanisms or factors that may be active in a particular situation (Lawson 1997). Ontology could be seen as a causal map that may guide a researcher. A second problem is that the entitlement approach is committed to methodological individualism, which to a certain degree limits the possible causal influence that can be derived from social structures (De Waal 2005; Jackson 2005). The HASAS model can provide some answers, especially on the first point.

The aim of the HASAS model is to provide a framework for studying the complex relations between different stratifications of reality with regard to events of scarcity, abundance, and sufficiency (Daoud 2007; Lawson 1997). It specifies the possible underlying causes of these events, that is, the causal influences from political, economic, social, and environmental structures. The model orders the chain of causality and frames them multi-causally. In this framework, scarcity and, thus, food insecurity may arise as a consequence of various deeper or underlying causal factors (Shaw 2007). A abundance or sufficiency of food may exist on a systemic level, but despite this, scarcity may still exist at the individual level

² Osmani actually proposed three different ways of interpreting Sen's entitlements framework, namely, as a specific hypothesis, as a general hypothesis, or as an approach. But this will not to any great degree affect the general argument I am proposing. See Osmani (1995).

(Sen 1981). This is the definition of quasi-scarcity (Daoud 2007). Systemic scarcity may partly have natural causal sources (drought, cyclone, etc.), partly socio-cultural (institutional), or it may even be socially (politically) induced, artificially created, serving the ideological interests of given groups (Devereux 2007; Howe 2007). Even if the possible causes are many, the HASAS model specifies the chain of causality in a certain way.

The basic components of HASAS are outlined in Figure 1 (Figure 3, presented at the end of the paper, is an application of Figure 1; it is an ontological map of the Bengal famine). This causal model consists of three analytical or ontological layers. The first layer is the actual level; it is in this layer where different events of interest occur, which are scarcity, abundance, sufficiency and their quasi-versions. This layer is explained by, conditioned by, or analytically speaking defined by the second underlying layer.

The second layer is the generative layer. An event of scarcity (abundance, or sufficiency; and their quasi-version) is thus explained by three causal sources or necessary generative mechanisms. They are 'necessary' because they define scarcity. The first mechanism is *human requirements* (R), which is the quantification of any kind of human want or need in a given system (medicine, land, energy, water, etc.). In the present case, food needs are the main interest. These requirements are satisfied by various resources, which are referred to as *available quantities* (A). These two analytical categories define scarcity, abundance and sufficiency on a systemic level. In other words, human requirements and available quantities represent the aggregation of individual needs and goods.

The third mechanism or causal source, *entitlements* (E), mediates between a person (his or her needs) and the system (Osmani 1995). This is a necessary mechanism that determines whose needs will not be met in the event of scarcity (Daoud 2007). Entitlements should be understood in a general sense, including informal as well as politically defined transfer of resources (Devereux 2007; Drèze and Sen 1989, p.10).

The third layer of the HASAS model refers to the deeper underlying factors that condition the second layer. The third layer is much more complex than the second. It is the 'black box' of any given scarcity case. This layer focuses on structures and mechanisms that generate a specific constellation of R-E-A. For each necessary mechanism (viz. R, E or A), there is a set of underlying causes. Human requirements (R) is, for example, conditioned by population growth rates, mortality rates and reproduction (family) norms; available quantities (A) is, for example, conditioned by available land, climate, and technology; entitlements (E) is, for example, conditioned by various sociocultural factors such as class, jurisprudence and social norms. As a result, these three necessary mechanisms are conditioned by underlying factors found on different ontological strata. Consequently, the most demanding investigative efforts lie here.

It may now be clear that different hypotheses can be proposed regarding the causality underlying the R-E-A relationship (cf. Osmani 1995). FAD and FED correspond neatly to the E mechanism and A mechanism, respectively. Moreover, as the HASAS model reveals, there is a third causal source, namely the R mechanism, which can alone cause systemic scarcity (FRI). The relevance of this causal source will be demonstrated in the Bengal case. Building on this line of thought, the HASAS model provides an explicit account of the causal links between various causal sources.

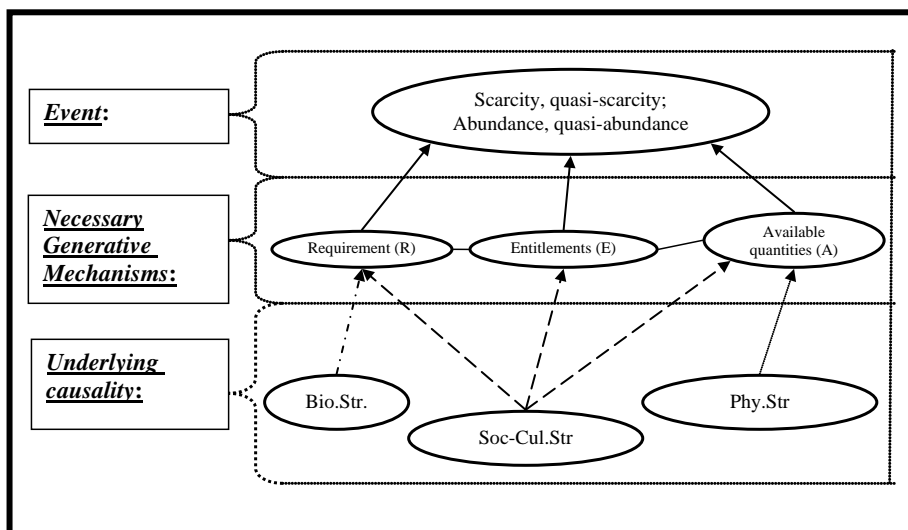


Figure 1: The Holistic Model of Absolute Scarcity, Abundance, and Sufficiency

Notes:

- | | |
|-------------|------------------------------|
| Bio.Str | = Biological strata |
| Soc-Cul.Str | = Social and cultural strata |
| Phy.Str | = Physical strata |

The 1943 Bengal famine

World War II had raged for almost four years, which conditioned the British interest in South Asia (Mansergh and Lumby 1973). The war had taken a critical turn by the end of 1941. Japan and India were officially at war on 8 December the same year. The first air raids on the Burmese city of Rangoon occurred around 23 January 1942. On 15 February 1942, Singapore came under Japanese control and Rangoon was occupied at the beginning of March. At this time, the government of India and of Bengal implemented most notably the 'Denial policy'. Surplus rice, restriction of boats, and other facilities as well as infrastructures were either purchased by the government or destroyed by the Indian military to prevent a potential invading army from benefiting from these resources (Bhatia 1967, p. 326).

The advocates of FAD regard these events as important, but merely as a contributing factor to the famine. A series of natural disasters that occurred at the end of 1942 should be seen as the major cause of the famine (Bowbrick 1986; Bowbrick 1987). The Famine Inquiry Commission wrote that 'On the morning of 16 October 1942, a cyclone of great intensity accompanied by torrential rains, followed later in the day by three tidal waves, struck the western districts of the province...the standing aman crop, which was then flowering, was in large measure damaged' (Famine Inquiry Commission 1945, p. 32). After these events, a fungus disease caused further damage (Padmanahan 1973; cf. Tauger 2003). Now even if these natural events, according to the Commission, were the primary causes of the famine this '... however, was not necessarily in itself an unmanageable problem' (Famine Inquiry Commission 1945, p. 35). It was not only the yield of the rice crop that was short, the carryover (Cr) was also smaller than normal. This shortage created further pressure on an already pressured food distribution system. Thus, these facts are regarded as central by the FAD approach (Bowbrick 1986; Bowbrick 1987).

Whether or not these causes were sufficient to bring about the famine, the events seem to have been the main reasons why traders and consumers began expecting that the next year's food supplies would be lower than normal, which provided an incentive for hoarding and speculation. Shortly after these disasters occurred, prices began rising (Famine Inquiry Commission 1945, p. 33).

The price for one maund³ of rice had doubled in December 1942 compared to January the same year. In spring 1943, prices had almost tripled compared to January 1942. By the time the first serious signs of famine occurred, at the beginning of that summer, prices had quadrupled. It was reported that in places prices had increased by six-fold (Famine Inquiry Commission 1945, p. 40, 216; Goswami 1990, p. 448; Sen 1981, p. 61). The severe price inflation was further aggravated by ineffectively coordinated government actions.

When the government of Bengal finally recognized the gravity of the situation, different actions were taken. The first and second procurement schemes were initiated to secure food supplies to Calcutta, but also to break the spiral of speculation on food prices. On 22 December 1942, controlled prices were induced and export of Bengal rice was prohibited. The aim was 'to break the Calcutta market' (Famine Inquiry Commission 1945, pp. 36-37). Further policies were pursued, which in the end would be decisive for who was affected by starvation, and thus for why the famine occurred. The main political priority, as a governmental document articulates it, was as follows:

Government agree that the maintenance of essential food supplies to the industrial area of Calcutta must be ranked on a very high priority among their war-time obligations, and welcome the decision of the Chamber to set up its own organization for the purchase and distribution of essential supplies for the industrial labour of its constituents (A letter from the Government of Bengal to the Chamber in Famine Inquiry Commission 1945, p. 30).

The government's actions stretched from December 1942 to March 1943. After March 1943, free purchase at market prices resumed, because these policies had not worked well, partly due to corruption (Basu 1984). This caused additional inflationary pressure (Sen 1981, p. 56). These measures, from controlling the market to suddenly decontrolling it, seem to have played a significant role in causing the famine. The situation was adversely reinforced by administrative chaos as well as the needs of the war economy (what Sen called a 'boom famine'), which was conditioned by the colonial relation to London (Bose 1990, p. 717). Basu underscored, 'Although all indications were here of forthcoming catastrophe, the government, its agents and private graintraders did everything to aggravate the situation further. Unless we put our emphasis on this complex scenario of politics, religion and colonialism, we will be unable to analyse the famine of 1943 in any proper perspective' (Basu 1986, p. 602). Judging from the journal of the Viceroy, Lord Wavell, who came to power at the last stage of the famine, the British government was not interested in aiding (Dad) a relatively insignificant colony, especially in the context of World War II. In one of the letters (dated 25 October 1944) from the Viceroy to Winston Churchill, we can read:

...my primary reason for writing is that I feel strongly that the future of India is the problem on which the British Commonwealth and the British reputation will stand or fall in the post-war period... And yet I am bound to say that after a year's experience in my present office I feel that the vital problems of India are being treated by His Majesty's Government with neglect, even sometimes with hostility and contempt. ... In spite of the lesson of the Bengal famine, I have had during the last nine months literally to fight with

³ One maund = 37.4 kilograms (Greenough, 1982)

all the words I could command, sometimes almost intemperate, to secure food imports. (Moon 1973, pp. 94-95)

As other causes are systematically being ruled out, the government's policy actions or inaction will be one of the few focal causes left.

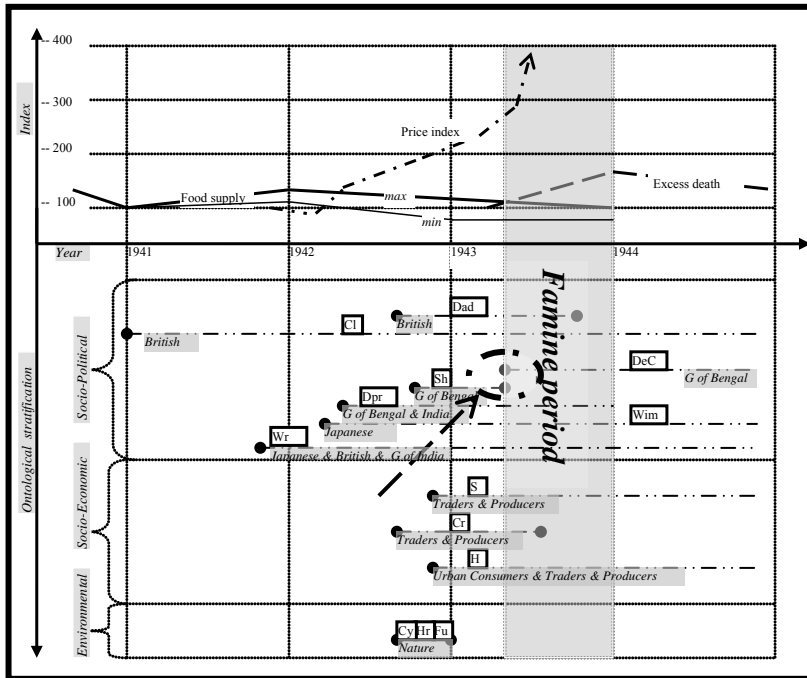


Figure 2 Diachronic analysis of the famine

Notes:

- Cl = Colonialism
- Cy = Cyclone
- Cr = Carryover.
- Dad = Denied Aid
- DeC = Decontrol
- Dpr = Defence preparation
- Fu = Fungus disease
- H = Hoarding.
- Hr = Heavy rain
- S = Speculation.
- Sh = Government schemes
- Wim = Cut or delayed Wheat import
- Wr = War

In summary, all of the relevant events are sketched in Figure 2. This figure plots two main things: the upper part shows three important indices (food price, food supply, excess death rates; the comparison year is 1941 for all three indices), whereas the lower part depicts the relevant events that could have contributed to the Bengal famine. The timeline brings these two parts together and consequently enables a diachronic analysis of the causes of the famine.

It is in March 1943 that the first serious signs of the famine began to emerge. The famine can be divided into three phases, according to Sen. The first phase stretches from the beginning of 1942 to March 1943; here the famine had yet not begun. Nevertheless, there were signs of severe economic, political and social distress. Adding the sharp food price rise, increased unemployment, wage decline, and the fear of possible Japanese aggression created some of the fundamental conditions for the famine. In the second phase, from March 1943 to November 1943, deaths directly related to starvation reached a peak. In the third phase, from November 1943 through most of 1944, the acute starvation had passed. Still, deaths related to famine epidemics (e.g., cholera, malaria, smallpox) reached a peak (cf. De Waal 1990; De Waal 2005). This was largely caused by human immune system deficiency due to malnutrition (Sen 1981, pp. 55-56). There are various estimations of the rate of excess death, ranging from 1.5 million deaths (Famine Inquiry Commission 1945, pp. 225-227) to as many as 3.5-3.8 million deaths (Greenough 1982; cf. Sen 1981, p. 52). Tim Dyson and Arup Maharatna estimated the number of excess deaths to be about 2.1 million, which falls in the middle of this range (cf. Bhrolcháin and Dyson 2007; Dyson and Maharatna 1991, p. 297).

As we can see in Figure 2, first, the government's decision to first control the market (Sh), nevertheless accompanied by defence preparation (Dpr), and cut wheat import (Wim) overlaps with a never-increasing rice price index in that time period; second, and more strongly related to the basic causes of the famine, the government's decision to suddenly decontrol the market (DeC) directly precedes the famine period, indicated by the greyed area in Figure 2 (with excess death rates). Given the presented material, it seems to me that the government of Bengal had the main responsibility for food provision for its population and is therefore accountable for not doing this in an effective manner.

Accordingly, there were human factors that played a major role in the famine, but the question is, could these human factors alone have produced a famine? What impact did the cyclone (Cy), heavy rain (Hr), and fungus (Fu) have on food availability? This brings us to the heart of the dispute: Was food actually scarce (FAD)?

On the Causal Contribution of FAD

Table 1 summarizes food supply data presented in four different studies; these four were chosen because they provide original data or innovative re-interpretations of data. 1941 is the base year. This is the comparison year because Sen assumed that this year's food supply was in fact worse than 1943, the famine year, though no famine occurred in 1941.

Table 1 Comparison over different studies on the Bengal food supply

<i>Year</i>	<i>the Commission (1945)^a</i> <i>(only rice)</i>	<i>Sen (1981)^b</i> <i>(rice + wheat)</i>	<i>Goswami (1990)^c</i> <i>(only rice)</i>	<i>Islam (2007)^d</i> <i>(rice + wheat)</i>
1938	122	123	116	115
1939	119	118	115	110
1940	121	122	115	115
1941	100	100	100	100
1942	132	131	106	116
1943	113	111	96.3	98
<i>Diff. (1943-1941)</i>	+13	+11	-3.7	-2

Notes:

- (a) See Appendix 2 in the Commission's report.
- (b) See, Sen (1981), p. 61
- (c) See, Stock adjusted rice supply, calendar year (SUPR1), see p. 455
- (d) See pp. 428, 439

Accordingly, in the Commission's view, there is '... no doubt that shortage of supplies was a basic cause of the famine' (Famine Inquiry Commission 1945, p. 77), but the estimation made by the Commission actually shows that there was 13 per cent more food in 1943 than in 1941 (rice estimations only). Sen, however, offered an adjustment of the Commission figures. He concluded that there was not 13 per cent more food, but somewhat less, 11 per cent (rice and wheat estimations). Goswami (1990) and more recently Islam (2007) have presented slightly different data. Goswami argued that there was 3.7 per cent less food available in 1943 than in the comparison year 1941 (rice only). Nonetheless, Islam claimed that this number was only 2 per cent less (rice and wheat). Islam, but especially Goswami, emphasized that FAD is an important explanatory variable that is omitted by Sen. Others concurred with this critique, but do not present any original data. Hence, the FAD hypothesis could not simply be refuted.

Nonetheless, even if we take the estimation that indicates the most severe food supply decline and that mainly focuses on rice production, namely Goswami's estimation, it seems difficult to come to the conclusion that a *dramatic* FAD occurred.⁴ Indeed, food availability was a bit lower compared to 1941, but only slightly. There were other years in which the decline had been more problematic, but with no famine as a n effect. Bhatia argued that the crop yield in 1928 was '...sufficient only for 45 weeks and in 1936, for 44 weeks. In both these years there was considerable distress but no abnormal rise in prices and, consequently, no deaths from starvation' (Bhatia 1967, p 318). In fact, the Commission estimated that the food production in 1943 should have been sufficient for 43 weeks (compared to only 39 weeks in 1941), including carry-over for about 49 weeks (Famine Inquiry Commission 1945, p. 13, 211). This is only three weeks short of weekly requirements (about 6 per cent). Nevertheless, it is difficult to be entirely conclusive about the food supply data. Though it does seem to be relatively clear that a situation of severe food scarcity (or systemic abundance of food) can be ruled out.

Accordingly, it seems plausible to claim that the food supply was sufficient (neither abundant nor scarce), what Bowbrick calls a 'first degree shortage', meaning that "there is sufficient food to provide a barely adequate diet for everyone, provided that there is rationing. If there is not, some sections of the population will suffer from serious malnutrition or starvation" (Bowbrick 1986, p. 106). In fact, this seems to be the Commission's position:

In theory, it should have been possible to distribute the total supply, even if it fell short of normal requirements, in such a way that everyone got an equal share of it and none need have starved merely as a result of foregoing a small fraction of his normal food requirements (Famine Inquiry Commission 1945, p. 77).⁵

Compare this to Ellman's (2000) illuminating study of the 1947 Soviet famine. He argued that '...for greater precision, it is convenient to distinguish between FAD₁ and FAD₂. FAD₁ famines are those in which there is no feasible division of the available food which can prevent famine... FAD₂ famines are those in which, although food availability has declined, there are feasible policies that could have prevented the famine (or at any rate substantially reduced the number of victims)' (Ellman 2000, p. 621). Thus, Ellman's FAD₂ is a preventable FAD. The Soviet FAD₂ famine bears some resemblance to the Bengal famine. This then suggests that the Bengal system had a sufficient food supply to feed the population and could have avoided mass starvation, had the appropriate socio-political measures been taken. Hence,

⁴ Severe scarcity is designated by Bowbrick as FAD of degree three. See Bowbrick, Peter. 1986. "The Causes of Famine: A Refutation of Professor Sen's Theory." *Food Policy* 11(2): 105-124.

⁵ Cf. Goswami, Omkar. 1990. "The Bengal Famine of 1943: Re-Examining the Data." *The Indian Economic and Social History Review* 27(4).

even if there was a decline in food availability, it was not particularly dramatic, and thus Goswami's findings cannot account for the huge catastrophe (Islam 2007, p. 429). This reinforces the hypothesis that the Bengal famine was produced by lack of efficient governmental interventions.

The HASAS model (see Figure 1) indicates that there are three major sources that may cause a scarcity event (R-E-A). Food availability may decline, individuals' entitlements may fail, and food requirements may increase; everything else being equal, each of these causal sources alone can cause scarcity. Indeed, an FAD₂ situation is a plausible description of the Bengal famine, which was made possible by policy failure, but further reinforced by a food requirement increase (FRI).

On the Causal Contribution of FRI

There seems to have been yet another central factor or condition that contributed to the Bengal famine and that needs to be considered vis-à-vis FAD and FED factors. In fact, some researchers have argued that food requirement increase (FRI), the Malthusian principle of population (Malthus 1826), is the main long-term factor generating famine, rather than FAD (Alemu 2007; Patnaik 1991). This involves rapid population growth that increases geometrically (FRI) while available food quantities (A) are practically static (increase arithmetically). It is true that, on a per capita basis, they give the same result (FAD and FRI), but they have very different underlying causal factors. Obviously, rapid population increase tends to generate more food insecurity, making people more vulnerable to an FAD. The point is, however, that FRI alone may create a systemic scarcity situation, without an FAD involved (Alemu 2007, p. 114). Bengal, and modern Bangladesh, seems to be more sensitive to this kind of scenario (Robinson 1974).

Indeed, increased food requirements in the Bengal system seem to have been an important contributing factor. There was a relatively rapid pan-Indian population increase, as well as one in Bengal (Pp). The Bengal population increased from 37 million in 1881 to 61.5 million in 1941 (Greenough 1982, p. 62; Islam 2007). The Bengal province, one of the world's most fertile areas, '...is no longer an exporter of foodstuffs or even self-sufficient' (Greenough 1982, p. 8); and indeed, '...a classical Malthusian situation of population outstripping productive resources developed...' (Greenough 1982, p. 62). Even during normal periods, food security in Bengal was generally low:

Population was growing rapidly, leading to increased pressure on a available land suitable for cultivation. How far agricultural production was keeping pace, with the increase in the number of mouths to be fed, is difficult to say. At the best of times, however, a section of the poorer classes, both in villages and towns, did not get enough to eat...' (Famine Inquiry Commission 1945, pp. 6-7).

A pan-Indian estimation of average annual per capita food output from 1893 to 1946 shows a decline of 32 per cent. This is mainly due to a pan-Indian population increase of 38 per cent (Bhatia 1967, p. 315), but there was an almost 61.4 per cent increase in Bengal alone (see Table 2). A major population increase occurred from 1931 to 1941, which pressured the Bengal food system further. Hence, this strengthens the validity of FRI as an important background condition of the famine.

Nonetheless, FAD₂ and FRI cannot by themselves explain the Bengal famine, because the food supply was sufficient on a systemic level. Both factors, especially FRI, provide us with some of the main causal background of the famine, but cannot account for why the famine was distributed as it was. Herein lies one of the main explanatory powers of FED. Its main aim is to provide an account of people's socioeconomic relation to the food goods available in

a given system, thus investigating who will starve and who will not (Osmani 1995). Observe that both FRI and FAD can only refer to properties of the system (viz. scarcity, abundance and efficiency on a systemic level), whereas FED focuses mainly on properties on the individual level (endowments). This is an important analytical distinction to bear in mind.

Table 2 Population growth in Bengal, 1881 to 1941 (millions)

Year	Total	Urban	Rural	Net increase
1881	37.01	2.24	34.77	-
1891	39.81	2.22	37.59	2.80
1901	42.88	2.60	40.28	3.07
1911	46.31	2.97	43.34	3.43
1921	47.59	3.21	44.38	1.28
1931	51.09	3.71	47.38	3.50
1941	61.46	-	-	10.37

Source: Greenough (1982, p. 62)

On the Causal Mediation of FED

With the distinction between the systemic and individual level in mind, we may outline the causal mediation of FED. Sen's main argument is that a considerable number of people were not required by the war economy (viz. unemployment), and those who did have a job did not receive a salary that matched the dramatic food price increase. This created severe food insecurity. Table 3 pinpoints some important details. It shows indices of exchange rates between agriculture labour and foodstuffs. Here we can see that the exchange index (wage relative to the price of rice) in 1942 to 1943 was only 32 compared to the normal period 1939 to 1940. This is thus during the worst period of the Bengal famine. This means that what an agriculture labourer could get in 1942-3 was only 32 per cent of what he or she could get in 1939-40.

Table 3 Indices of exchange rates between agricultural Labour and Foodgrains in Bengal

Year	Wage index	Foodgrains price index	Index of exchange rate
1939-40 (1940)	100	100	100
1940-1 (1941)	110	109	101
1941-2 (1942)	115	160	72
1942-3 (1943)	125	385	32
1 st half of 1943-4 (1943)	130	385	34

Source: Sen (1981, p 64)

The urban population was much more food secure compared to the rural population, because they were needed by the war economy, but mainly because they were prioritized by the government (Patnaik 1991, pp. 5-6; Sen 1981, pp. 75-78). The rural population was most affected by the deprivation. The government's main priority was to secure the country's industry (Sh) and prepare for a possible Japanese invasion. This is of course related to the fact that India was a British colony (Cl). It is arguable that the government's priorities would have been different if this condition had not been present (Law-Smith 1989; Mansergh and Lumby 1973; Moon 1973; Sen 1981).

Thus ‘having’ or ‘not having’ is a function of the entitlements in society, which are directly linked to one’s socio-economic position (family, clans, castes, gender, etc.). This results in unequal opportunities to accessing enough food. Even if Sen did acknowledge the relevance of social structures and power relations, these notions are not properly integrated into the entitlement approach (Fine 1997, pp. 630–632; Jackson 2005, pp. 120–121). Accordingly, FED cannot adequately explain the underlying power relations between the Bengal authorities, the central government and the ruling class, namely the associates of the British Empire ‘...which ultimately determines the ‘exchange entitlement’” (Basu 1986, p. 598). Thus, focusing on underlying human action and interaction in relation to famines is one step in introducing the relevance of power (Devereux 2007; Keen 1994; Shaw 2007). In the next section, I will summarize how the main FAD, FED and FRI factors interacted, as framed by the HASAS model. I will focus specifically on some of the most important underlying human actions of the Bengal famine.

A synchronic analysis of FAD, FED and FRI in the Bengal case

In summary and framed by the HASAS model, which is divided into three analytical layers, the following picture emerges (see Figure 3). On the first layer, there was an event (the Bengal famine; a scarcity situation), which is in turn divided into two levels. On a systemic level, there was a general sufficiency of food in the Bengal system. On the individual level, however, people who starved to death experienced quasi-scarcity of foodstuffs, meaning that there was enough food in Bengal, but that some people were excluded from accessing it, and consequently, starved to death.⁶

The second layer, which consists of three necessary mechanisms, directly explains the event in question. These mechanisms are requirements (R), entitlements (E) and available quantities (A). Scarcity can arise as a consequence of any of these failings, hence FRI, FED and FAD – as elaborated at the beginning of this paper. This second layer (R-E-A) defines systemic and individual scarcity, sufficiency and abundance of resources. The relationship between requirements and available quantities (R-A) defines the systemic level, whereas entitlements (E) relate the individual to the system. Given individuals’ social positions in society (based most notably on class, ethnicity, and gender), they will gain different entitlement sets. In the Bengal case, the most relevant social position or distinction is the one between *urban* and *rural*, because those who starved were mainly people from the rural area.⁷ Consequently, the worst affected groups of people were, in descending order, fishermen, transport workers, petty husbanders, agricultural labourers, raftsmen, and non-agricultural labourers (Sen 1981, p. 70). This proposition is supported by the Commission, ‘Only one section of the community suffered from starvation – the poorer classes in the rural areas. Well-to-do people, and industrial workers in Greater Calcutta and elsewhere did not go short of food in 1943’ (Famine Inquiry Commission 1945, p. 5).

The character of this second layer (R-E-A) is explained by a number of underlying mechanisms. The central question here is what explains the fact that more people in rural than urban areas were affected by famine. Why is that more important in the Bengal case?⁸

⁶ Thus, the term ‘quasi’ refers to the fact that people did not have to starve because food was enough.

⁷ This is only a crude categorization. Other social stratifications did have a role to play, such as gender, ethnicity and age; see, for example, the Famine Inquiry Commission Famine Inquiry Commission (1945) "Report on Bengal." New Delhi. Nevertheless, the urban-rural division was the central social distinction.

⁸ In other famines gender Gladwin, Christina H., Anne M. Thomson, Jennifer S. Peterson, and Andrea S. Anderson. 2001. "Addressing Food Security in Africa Via Multiple Livelihood Strategies of Women Farmers." *Food Policy* 26(2): 177-207. or ethnicity Flint, Julie, and Alexander De Waal. 2008. *Darfur: A New History of a Long War*, Zed Books, in association with International African Institute, London may play a more central role.

In order to answer this question, we can divide this layer into focal actions, peripheral actions and general conditions (Archer 1995, p. 160).⁹ Accordingly, actors and their actions are seen as one of the most important underlying mechanisms in this analysis (Devereux 2007; Keen 1994; Macrae and Zwi 1994; Shaw 2007). This is because even if FAD occurs, the question is how to countervail it effectively. It is mainly human actors that can bring about famine, intentionally or as an unintended consequence; it is also only human action that can countervail certain famine threats arising from human (conflict) or non-human forces (climate shocks) (Howe 2007). Given the presented material on the Bengal famine, one of the central questions is: 'How was the Bengal famine possible given that there was enough food?'

There are at least five central actors that had the power to cause or evade a famine. The first actor was the Japanese army. Its main goal was to prevail against the British and thus against India. They wanted to undermine the British and possibly invade Bengal, and thus a famine may have served that purpose. They managed to cut wheat import (Wim) to Bengal. The Japanese army carried out some air raids on Calcutta, which forced the British to make extensive defence preparations (Dpr) (Famine Inquiry Commission 1945, p. 37). Nevertheless, because there was enough food in the Bengal system, the actions of the Japanese cannot be seen as a focal point in explaining the famine – their actions were peripheral.

The second actor (or set of actors) was the traders and producers. Some researchers regard the actions of the traders and producers as being responsible for the huge price inflation and thus as the main cause of the famine, that is, market failure (Ravallion 1987). This was achieved through extensive speculation (S) and hoarding (H) – urban consumers were hoarding as well in order to secure their livelihood. It is true that the huge price inflation cannot be accounted for without acknowledging that there was a great deal of speculation going on, but their actions were not unusual. In a capitalist system, traders always want to maximize profit, as a default. They maximize in non-famine situations and famine situations alike. Thus, they were exercising the same kind of causal pressure on the market as they would in a normal situation, when of course no famines necessarily occur.

The third actor was the British authorities. They did not aid (Dad) the Bengal people when needed. Their main interest was in countervailing the Japanese threat and maintaining control over India. One might argue that aiding Bengal would have given them some goodwill in a politically and socially unstable area. This is true, but because there was enough food in the Bengal system, their actions or inaction cannot be counted as focal in explaining the famine.

The same argument is valid for the government of India, the fourth actor. They induced, as part of defence preparations, a denial of trade between the various provinces of India, but given that there was in fact enough food in the first place, this will also be considered a peripheral action. They did have, of course, an important role to play in what courses of action the fifth actor would take.

It is mainly the fifth actor, the government of Bengal, that directly triggered the famine period. Once that happened, it had also the main responsibility and power to introduce effective famine relief, but failed to do so. As shown in Figure 2, the transition point between controlling (Sh) and decontrolling (DeC) the food market marks the point at which excess death starts to rise. It is this *sudden shift in priorities* that should be seen as the focal action that explains the Bengal famine. As described earlier, the government's priorities were

⁹ These general conditions can be roughly divided into social and natural conditions, see figure below. A condition should be seen as a central causal background factor that precede social interaction but that does not necessarily determine or explain that interaction (Archer, 1995). By social conditions I mean those conditions that essentially depends on human action or interaction (e.g. colonialism), whereas by natural conditions I refer to those conditions that are not dependent on such actions (e.g. fungus disease).

directly oriented towards maintaining food supplies to the industrial areas of Bengal, which then favoured the urban and disfavoured the rural population.

This shift in priorities was in turn heavily conditioned by the British colonial apparatus (CI).¹⁰ Late actions to alleviate the distressed situation in 1943 were partly due to this; Bose argued that the 'Governor's claim that the government simply did not have the food to give the prescribed ration must be viewed in the light of the colonial state's sense of priorities... The government of India were unable to impress upon London the desperate need for external supplies. The famine was not even officially acknowledged in the British Parliament until October 1943.' (Bose 1990, p. 717). Hence, the colonial relations cannot be overlooked in the Bengal famine (cf. Marx 1853). The priorities of the Bengal government were influenced by the central government of India, which in turn was shaped by the British Empire (Basu 1986).

Moreover, the increase in the Bengal population (Pp) occurred mainly in the rural areas, making this group even more vulnerable to food insecurity (FRI). This is a crucial causal background condition. The government prioritized the livelihood (food security) of the urban population over that of the rural population. The entitlement of an urban individual was thus enforced by two factors: the government (Sh) and the demand on labour market. Indeed, as the famine inquiry commission wrote '...an even more serious failure [FAD] had occurred only two years before in 1941, and had led to nothing more serious than a state of scarcity which was successfully alleviated by the usual relief measures.' (1945, p. 35). Now, even if the exchange entitlements of rural population declined (market exchange), the inaction of the government to secure other kinds of entitlements for the rural population must be seen as crucial to explaining why FIED occurred: No transfer entitlements via a viable policy or extended entitlements via informal channels were used.

Accordingly, population increase (Pp), colonialism (CI), and climate shocks (Cy, Hr, Fu) should be seen as important background conditions of the famine, but it is mainly the government priorities that should be viewed as the focal explanation for why the famine occurred.

¹⁰ There are some indications about corruption and a power struggle within the government of Bengal, which may have caused conflicting priorities. Basu even argued that 'One can very well prove the link between the government and the grain-traders, and can show that the price control and trade control policies were there to help the grain traders to earn more profit which the bureaucracy even at the highest level did certainly share... government both central and provincial was guilty of making profit at the expense of the starving people.' Basu, Dipak R. 1984. "Food Policy and the Analysis of Famine." *Indian Journal of Economics* 64(254): 289-301..

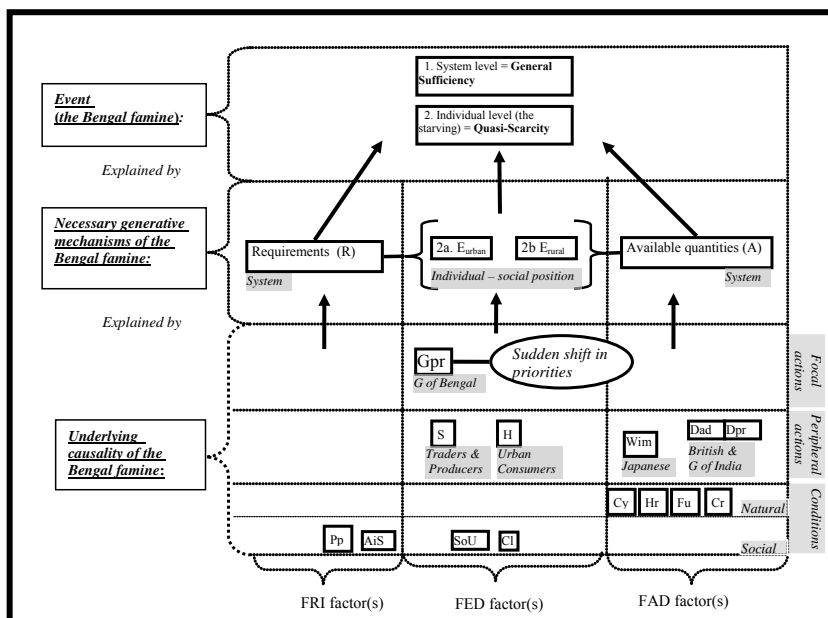


Figure 3 Synchronic analysis: application of the holistic model of absolute scarcity, abundance, and sufficiency (HASAS) to the Bengal famine.

Notes:

- AiS = All-India situation
- Cl = Colonialism
- Cy = Cyclone
- Cr = Carryover
- Dad = Denied aid.
- Dpr = Defence preparations
- Gpr = Government priorities.
- E_{urban} = Entitlements of the urban population
- E_{rural} = Entitlements of the rural population
- Fu = Fungus disease
- H = Hoarding.
- Hr = Heavy rain
- Pp = Population increase
- S = Speculation.
- SoU = Social unrest
- Wim = Cut or delayed Wheat import

Implications: further research and policy recommendations

In the present paper, I have argued that competing accounts of a famine could be incorporated under one ontological framework of events of scarcity, abundance and sufficiency (the HASAS model). This was achieved in three analytical steps. As a first step, we recalled the analytical distinction between an approach and a hypothesis. It was then argued that the FED approach is fully compatible with the FAD hypothesis – as well as the FRI hypothesis. This is in fact Sen's position, 'The links between food availability and entitlements are indeed numerous and of ten important' (Drèze and Sen 1989, p. 26). As a second step, it was demonstrated that O'Smani's account could be clarified and generalized further using the HASAS model, which views causality in a holistic way (Daoud 2007; cf. Mallory 1926; Shaw 2007). This model offers an ontological or causal map of scarcity, abundance and sufficiency.

As a third step, the paper applied the first and second steps to an actual case, namely the Bengal famine, in order to test the applicability of this account.

In theory, the HASAS model shows that there are three causal sources of any given famine or scarcity event. This model is defined by the R-E-A relationship, which, in turn, specifies four main causal combinations: that is, different combinations of R-E-A.¹¹ Everything else being equal, available quantities (FAD) may dramatically fall, the population may grow at an exponential rate (FRI), or entitlements (FED) may fail because of socioeconomic exclusion. In some complex famine cases, as the Bengal famine, elements of all three are likely to be active (cf. Macrae and Zwi 1994). The main investigative effort, however, should be directed at the underlying causes of these three causal sources, which constitute the ‘black box’ of any given scarcity case. In the case of Bengal, FRI was an important causal condition, but it was mediated via FED. It is FED that accounts for this famine (urban vs. rural distinction). These conditions, in turn, were explained by a number of factors, but most notably by the fact that the government of Bengal made a sudden shift in policy priorities. In other cases, different social distinctions are surely more relevant, such as ethnicity, gender, and class. These will then define what entitlements a group of people will have, and what resources they may access.

One might ask what bearing the present paper has on contemporary famine cases. One of the main points of the HASAS model is to structure the chain of causality – thereby providing a map of potential causal sources and directing research as well as policy efforts accordingly. The model asks ‘what or who may cause scarcity’ and ‘how do these factors affect the R-E-A relationship’. For example, the 1998 famine in Bahr al-Ghazal, Sudan, was largely caused by civil war (Deng 1999), similarly to previous famines in the region (Keen 1994), which was conditioned by international interests in the area (Deng 2002). The military forces of the Sudanese central government intentionally targeted and destroyed agriculture resources in Southern Sudan in order to gain strategic military advantage. These forces did not only want to starve the rebels to death, but also to destroy the way of life of the Dinka people and deprive them of their assets. The underlying causes of this famine are rooted in complex political, economic and social processes dating back at least to the time of the presence of British colonialism (De Waal 2005; Deng 1999; Flint and De Waal 2008). Looking at the total Sudanese system, there seems to be enough food (no FAD) (Deng 2002), but because of the direct destruction of endowments in the local Bahr al-Ghazal, people’s livelihoods (production entitlements) were adversely affected (local FAD).

Now, if the Bengal famine could be explained by some FRI factors but mainly by FED factors, then it seems the Sudanese famine could be explained by local FAD (driven not by climate shocks, but by intentional human actions). A situation similar to the Sudanese case occurred in the Ethiopian Wollof famine, in 1973. In this case, endowments were not destroyed by intentional human actions, but by drought (Sen 1981, pp. 111-112) – generating a local FAD mediated by FED. Similarly, the Ethiopian famine in 1999-2000 was triggered by drought (which then contributed to an FAD) and mediated by FED. Nevertheless, other factors in the complex emergency situation (mainly the war with Eritrea) conditioned the Ethiopian people’s entitlements further (Hammond and Maxwell 2002; Macrae and Zwi 1994). The Soviet famine of 1947 was in some respects very similar to the Bengal famine, in so far as appropriate government measures could have averted a famine, ‘...had the priorities of the government been different, there might have been no famine...’ (Ellman 2000, p. 603). Instead, adverse changes in people’s entitlement led to FED. Hence, what the HASAS model suggests is that researchers need to focus on the R-E-A relationship and on

¹¹ 1. Solely R; 2. R&E; 3. R&E&A; 4. R&A; 5. solely E; 6. E&A; 7. solely A; which is seven combinations.

However, if we strictly follow Osmani’s account, E will always mediate and thus be an active mechanism. This would leave us with four possible combinations.

investigating its underlying causes. A large portion of the analysis should be devoted to human actions and interactions, in addition to climate shocks (Archer 1995; Devereux 2007).

One of the most interesting research areas is that the HASAS model lends itself to its comparative studies of famine and other kinds of scarcity situations (e.g. water, land, fishery) (cf. von Braun, Tesfaye and Webb 1999). The basic question is how different causal factors affect the R-E-A relationship in each case, and what lessons can be learned from this comparison. As sketched in Table 4, each causal source in the R-E-A relation has underlying causal factors. Entitlements of individuals or groups of people are conditioned by a number of factors (e.g., class, gender, ethnicity, social policy, etc.), which could then be compared over a given number of famines or similar cases. In the Bengal famine, some of the central causal factors affecting entitlements were changes in individuals' social position (rural or urban) relative to working opportunities (due to the war economy) and the government's social policy (schemes). Available quantities of food or similar (A factors) are conditioned by, most notably, arable land, technology, policy, and ownership of capital. Requirements for food or similar (R-factors) are conditioned by, for example, demographic changes, social norms, education, and family policy (cf. Basu and Amin 2000; Connelly 2006). Of course, the qualitative character of each scarcity case specifies the underlying causal factors, as sketched in Table 4.

Table 4 a sketch of a comparison matrix

Causal factors		Case		
		famine A	famine B	famine C
R-factors	Fertility/death rates			
	social norms			
	family policy			
	education			
	etc.			
E-factors	class			
	gender			
	ethnicity			
	social (labour) policy			
	etc.			
A-factors	arable land			
	technology			
	agriculture policy			
	Ownership of capital			
	etc.			

The HASAS model is articulated as a general approach to scarcity events, famine being only one such event. Another research implication or suggestion is to investigate the link between food (security) scarcity and other kinds of scarcities (e.g., water, land, housing, energy, education, and health care). For example, water scarcity is a growing global problem (Brown 2009). It causes poor sanitation and health problems, and water is of course crucial to food production. Similar to famines, different segments of the population have different water security. Thus, an interesting research project is to investigate the link between food and water scarcity – as structured by the HASAS model. One commonly studied causal link is how water scarcity affects food scarcity in terms of agriculture as well as basic sanitation (De Waal 2005); but another link that is less studied is what similarities and differences there are between water and food scarcity as such – as cases of scarcity. What theoretical and policy lessons can we learn by comparing different scarcity cases?

There are surely a number of interesting hypotheses to test. One that is rather likely to be valid is the hypothesis that those social groups that tend to have higher food insecurity also have higher water insecurity. A probable explanation is that they are not entitled to enough water resources (water entitlement decline, WED), even if there is enough water in the system (no water availability decline, WAD), and even if aggregate demand has increased somewhat (water requirement increase, WRI). A more general hypothesis is that the same social groups that are vulnerable to food insecurity are usually vulnerable to socioeconomic exclusion from accessing basic resources in society (resource entitlement decline, RED), even if there are enough resources on a systemic level (absence of resource availability decline, RAD). This is indeed the definition of poverty, and it calls for an approach that focuses on livelihood security (Coates et al. 2010; Dasgupta 2000; Jaspars and O'Callaghan 2010; Young and Maxwell 2009). More research is certainly needed on these issues.

At the core of these types of scarcities are often some kind of failure of human action (policy, institutional), unintended consequences (trade off between different priorities), or intended human action (war, siege, sanctions), what have been called priority regimes (Howe 2007). As Keen argued one needs to ask questions about the power relations that cause famine, 'what use is famine, what functions does it assure, in what strategies is it integrated?' (Keen 1994, p. 12). For this reason, policymakers need to focus on how their actions affect the R-E-A relationship (that might lead to FAD, FED or FRI), as shown in the case of Bengal. There is always human action or inaction underlying scarcities. As Dréze and Sen writes:

The points of overriding importance are: that there is no real evidence to doubt that all famines in the modern world are preventable by human action; that many countries—even some very poor ones—manage consistently to prevent them; that when people die of starvation there is almost invariably some massive social failure (whether or not a natural phenomenon had an initiating role in the causal process); and that the responsibilities for that failure deserve explicit attention and analysis, not evasion (Dréze and Sen 1989, p. 47).

This in turn calls for an intellectual progression, '... from old famine' to 'new famine' thinking requires two paradigm shifts: from famines as failures of food availability, to failures of access to food, to failures of accountability and response' (Devereux 2007, p. 9). This involves thinking about humanitarian projects and how they fit into a wider global social and political climate (Miner and Smith 2007). As suggested by the HASAS model, accountability and response are linked to not only the evasion of FAD and FED, but also FRI (cf. von Braun, Tesfaye and Webb 1999, p. 52 ff.). Considerations of FRI factors seem to be somewhat implicit or even missing.

For example, explicit consideration of FRI factors seems to be missing in the concept of food security used by major organizations (see Food and Agriculture Organisation and the Food Insecurity and Vulnerability Information and Mapping Systems, FIVIMS) (Shaw 2007, p. 383 ff.). According to the FAO, the definition of food security consists of four dimensions, that is, food availability, food access, utilization (food preparation) and stability (FAO 2008). This can be compared to the three causal sources of the HASAS model, namely requirements, entitlements and available quantities (R-E-A). Only two of three causal sources are covered. As argued in the paper, the increased aggregate food requirements of a society do affect individuals' food security in a fundamental way (FRI). It is true that the measuring of FAD and FRI are effectively the same thing on a per capita basis (the ration between food needs and food production), but the underlying causes are very different of FAD and FRI. Subsequently, policy recommendations would also follow. If food requirements were increasing due to a rapid population increase, one would recommend a different set of policy measurements (e.g., family planning) than if food availability were declining due to drought

(e.g., aid or technological development). Hence, the actual underlying causes of a famine or food insecurity are central to what kind of policy measurement one should recommend. All three causal sources, not only food availability and food access, are needed in order to assemble effective policy measures.

Accordingly, the HASAS model provides a framework in which central insights into FAD, FED and FRI can be used simultaneously. This is one of the strengths of the HASAS model, namely, that it bridges the ontological gap between opposing causal *approaches*. All in all, a multi-causal model calls for interdisciplinary research and encourages a mixed-method approach. As Shaw argued, 'In essence, food insecurity is now being seen as the eye of the storm of interlocking national and global concerns to which it contributes and whose solution lies in tackling those concerns holistically' (Shaw 2007, p. 383). That said, the HASAS model suggests that various scarcity cases (famines, poverty, water scarcity, land scarcity, and the like) could be understood through a similar framework, but conditioned by a plurality of causes. More research is indeed required to unveil new causal links.

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Paper III

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The *Modus Vivendi* of Material Simplicity: Counteracting Scarcity via the Deflation of Wants

Adel Daoud

Department of Sociology, University of Gothenburg, Sweden

Abstract This paper studies how voluntary material simplicity may counter-veil the causal effect of relative scarcity generated by the environment of a consumer society. Analyses of both interviews and texts were performed. It is shown that voluntary material simplifiers manage, though with difficulty, to neutralize the causal effect of consumer society. This is achieved by mediating the cultural properties of the economic ethic of material simplicity, which promotes the deflation of human wants. These simplifiers consequently manage, though with difficulty due to causal interference, to deflate their material wants and maintain them below their material means. Consequently, they actualize the *modus vivendi* of material simplicity; namely, a practical state of relative abundance. One major implication of this study is that the scarcity postulate of mainstream economics is problematically formulated. Hence, the development of a new model of relative scarcity and abundance encourages an explanation rather than an assumption of scarcity.

Keywords: relative abundance, consumerism, economic ethic, voluntary material simplicity, relative scarcity

INTRODUCTION

A generally accepted property of the “consumer society” is that its causal environment contributes strongly to the inflation of human material wants (Bourdieu 1986; Campbell 1987; Danner 1974; Dolfsma 2004; Etzioni 1998; Fine 2002; Galbraith 1958; Kasser 2002; Kasser and Kanner 2004; McKendrick *et al.* 1982; Sassatelli 2007: 74; Veblen 1994; Xenos 1989). Yet the processes by which wants are created and sustained are not well understood (Campbell 1987: 202). Since Veblen (1994), it has been widely

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accepted that inflation of wants has much to do with “the importance of material objects as signs of relative social status” (Xenos 1989: ix). But if one accepts that people do not passively enact the dominant value systems of their cultures, but rather have potential to shape their own strategies for navigating through economic life, then it becomes important to investigate how and why people accept or reject social pressures to *consume more* (Etzioni 2004; Gandolfi and Cherrier 2008). Understanding the processes that regulate the balance between people’s wants and their material resources is of fundamental importance for economic theory. Mainstream theory takes wants to be always unlimited relative to resources, so that *universal scarcity* is a chronic and inevitable feature of economic life. However, if wants are subject to human fashioning, it becomes possible for people to achieve *relative abundance* by deflating material wants.

To gain insight into the processes whereby people manage the balance between their wants and their resources, this paper examines how individuals who practice an *ethic of material simplicity* manage to countervail or neutralize the strong causal pressure of consumerism. The ethic examined is Voluntary Material Simplicity (VMS)—a set of strategies and practices associated in the Western world with Elgin (Elgin and Mitchell 1977; Elgin 1993), but which also share essential cultural propositions with various philosophical and spiritual systems, most notably Buddhism (cf. Schumacher 1975; Shama 1996; Rudmin and Kilbourne 1996; Grigsby 2004; Buell 2005; Saintilan 2008). While there has been a good amount of previous research on voluntary material simplicity as a social phenomenon or movement,¹ there has been little investigation of VMS as a matter of endogenous formation of tastes (cf. Dolfisma 2002), whereby people shape their own wants relative to the material resources they think they ought to be consuming in a normative sense.

A central argument of this paper is that VMS calls into question the contrast usually drawn in mainstream economics between scarcity and abundance. The postulate of universal scarcity holds that society is utterly deficient in resources: food (Samuelson and Nordhaus 2001), money, time (Becker 1965), or virtually anything (Robbins 1945), and this situation exists even in the afterlife (Gordon 1980). However, this paper argues that

¹ Thus, previous work has examined connections between VMS and ecological lifestyles (Iwata 2006; McDonald *et al.* 2006), ethical consumption (Huneke 2005; Shaw and Newholm 2002), car sharing (Jonsson 2006), voluntary reduction of working time and income or “downshifting” (Schor 1999; Huneke 2005), comparisons between “simplifiers” and “non-simplifiers” (Craig-Lees and Hill 2002), eco-villages (Jonsson 2006), popular definitions (Johnston and Burton 2003), and different levels of intensity of practice (Etzioni 1998).

Marshall Sahlins' findings for hunter-gatherers—people living principally *outside* the causal pressure of consumer society—can also be true for people living *inside* this society:

For there are two possible courses to affluence. Wants may be “easily satisfied” either by producing much or desiring little . . . the gap between means and ends can be narrowed by industrial productivity. But there is also a Zen road to affluence, departing from premises somewhat different from our own: that human material wants are finite and few, and technical means unchanging but on the whole adequate. Adopting the Zen strategy, a people can enjoy an unparalleled material plenty—with low standard of living. That, I think, describes the hunters. (Sahlins 1972: 1–2)

The paper is divided into three sections. The first discusses the economic ethic of material simplicity, understood to be a set of ideas advanced and circulated at a cultural level about how and why people should aim to deflate their material wants relative to levels seen as normal in consumer societies. Particular attention is paid to three texts viewed by proponents of VMS as offering compelling rationales for simplifying, namely Duane Elgin's *Voluntary Simplicity* (1993) and two Tibetan Buddhist texts: *Cutting through Spiritual Materialism* (2002) by Chögyam Trungpa, and *Open Heart, Clear Mind* (1990) by Thubten Chodron. The second section discusses what we call the *modus vivendi* of voluntary material simplicity—that is, the set of practical ways of thinking and acting that enable people to organize their everyday lives around the ethic of simplicity. Evidence is presented from in-depth interviews with three practitioners of VMS that provide valuable insights into the means by which people succeed in deflating their wants and scaling back their material lifestyles in ways that have improved their individual welfare. The third section returns to the question of how to conceptualize “wants” if resources should be understood not as universally scarce but rather as potentially relatively abundant, by extending the holistic model developed by Daoud (2007).

THE ECONOMIC ETHIC OF MATERIAL SIMPLICITY

The practice of VMS, which is spreading among the middle classes of the Western world, represents a key example of an *economic ethic of material simplicity*—by which we mean the cultural structures that enable people to deflate their material wants (Archer 1996; Jackson 1996; Mischel 1997; Swedberg 1998). Here, “wants” are defined as empirical manifestations of deeper human properties, which are not inherent but rather reflect sets of

cultural structures that condition people’s behaviors, including ideas, attitudes, values, norms, and strategies (Hunt 2005; Lawson 1997: 279; O’Boyle 2005; Starr 2004). Taken together, the cultural structures used to deflate wants constitute an *ethic* that enables people to make their material resources abundant relative to their wants—a condition we refer to as *relative abundance*.

In contemporary discussions of material simplicity, there are several overlapping discourses that attach personal or social gains to simple material lifestyles (cf. Badiner 2002; Rosenberg 2004; Saintilan 2008). As shown in Figure 1, Voluntary Material Simplicity (VMS) is a subset of all material-simplicity discourses, which range from ascetic Christianity (Rudmin and Kilbourne 1996: 190), to deep ecology (Lauer 2002), to certain indigenous cultures (Sahlins 1972). Buddhism in general associates a materially simple lifestyle with the path to happiness in a way that overlaps with Elgin’s view. Western Tibetan Buddhism, which has emerged as an antithesis to the striving and longing of Western consumerism and preoccupation with status, overlaps in particular with Elgin’s VMS. In noting the commonalities between the two, Elgin writes that, “In Buddhism, there is a conscious emphasis on discovering a middle way through life that seeks balance and material sufficiency. The soulful value of the simple life has been recognized for thousands of years” (Elgin). We focus on this approach to material simplicity because it spans both secular and spiritual discourses and

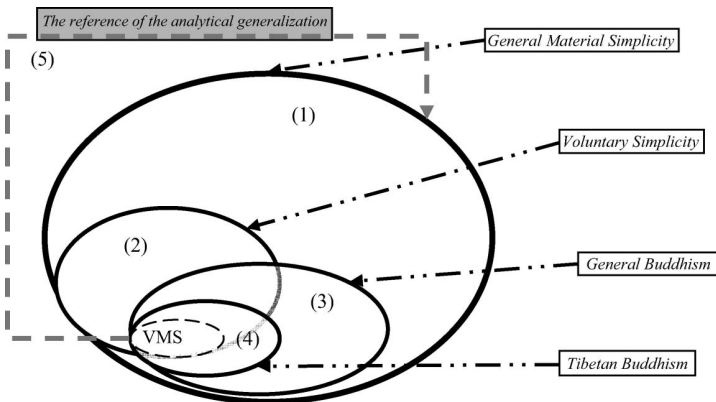


Figure 1: A Set Theoretical Approach of the Subject of Inquiry and the Reference of the Generalization

Note: Naturally, the sets are not according to scale.

combines both Western and Eastern elements, thus hopefully providing insights that are relevant to other approaches as well.

The deflation of material wants is a central theme in the writings of Elgin and those of Tibetan Buddhist thinkers such as Chögyam Trungpa and Thubten Chodron, whose books are commonly cited as influential by proponents of Voluntary Material Simplicity. Accordingly, writers such as Chögyam Trungpa and Thubten Chodron should be seen as Tibetan Buddhists who have been influential in the development of Western Buddhist thought. Following Thoreau, Elgin (1993: 48–49) argues that “[A person] . . . is rich in proportion to the number of things which he can afford to let alone.” In Buddhist thought, attachment to a multiplicity of desires or wants is held to be the very source of suffering, as expressed in the Four Noble Truths (Alt 1980; Herman 1979). The Four Truths hold that, first, “existence is suffering”; second, “the cause of suffering is desire (attachment)”; third, “the end of suffering comes with cessation of desire”; and, fourth, “Nirvana is attained through the Eightfold Path” (World Encyclopaedia 2005).

There are strong parallels in the writings of Elgin, Trungpa, and Chodron about their view of the problem of wantingness, the frustration it might create and how to remedy it (cf. Ishii 2001), for example:

Civilization, in the real sense of the term, consists not in the multiplication, but in the deliberate and voluntary reduction of wants. This alone promotes real happiness and contentment. (Elgin 1993: 48, citing Mahatma Gandhi)

Instead of battling the world with a dissatisfied mind that continually wants more and better, we'll transform our attitude so that whatever environment we're in, we'll be happy and will be able to make our lives meaningful. (Chodron 1990: 20–21)

Each time there is a desire there is another birth. You plant wantingness, wanting to do something, wanting to grasp something . . . Birth here means the birth of further confusion, further dissatisfaction, further wanting. For example, if you have a great desire for money and you manage to get a lot of it, then you also want to buy something with that money. One thing leads to the next, a chain reaction, so that desire becomes a kind of network. You want something, want to draw something into you, continually. The experience of shunyata, [emptiness] seeing precisely and clearly what is, somehow cuts through this network, this spider's web, because the spider's web is woven in the space of desire, the space of wanting. (Trungpa 2002: 199–200)

For Chodron and Trungpa, the main goal for achieving happiness is found in the diminution of all types of desires or wants of both material and

immaterial character. For Elgin, too, the main focus is on the reduction of material wants. The effect of wantingness is not only suffering (Chodron 1990; Trungpa 2002), but also environmental destruction (Elgin 1993: 170–190) and social inequality (Elgin 1993: 37–45). Here, suffering does not mean great pain, but rather an unsatisfied mind, or frustrated wants:

Translating the first fact as “the truth of suffering” can be misleading, for the term “suffering” connotes great pain. Thus, when we hear that the Buddha said life was suffering, we wonder what he was talking about, for most of us don’t experience extreme misery most of the time. Actually, the Pali and Sanskrit term *dukkha* connotes that things aren’t completely right in our lives. Something is amiss; there are unsatisfactory conditions in our existence. Most of us would agree with this We experience unsatisfactory situations: we don’t get what we want, or we get what we don’t want. While we have to work hard to obtain what we like, what we don’t like comes effortlessly, without our having to ask or work for it! Even when we get things we desire, they don’t last forever. Our possessions break or go out of style. (Chodron 1990: 130)

Elgin (1993: 145–152) acknowledges this, but is more concerned with the social and environmental consequences of attempting to satisfy all the material wants that consumer society seeds within us (Elgin 1993: 164–194). Excessive material production and consumption bring about the destruction of the environment and create inequality. It is not until the falseness or emptiness of these planted seeds is perceived that people can become emancipated. Chodron and Trungpa argue that this insight is gradually achieved by following the *Dharma*, the teachings of Buddha. For Elgin, however, the *Dharma* is one way of several for the achievement of happiness (Elgin 1993: 83).

To Chodron and Trungpa in particular, fortification of the ego is the root of the problem. To affirm a person’s own existence, various dreams and fantasies are created (wantingness). This generates attachment to objects and subjects (Chodron 1990: 107–108). However, in the process of attempting to satisfy a want, new wants are produced. Very soon, a person’s wants reach proportions that are beyond that person’s reach (relative scarcity), and a state of general dissatisfaction is created. Trungpa describes this process with a restless monkey metaphor (Trungpa 2002: 128). In this passage, the monkey anxiously tries to satisfy his hunger for various wants, but only finds a *mirage of wants*:

Now he [the monkey] experiences great hunger for more pleasurable, spacious conditions and fantasizes numerous ways to satisfy his hunger. He may imagine that

he sees far away from him some open space, but when he approaches it, he finds a vast terrifying desert . . . Or the monkey may fly to a seemingly lush and fertile valley, only to find it filled with poisonous insects and the repelling smells of rotting vegetation . . . Each time he seems about to achieve pleasure, he is rudely awakened from his idyllic dream; but his hunger is so demanding that he is not daunted and so continues to constantly churn out fantasies of future satisfaction. (Trungpa 2002: 139–140)

Hence, it is viewed by Elgin, Chodron, and Trungpa, that this mirage is one of the main mechanisms that causes suffering. Yet, the realization of the *Dharma* will weaken this fortification and consequently deflate the network of wants. Interestingly, as will be seen in the next section, all three respondents emphasized this point.²

THE *MODUS VIVENDI* OF MATERIAL SIMPLICITY

Whereas the concept of the economic ethic refers to ideas of material simplicity that are circulated in the cultural domain, the question remains as to how people translate cultural propositions into practical prescriptions that they consistently implement in their everyday lives. Here it is valuable to use Margaret Archer's concept of *modus vivendi*. As she argues, "The establishment of . . . successful practices, which together constitute a *modus vivendi*, involve[s] both a realistic recognition of the multiple needs of the human condition and an intelligent, though fallible, interaction with those constraints and enablements which are activated during the pursuit of our concerns" (Archer 2003: 150). The *modus vivendi* of material simplicity thus refers to the practical actualization and safeguarding of a state of relative abundance by deflating wants.

Our methodology in studying the *modus vivendi* of material simplicity consisted of in-depth interviews with three practitioners of VMS. Respondents were identified by contacting one of the largest Tibetan Buddhist centers in Sweden;³ among the possible participants suggested by the center, respondents were selected on the basis of willingness to participate and of having socio-demographic characteristics that made them otherwise fairly

2 This also demonstrates that the relation between the cultural and the individual strata (*culture* ⇔ *individual*) really exists. The analytical focus of the interviews and the next section is on the social and individual level (*individual* ⇔ *social*).

3 It is however not clear how many individuals are actually active, but they usually have around 25–40 persons attending their various seminars and workshops, according to the head of this center (not one of the respondents).

typical in the Swedish population (see below). Three out of four responded to this research call; unfortunately, later on, the fourth person, who was a monk, could not actually participate. Each respondent was interviewed for about two hours; this was done by following two questionnaires which were used in the form of an interview schedule where various themes were discussed (e.g. consumption habits, work; see discussion below).⁴ In the first part of the interview we used a semi-structured questionnaire, which encouraged respondents to reflect upon and discuss their values, consumption behavior, and vision of a good life. In the second part of the interview we used a structured but still open-ended questionnaire in so far that they were given the opportunity to share their reflections about their responses, especially their material wants (W_k) and their means of satisfying these wants (M_n). The structured questionnaire is shown in the appendix.⁵

Because in-depth interviewing of a small number of respondents is not a typical methodology in economic research, it is important to clarify why this strategy was chosen. First, there is little careful research into the processes whereby people identify simplifying ethics and put them into practice in their everyday lives. This makes the area especially well-suited to in-depth exploratory research, which can be used to gain direct insights into the processes involved. A second and related point is that, because people may have relatively idiosyncratic ways of thinking and talking about changes in their approaches to consumption, it is important to have opportunities to ask respondents to explain or elaborate on their answers; such back-and-forth communication is easy to do in one-on-one interviewing with open-ended questions, but less so in other methodologies. Third, although it is of course necessary to be cautious about drawing broad conclusions from a small sample of respondents, given the exploratory nature of the study, it is more important to acquire high-quality insights from a small number of respondents, than it is to be sure that their experiences are broadly representative of the population from which they are drawn (Sayer 1992; Schofield 2002). Thus, we focused on providing an accurate and insightful characterization of how respondents in the sample have worked to deflate their wants, as a means of initiating fruitful research in this area, not providing the last word on it.

Table 1 outlines the backgrounds of the three respondents in terms of age, family, leisure pursuits, current work, and principal source of income. The

4 The interviews were conducted in November and December 2007.

5 The second questionnaire has affinities with Kasser and Ryan's aspirations index (Kasser 2002: 6), although the questionnaire used in the present study had no predefined answers. See also Sheldon and Kasser (1998).

Table 1: Background (Causal) Categories

	Age	Family	Leisure pursuit	Living conditions	Current work	Principal source of income (M_n)	Voluntary change of work	Systematic practice of VMS*
Lisa _(f)	24	Single	Singing	Shared apartment, city	University student, youth worker (part time)	Income and privilege from work; loan (studies); parents as last resort	From paid work to voluntary organization (part time)	0 years**
Jon _(m)	31	Family (newborn daughter; partner)	Rock music, kayaking	Terrace house, city	Assistant to functionally disordered youth (full time)	Income from work, partners resources; favorable housing market	From professional musician to youth worker (full time)	10 years
Andy _(m)	42	Partner	Sailing	Apartment, city	Conflict mediator	Income from work; savings	From CEO to conflict solver (part time)	5 years

Notes: * = Member of a Buddhist association, engagement in consistent practice of meditation, literature study, retreats, etc.

** = Even if Lisa has not engaged in systematic practice, she has for several years tested different meditation techniques and studied and discussed Buddhist literature with her friends.

three respondents are fairly typical of people living in Western industrialized consumer society. All three respondents live in one of Sweden's largest cities: Andy lives in a small apartment, Lisa shares an apartment with a friend, and Jon has recently moved to a terrace house. They have fairly standard leisure pursuits. However, all three respondents have chosen, or switched to, jobs that are more consistent with the ethic of simplicity, rather than ones associated with high status or high pay. Lisa has chosen to work part time rather than full time to obtain more time for leisure and voluntary work; she was offered full-time work as a youth worker, but declined. Jon received a unique offer from his former rock band (under a major international record company) to realize his childhood dream of being a rock musician. After long consideration, he chose to decline this offer in favor of his current work assisting youths with functional disorders (full time). Andy was a CEO in a smaller consulting agency (law) for several years, and was previously very engaged with the consumer way of life (concerned less with shopping for expensive possessions, but more with the pursuit of social status). After a bout of illness, he has chosen to leave law altogether and work as a self-employed part-time consultant in the field of conflict resolution. Accordingly, all three individuals have chosen professions that do not require long working hours (Golden and Wiens-Tuers 2008; Schor 1999; Starr 2008), that gives time for other activities (Etzioni 2004), at the cost of higher levels of consumption (McDonald *et al.* 2006)—consistent with the ethic of material simplicity described above.

The three respondents were also asked to complete a structured questionnaire about their material and immaterial wants^{6,7} in order of priority, as well as their opportunities for satisfying these wants (see the Appendix). One of the principal methods of satisfying material wants is a social position that enables certain economic opportunities that are used as means (M_n). In mainstream economics, means are defined by an individual's budget constraints, commonly given by that person's income. Here, this study tries to go beyond this definition; means may be acquired by any socially defined relation (such as through family, gifts, or status) (cf. Sahlins 1972).

Table 2 outlines the main findings. As a broad conclusion, it seems reasonably safe to claim that all three respondents have more than enough material resources to satisfy their material wants (column 4) and thus

6 The focus will mainly be on material wants. The immaterial and material wants in Table 2 demonstrates that they are related. Nonetheless, for the sake of argumentative stringency and lack of space this question will be addressed in future research.

7 Cf. with Kasser and Ryan's (1996) distinction between intrinsic and extrinsic goals.

Table 2: Evaluation of the Success of VMS Practice

	Material want-list (W_k)	Immaterial want-list	Material consumption bundle		<i>Modus vivendi</i> of material simplicity?	Interference?
			W_k	M_n		
Lisa	W_1 =Basic needs	(1) Family	Deflated	Stagnant.	Yes, but fragile	Yes (Work as necessity of maintenance)
	W_2 =Computer	(2) Singing				
	W_3 =Cellphone	(3) Movies, reading books, Internet				
	W_4 =MP3 player					
Jon	W_1 =Basic needs	(1) Religious practice	Inflated/Deflated	Stagnant.	Yes	Yes (Need for money; socioeconomic security for family)
	W_2 =Money as such	(2) Family				
	W_3 =Kayak	(3) Colleagues				
		(4) Outdoor life				
		(5) Rock music				
Andy	W_1 =Basic needs	(1) Religious practice	Deflated	Deflated	Yes	Yes (Future maintenance)
	W_2 =Computer	(2) Family, social relations				
	W_3 =Cellphone	(3) Involvement in the Buddhist association				
	W_4 =Sailing boat	(4) Conflict resolution				
	W_5 =Car	(5) Sailing				

actualize a *modus vivendi* of material simplicity, (measured as the relation between W_k and M_n): see columns 3 and 4. To reiterate, the category material wants (W_k) is a crude estimation of what an individual believes to lack or lacked in a near-past as well as the near-future timeframe. All three respondents claim, not surprisingly, that basic material wants, or more precisely basic needs, of different kinds (food, housing, basic clothing) are of highest priority: see column 1.

Lisa's material wants seem now to be stagnant, after a time of deflation. Her material wants have neither decreased nor increased over the last year. She claims, "I live in a nice apartment and have no reason to want a bigger place. I have no need for a car; I use public transport. I have enough clothing, and if I need something I look in the secondhand stores. I have, nevertheless, thought about a new piano for my musical interest, but I am not sure that I will use it." According to her comments, she has all the necessary means (M_n) to satisfy her current material wants (W_k). She collects her means mainly from her current part-time job (income) and studies (loan), but enjoys some privileges from her position and support from her parents—if it is needed. Besides her old computer, Lisa's workplace provides her with a laptop computer and a cellphone, which she uses in her leisure time as well. Even so, there is some doubt whether Lisa will manage to safeguard her near-future *modus vivendi* of material simplicity: her means may soon be reduced, whereas no further deflation of wants can be observed. At the moment, however, she is succeeding.

At first sight, Jon's material wants have actually increased, or inflated—this seems to be a major anomaly, in relation to the hypothesis that practicing VMS leads to deflation of wants. Nevertheless, there seems to be a sufficient explanation for this, found in Jon's own story. Jon appears to have assimilated the material needs of his newborn daughter (food, clothing, security, etc.). Jon's personal material wants appear to be very basic. He does not even buy new clothing. However, for his daughter's sake, he was "forced" to buy a bigger home, a terrace house, in a secure neighborhood. He narrates, "The terrace house we bought . . . is located in a very secure area. It is within a car free area. It is really Swedish in a sense, but it's so damn good for my daughter. A lot of families with children, good day care, it is really perfect. Almost too perfect . . . and my partner didn't want to live in a district with a lot of social problems." Accordingly, it could be that the house was bought to please his partner, rather than for the needs of his daughter. Yet it seems that it was not Jon's personal material wants that forced him to accept the new house; the source of the pressure was his family. This would indicate that Jon's *personal* material wants have actually deflated,

but when the material needs of his daughter (or his partner) are added to his want-list (W_k) it appears that “his” wants have inflated. Nonetheless, Jon’s modest income combined with his partner’s, as well as the sale of their apartment in a favorable housing market, lead Jon to conclude that he has enough means to satisfy all his material wants.

Andy has made radical changes in his life. Both his means as well as his material wants have deflated because of this. His monthly income is considerably lower, because he gave up high status employment as a CEO. Simultaneously, his material wants have radically changed from a status-pursuing level of consumption to a more modest one. Although he currently has a somewhat expensive leisure pursuit—sailing, (he will dispose of his car, see Table 2 Andy’s W_5) he maintains that he has enough means. Andy’s main resource is his savings; the income from his part-time job assignments is not enough to cover all his monthly expenses.

It is, in particular, one element of the economic ethic of material simplicity that is salient in these testimonies: namely, the realization of the “mirage of wants.”⁸ Andy and Jon, who have systematically practiced the kind of ethic for the longest time⁹—see Table 1, column 8—return to this point consistently (as in the monkey metaphor above): it is one of the clearest strategies used to deflate wants. It should be noted that Jon’s leisure pursuit requires a kayak, and if he is asked how he controls his various new wants, he responds as follows:

I can be very eager . . . recently, I thought of buying a new kayak, a kayak that I really, really would like to have . . . It is so funny because I recognized the idea: “if only I could buy this kayak, it would be so much fun . . . ” But at the same time I am thinking: “I will allow myself to think these thoughts and these dreams, and I will see if they are equally strong in a week or so.” And after a week: “these fantasies have come up again . . . me, in this really cool black kayak.” . . . The thoughts were strong at the beginning, the same next day, but they became weaker and weaker . . . And just as with this idea about this kayak, just as I have thought about everything else.

In a similar manner, Andy claims that the fantasies associated with wants create the impetus for a never-ending chase: craving, chasing, working, more craving. To realize that these fantasies are nothing more than a mirage produces contentment. Accordingly, even if all three respondents can rather easily satisfy their material wants, they feel the presence of an internal

⁸ Compare this with the concept of mindfulness; see, for example, Rosenberg (2004).

⁹ It should be added that both Andy and Jon have obtained an audience with the Dalai Lama.

conflict, a sort of ambivalence. Andy sells courses and works as a consultant for different organizations. He is very familiar with different selling techniques, but now he has a more distant relation with them. He says, "... selling is also a thing that I have become worse at, because the focus is not on me anymore and I do not feel the scarcity of money any longer, so I am not so keen to sell you a course." Jon and Lisa report a similar conflict.

Observe that Jon wants money as such (Table 2, column 1). This seems to be peculiar: "Money is important to me. To know that I have money ... therefore I rank money in second place [in the questionnaire] ... I get scared when I say all of this [nervous laughter]!" How does wanting money fit with the economic ethic of material simplicity? At first sight, it does not. However, consider the following. This claim could also be interpreted as Jon's interest in safeguarding the *modus vivendi* of material simplicity, relative abundance, by keeping already deflated wants below his material means. Alternatively, relative scarcity emerges—an undesirable state. Naturally, the average person also desires a state of relative abundance, but the strategy of such a person is not to reduce material wants, but to increase material means, by working more or borrowing money (Golden and Wiens-Tuers 2008; Schor 1999; cf. Starr 2008). Therefore, all things being equal, when Jon claims that he wants more money than he needs, it basically indicates that he will become annoyed if his material wants will for some reason unexpectedly inflated and thus exceeded his means. Thus, even if Jon does not realize it, this kind of irritation is actually consistent with the outlined ethic (cf. George 2004).

Nevertheless, the dependence on money creates ambivalence and uneasy feelings. For Lisa, this internal conflict is channeled towards work as a "necessary evil" to acquire means (M_n). She claims, "The job is stressful. It permeates everything. It is such a need that is stressful. It is, unfortunately, the basis of all life in this society," she continues. "I hope, of course, that I do not get into a situation where I need a lot of money, with big loans and such things. I hope I can manage on a little." Thus she works part-time rather than consume more. All three, accordingly, testify about a dissonance, a kind of causal interference.

To sum up: in its orthodox form, VMS aims to extinguish the worldliness of social life and so corresponds to a vision of monastic life (Weber 2000). In Max Weber's account, Buddhism is a world-rejecting system of thought, in contrast with the world-affirming tradition of Ascetic Protestantism, which seeks mastery and thus control over material conditions. VMS seeks

emancipation by reducing the importance of the material wants (Schluchter 1989: 117 ff.). Thus, on the cultural level, it is this rejection of the material world that accounts for the pursuit of deflation of wants. On a practical level, however, judging from the three respondents, the activation of this economic ethic results rather in the establishment of a *modus vivendi* of material simplicity (“carrying some material wants”) and not of complete rejection of the world (“carrying no material wants at all”).

Now, with reference to these observations let us try to assemble an analytical model in order to account for some of the underlying mechanisms of relative scarcity, abundance, and sufficiency. As this study uses very few cases, no empirical generalization is granted; but the construction of an analytical model will provide some potential for an analytical generalization (Sayer 1992; Schofield 2002).

TOWARDS A HOLISTIC MODEL OF RELATIVE SCARCITY, ABUNDANCE, AND SUFFICIENCY

As the comparison of the fourth and fifth columns of Table 2 shows, even if all three respondents have accomplished relative material abundance, there is a sort of *causal interference* between the totality of VMS (principles and practices) and fundamental properties of consumer society (Grigsby 2004; cf. Pellow 2005). As Grigsby argues, “The problem [for simple livers] is how to get by economically and socially and at the same time participate as little as possible in reproducing the dominant economic relations and culture” (Grigsby 2004: 166). The explanation for this interference, it seems reasonable to propose, is that different systems and economic ethics operate at the same time (Archer 1996; Hodgson 1998; Swedberg 1998). In this context, the *modus vivendi* of material simplicity does not manifest as a categorical event, but rather as a tendency. The event functions as a continuous potentiality in the practice of VMS, but is not necessarily actualized: a person can practice VMS, but may not succeed in the establishment of relative abundance. It is precisely a *modus vivendi*, a fragile state, because it is under constant threat from countering causal pressures. Both material wants and means depend on dynamic forces. A person may lose his/her job, or his/her wants *seem* to inflate because his/her family wants more. The possibilities are many. However, for our respondents, it seems, there is no relative scarcity and no need to allocate material means. Accordingly, the scarcity postulate of mainstream economics does not seem to apply in these three critical cases.

In relation to the observations described above, the main thrust of the thesis¹⁰ does not hinge on relative abundance being entirely actualized. On the contrary, relative scarcity plays an equally essential role in this model, which illuminates the complexity of human (socioeconomic) provisioning. In view of this, I maintain that by making some modifications to the holistic model of *absolute* scarcity and abundance developed by Daoud (2007), a model of relative scarcity and abundance can be advanced that has the analytical power to explain the empirical observations presented in this paper.¹¹ This model is informed by the critical realist ontology.¹² This ontology informs the structure of this model (that is, the analytical division between events, necessary generative mechanisms, and underlying structures).

Nevertheless, other basic concepts of this model are provided by Menger's (2004)¹³ theory on scarcity, which was developed further by Robbins (1945). According to these two theorists, relative scarcity arises when the "many wants" (competing ends) exceed the given resources (means). In mainstream economics, a resource is commonly expressed in monetary terms as a "budget constraint," but this is not a necessary restriction. A resource could also be "time," "energy," "cognitive abilities," or other means with alternative uses.¹⁴ Even if the focus of this study is upon material resources (defined by the respondents), this argument highlights the analytical generality of the developed account.

In the same manner, in this model an event of relative scarcity (or abundance) is defined as the necessary relation between one kind of M_n (in this case material means) and several kinds of W_k (in this case material wants) harbored by an individual and potentially satisfied by these means. If M_n is insufficient to satisfy all W_k , then relative scarcity emerges; if M_n is more than sufficient, relative abundance emerges. This is captured in

10 This model is obviously not a mathematical model but a causal or theoretical one. A theoretical model aims to show the underlying causal mechanism of an event rather than to establish a statistical inference; it is a graphical representation of how theoretical categories are related. For a detailed exposition of "models" see Danermark *et al.* (2002: 150 ff.).

11 Compare this model of relative scarcity and abundance to the model of absolute scarcity and abundance developed in Daoud (2007 see also Daoud (forthcoming)). The two models are almost analogous, but differ in that this model focuses on the *alternative use* of the set of M_n , whereas the model of absolute scarcity focuses on the *actual use* of available quantities (A) and entitlements (E). Thus the two models highlight two different dimensions or potentialities in resources.

12 See, for example, Bigo 2006, Lawson 1997, Martins 2007, and Mearman 2006 for some of the possibilities and problems with critical realism.

13 Originally published 1871.

14 See, for example, Menger's analogy of Crusoe, who tried to allocate his limited water supply (2004: 133–136) or Robbins' example of being either a philosopher or a mathematician (1945: 14). Also, compare this argument with the economic approach of Gary Becker.

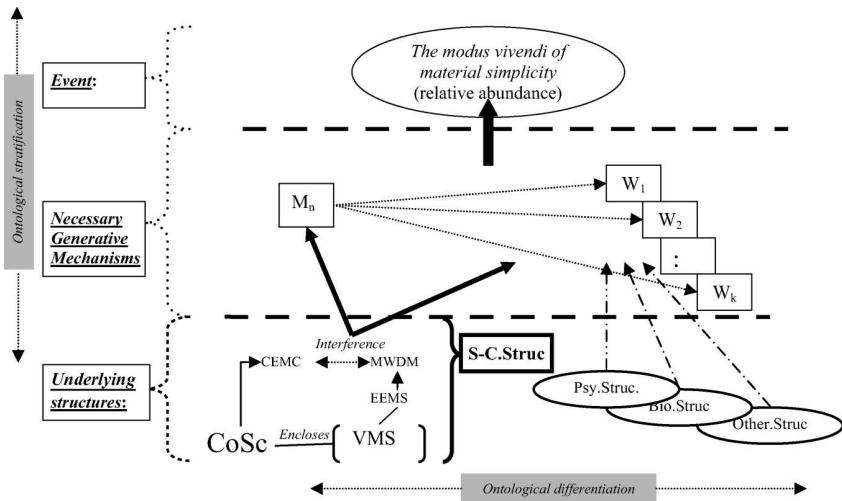


Figure 2: The Holistic Model of Relative Scarcity and Abundance—The Problem of Emergence

Notes:

M_n = Means of want-satisfaction

W_k = Want, material

CoSc = Consumer society

S-C.Struc. = Sociocultural structures

Psy.Struc. = Psychological structures

Bio.Struc. = Biological structures

Other Struc. = Other undefined intervening causal structures

CEMC = Casual environment of material complexity

MWDM = Material want deflating mechanisms

EEMS = Economics ethics of material simplicity

Figure 2. Herein lies the kinship with the mainstream conception, but the differences consists of, at least, three kinds.

The developed approach is consequently interested in the following issues. First, it questions the constitution of this means–ends relation, which means that the nature of wantingness is investigated (Kasser and Ryan 1996). Different institutional settings (e.g., different social fields) will form and produce different wants. For Robbins, “The external world does not offer full opportunities for their complete achievement [the various wants]. Life is short. Nature is niggardly” (Robbins 1945: 12–13). Yet a resource is not merely naturally given as a “budget constraint,” but assembled socially in micropolitical affairs (negotiations about the distribution of family resources,

changing working hours, etc.) (Archer 2003; Hodgson 1998)¹⁵—this is reflected in the three VMS cases. Second, in a situation of relative scarcity, instrumental rationality is only one possible mechanism to determine alternative use (allocation). Social relations (power, institutions, norms, etc.), fallible reflexivity, habits, or lack of information leading to uncertainty are some mechanisms that may inform behavior (Archer 2003; Hodgson 1997). In the case of VMS, the foci have been on how norms or ethics (sociocultural mechanisms) condition wantingness. Third, if mainstream economics is intimately dependent on a situation of relative scarcity,¹⁶ a more general socioeconomic approach focuses not only on scarcity but also abundance and sufficiency (Dugger and Peach 2009). A state of abundance or sufficiency may be the goal of any given political economy (e.g., the welfare state or utopia) (Bronfenbrenner 1962; cf. Hodgson 1995), or socioeconomic action (the three VMS cases presented here). The development of certain institutions in a society may be guided by these events (cf. Danner 1974). This development is often characterized by conflicts, that is, new emergent habits (e.g., VMS) that challenge a dominant culture (e.g., consumerism) (Grigsby 2004).

In more general terms, the constitution of M_n and W_k and their underlying causal properties depends on the underlying causal structures that produce them (cf. Dolfisma 2002). Naturally, different cases will pinpoint different underlying structures. For example, the alternative use of money in capitalism is slightly different from the alternative use of time in family relations, and for any given study, the analyst may focus on specific structures or the relation between them (sociological, psychological, biological, etc.). For VMS, as discussed in this essay, the main focus has been on its sociocultural dimensions. Psychological,¹⁷ biological, and other kinds of structures are acknowledged to exist, but have not been subjected to deep scientific inquiry. This focus, consequently, invites to further research on the other underlying causes of relative scarcity and abundance, not only about VMS, but also the various other cases that may be investigated by such an approach (use of time, generation of immaterial wants, and fiscal systems, to mention a few).

Thus, the underlying sociocultural structures and the conflict they generate may be pinpointed in the following summarized way. The assembled observations mainly show that: (1) the sociocultural practices of VMS have

15 Compare these different accounts, Archer's sociological agency structure and Hodgson's institutional agency institution approach. See Fleetwood (2008) for an illuminating comparison.

16 Without it, the analysis collapse. See for example Robbins (1945).

17 See Kasser and Kanner (2004) for psychological studies on consumerism.

logical and causal properties, labeled the *material want deflating mechanisms*, or MWDM; (2) the sociocultural properties of consumer society elicit a set of countervailing logical and causal mechanisms, referred to as the *causal environment of material complexity*, or CEMC; (3) when VMS is mediated by human agency, it also triggers the economic ethic of material simplicity, or EEMS; and (4) the three agents practice this ethic and achieve the *modus vivendi* of material simplicity (the event), but with difficulty, because of the *causal interference* between CEMC and MWDM. Figure 2 illustrates this point.

It is not unreasonable to assume that the magnitude of this causal interference is one of the determining factors of the general success of a VMS lifestyle; that is, on both individual and social levels (a hypothesis which could be tested by future research). Higher interference tends to lower the manifestation of a *modus vivendi* of material simplicity. As Grigsby argues (2004: 166), the problem for VMS practitioners is how to get by socially and economically without reproducing the dominant institutions. A direct answer to this question is of course difficult to provide, but may be found in a combination of psychological (see, for example, Csikszentmihalyi and Csikszentmihalyi 2006) as well as sociological theories (see, for example, Etzioni 2004; Schumacher 1975). Even if VMS is positively correlated with social and individual wellbeing (Brown and Kasser 2005; Ekman *et al.* 2005; Rosenberg 2004; Sheldon *et al.* 2004), the future of VMS depends on its effectiveness in contesting dominant institutions, but mostly on its ability to mediate and disseminate the economic ethic of material simplicity.

Accordingly, it should be emphasized that these individuals are merely examples of a relatively fractioned social movement that has not produced a significant or systemic change of society. These individuals could be seen to manifest expressive rationality or meta-reflexivity; that is, individuals who frequently reflect over themselves and the consequences of their own action (Archer 2003: 255 ff.). They reflect over issues ranging from their own identity to the ultimate ends of life; it is maybe not surprising that they tend to go a step further when it comes to changing their lifestyle when they believe it to be necessary. So, even if the economic ethic of VMS has gradually become more accepted by the public, it has still not become normalized practice (Etzioni 2004). It seems that the average individual still harbors the mainstream consumerist values, at least if we judge from the increased consumption level of society (Bauman 2007). The growth of VMS would require that this economic ethic is adequately disseminated, from this kind of social movements (Buddhism, ecological movement, or other similar

movements) into the normal or common value system of society, seriously challenging it, and, subsequently, reproduced and gradually expanded further.

We could therefore ask, what are the outlooks for VMS to become a central element of society's mainstream value system as well as individuals' practice? To reiterate, it is merely possible to give some indications of how to research this difficult question. First, it should be said, that the prognosis depends on the chosen definition. Should the social scientist choose voluntary material simplicity (VMS), voluntary simplicity, simple living, or downshifting (Johnston and Burton 2003)? Thus there are, on the one hand, several ways to theoretically define the "act of deliberately choosing to reduce ones wantingness"; on the other hand, there are in practice several social behaviors and thus social movements that fit the "act of wanting less": Western Buddhism is only one example. Groups within the green movement are another example (Lauer 2002), some Christian movements are yet another example (Rudmin and Kilbourne 1996). Hence, a more fully elaborated account of this question depends on both theoretical and practical methodological issues. There are, nonetheless, two relatively crude indicators that may play in favour for the general successfulness of VMS.

The first indicator is found in previous research on values. Ronald Inglehart and his associates have convincingly demonstrated that many societies around the world have entered what they call a post-materialistic era, a value system that praises non-materialistic activities (Inglehart and Abramson 1994). Basically, these findings show that societies which have had a strong economic development (mostly Western societies) and previously strong materialistic values (emphasis on survival values, e.g., economic growth), now have researched a point of material saturation and thus tend today towards more post-materialistic values (emphasis on self-expression, e.g., individual self-expression) (Inglehart 2004). Accordingly, VMS could be seen as an example of post-materialist values, but an example that goes further than the ordinary post-materialistic individual. However, this does not mean that all post-materialistic values encourage the economic ethic of VMS and thus promoting the *modus vivendi* of material simplicity. In a post-materialistic value system consumption of immaterial services becomes more and more common, which may still lead to consumption of status giving services in general. Inglehart and Welzel (2005) argue that:

Rising emphasis on self-expression values does not put an end to material desires. But prevailing economic orientations are gradually being reshaped. People who work in the knowledge sector continue to seek high salaries, but they place equal or

greater emphasis on doing stimulating work and being able to follow their own time schedules . . . Consumption is becoming progressively less determined by the need for sustenance and the practical use of the goods consumed. People still eat, but a growing component of food's value is determined by its nonmaterial aspects. People pay a premium to eat exotic cuisines that provide an interesting experience or that symbolize a distinctive life-style. The publics of postindustrial societies place growing emphasis on "political consumerism," such as boycotting goods whose production violates ecological or ethical standards. Consumption is less and less a matter of sustenance and more and more a question of life-style—and choice. (p. 33)

Thus conspicuous consumption is still a possibility within a post-material era. In other words, post-materialism does not necessarily equal the ethics of VMS; what it does mean, however, is that there is a greater logical compatibility between VMS and post-materialist value system than VMS and materialism (Inglehart and Welzel 2005). So how could we substantiate whether these post-materialistic tendencies are working in favour of VMS? The following indicator gives us a hint.

The second indicator is based on increased media coverage of simplicity and ecologically sustainable lifestyle (internet, newspapers, television, books), not only in the US but also in the UK (Princen *et al.* 2002: 212) or even smaller Western countries such as Sweden. Princen *et al.* argue:

Perhaps because of their growing numbers, simplifiers have become the subject of increasing media attention. In 1993, for example, readers of major US newspapers would have learned little if anything about the VSM, since relevant stories rarely made it into print. This had changed by 1996; that year, an average of just over two articles or features per paper appeared. By 1998 the number of stories or features had jumped threefold to fivefold, depending on the newspaper, and as of this writing (mid-2001) there is no indication that this pace of coverage is slowing. Strikingly, relevant articles are finding their way into marquee venues. (2002: 201).¹⁸

18 The number of published stories seems to increase exponentially both in Sweden but especially in English speaking countries. A crude search in Google News shows that between year 1980 and 1999 about 1,900 newspaper stories could be found about simplicity in English newspapers; between 2000 and 2009 (October) the number rose to about 5,300 stories, almost a threefold of the amount of stories. The absolutenumber is not comparable with the US, but a small emerging trend is observable in Sweden as well. Between 1980 and 2003 no publications about simplicity could be found in Swedish newspapers, but between 2004 and 2009 (October) the stories rose to around 40. This is a very small relative number but an indication of increasing media coverage. For recently published stories in the major Swedish newspapers, see, for example, *Aftonbladet* (Gustavsson 2008) "År Vardagen Full Av Stress?"; *Svenska Dagbladet*, "Hårt Jobb Att Arbeta Mindre" (Lagerblad 2007), *E24* "Vägen till ett annat tempo" (Andersson 2009), and *Dagens Nyheter*, "Var Fjärde Skulle Byta Sänkt Lön Mot Mer Fritid" (Granstrand 2008) and "Jag Vill Släppa Taget Om Det Materiella" (Lerner 2009a). The latter was also broadcast on the very popular morning show "Gommoron Sverige" (Svergies Television 2009). Published books about material simplicity show a similar tendency. The following English search string was used: "simple living." OR "voluntary.simplicity." OR "slow.life." OR "material.simplicity." The following Swedish search string

Zafirovski found, via a content analysis, that more books on simplicity were published in a recent four-year period (32 books in 1995 to 1998) than compared to the previous 22 years (26 books in 1973 to 1994) (Zafirovski 2000). This shows that the public interest in material simplicity has increased considerably.¹⁹

Nevertheless, none of these arguments say much about the actual behavior of people. Values may be held, but not practiced; people may harbor post-materialistic values but do not find material simplicity compelling; the media may write about simplicity and people read it with interest, but they do not find the motivation or interest to actually change their lifestyle. What these trends at least say is that material VMS in general has found a common acceptance in the general discourse and thus people's minds, which could motivate a growing number of people to actually change their lifestyle.

Even if there is strong evidence for the case that a materialist lifestyle gives less long-term happiness than non-materialist (Kasser 2002), a major obstacle to the adoption of VMS and other kin lifestyles is the perceived sacrifice people need to do within a capitalist system (cf. Jonsson 2006), which links directly to the problem of causal interference. As Etzioni writes:

The question of whether voluntary simplicity can greatly expand its reach depends to a significant extent on the question of whether voluntary simplicity constitutes a sacrifice that people must be constantly motivated to make or is in itself a major source of satisfaction, and hence self-motivating. (1999: 113)

Given the inherent instability of modern capitalism (Ingham 2008), which generates periods of financial crisis and now directly accountable for a rapidly impending ecological crisis, it seems to me, that VMS will gain increasing momentum. The economic ethic of VMS resonates well with the ecological economical call for, among other things, voluntarily reduced material consumption (Cato 2009; Daly and Farley 2004; Lawson 2006). Hence, reduced material consumption, with assistance of fundamental technological innovations, is one of the main solutions to the impending ecological crises of our time. Simplicity "might provide the foundation for a society that accommodates basic socioeconomic equality much more readily than societies in which conspicuous consumption is rampant" (Etzioni 1999: 125). But it needs to be perceived by the public as a forward looking

was used: "frivillig enkelhet." OR "downshifting," OR "enklare liv," OR "leva enkelt," OR "voluntary simplicity." The search was conducted 30 October 2009, on <http://news.google.com>.

19 For Swedish book examples which have been noticed in major newspapers see, for example, Lerner (2009b).

movement, or else it has little chance of flourishing within modern capitalist societies.²⁰

DISCUSSION

This paper has presented the following argument. The general causal environment of consumer society tends to inflate human material wants and thus generate relative scarcity. It has been shown how individuals who are enclosed by this environment may implicitly or explicitly attempt to neutralize this effect by activating the economic ethic of material simplicity. This ethic is produced by the cultural structures of VMS, which is a shared sociocultural element of Western Tibetan Buddhism and voluntary simplicity. The interest of these individuals is thus to actualize and safeguard the *modus vivendi* of material simplicity, a practical state of relative abundance by deflation of human material wants. At the moment, and despite the strong countervailing forces that create causal interference, these individuals seem to do so. Hence, the main purpose has not been to contribute to the already rich literature on voluntary simplicity, but to use existing knowledge, complemented by new conceptual and empirical findings, to illuminate the theme of scarcity, abundance, and sufficiency.

One of the main theoretical contributions has thus been to empirically explore, with reference to these three critical cases (Danermark *et al.* 2002; Ragin 1987) how scarcity may be countervailed. This then indicates that the scarcity postulate of mainstream economics is problematically formulated. However, it is important to distinguish between an analytical and empirical generalization (Sayer 1992; Schofield 2002). In terms of an empirical generalization, this study is more explorative than conclusive. Still, in terms of an analytical generalization it may provide the necessary theoretical tools for a fuller understanding of an event of scarcity, abundance, and sufficiency. Accordingly further studies need to be made in order to understand the empirical extent of the issue.

The alternative causal model, the holistic model of relative scarcity and abundance (cf. Daoud 2007; Daoud forthcoming), seeks to account for the limitations of the scarcity postulate by being stratified and dynamic. A supporter of this postulate may provide at least one counterargument, namely that economics is only interested in cases of (relative) scarcity, and therefore the example of VMS is indeed sociologically interesting, but economically irrelevant. I argue that while this may be so, it is only true for

20 I thank both anonymous referees for making me aware of this issue.

neoclassical economics and not for general socioeconomic theory. The paradox of affluence is outside the scope of neoclassical economics. As Peter Danner describes this paradox, “increasing affluence generates more scarcity and, consequently, increasing ‘unsatisfaction’ of wants. The goad of scarcity, put precisely, is that affluence, in fulfilling more wants, frustrates even more” (Danner 1974: 22).²¹ This study has sought to investigate how the economic ethic of material simplicity effects individuals material want formation (cf. Danner’s “spirit of poverty”; Danner 1974) and ultimately their well-being (Csikszentmihalyi and Csikszentmihalyi 2006).²²

The holistic model encourages explanation of relative scarcity, abundance, sufficiency (the problem of emergence), rather than assuming scarcity (the problem of allocation). One of the important questions is, accordingly, why does relative scarcity and abundance arise in the first place? How do various social actors countervail these events (if they are not desired), or how are these promoted (if desired)? This shift in focus does not mean that questions of allocation should be ignored, but rather a collaborating and complementary approach is preferred. Yet, irrespective of focus (allocation or explanation), this model illustrates the importance of sociocultural and institutional conditioning upon economic events (Jackson 1996; Lawson 1997; Mischel 1997; Hodgson 1998; Dolfma 2002).

Nonetheless, further research is required to test the applicability of this causal model, and to account for issues in proximity. For example the following should be researched: first, examination of the internal relation between the concepts of wants, wishes, desires, needs, preferences, aspirations, ends, interests, and related concepts (Hunt 2005; O’Boyle 2005); second, how these relate to various institutional settings (Hodgson 1997); third, to develop more fully how wants may change, that is, the “metamorphosis of wants”; and, fourth, to address the relation between materiality and immateriality of wants and means (Kasser and Ryan 1996).²³ Furthermore, to reiterate, only crude qualitative measures were used in this study which does not validate any empirical generalization. Complementing this limitation with quantitative studies is thus also necessary (cf. Greene and Yoon 2004).²⁴ All in all, by examining issues of this nature, the holistic model

21 Cf. Kasser’s “affluenza,” (2002: xi).

22 Strictly speaking then, the meaning of affluence is not the same as relative abundance, as developed here. The antinomy of affluence is poverty. Relative scarcity may then exist in affluence, and relative abundance in poverty. Increased affluence simply means increased control over material means.

23 Cf. Kasser and Ryan’s (1996) concept of intrinsic and extrinsic goals.

24 In such an approach, the quantification of scarcity, abundance and sufficiency is required. The terminology

invites for further and deeper socioeconomic interventions into the theme of scarcity, abundance, and sufficiency (cf. Gordon 2005).

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W_k and M_n is used in order to facilitate such quantification. I merely offer a sketch here. To reiterate, scarcity, abundance and sufficiency (SAS) is defined as the relation between wants (W_k) and means (M_n). This is defined as a scale, namely, "SAS = $M_n - W_k$." Here, W_k is a set with k different kinds of wants (house, car, etc.) and M_n is n different kind of means of satisfaction (social positions, own income, partner's income, etc.). This SAS relation is basically the dependent variable. If the SAS variable is positive, then abundance is actualized; if negative, scarcity exists. However, in order to investigate a special kind of relative abundance, namely, the *modus vivendi* of material simplicity, which occurs via deflation of material wants, further specifications must be made. The character of M_n and W_k could in turn be investigated by a series of independent variables; most importantly, active value system (the economic ethic), kind of work, whether downshifted, kinds of good consumed, if less consumption is voluntarily chosen, affiliation with some kind of VMS movement (e.g., Buddhist, ecological), denote these variables as b_1 to b_z . Accordingly, in a simple multivariate regression one could set "SAS = $b_0 + b_1 + \dots + b_z + e$." This sketch offers a basis for statistical analysis.

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APPENDIX—THE STRUCTURED QUESTIONNAIRE: CAPTURING AN INDIVIDUAL’S WANT-LIST²⁵

- (1) Which *material* goals do you prioritize? (for example, a house, a car)
- i. Could you please rank these?
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 - ii. Which would you abstain from if you had to choose?
- (2) Which *immaterial* goals do you prioritize? (for example, spiritual, social or political)
- iii. Could you please rank these?
 1. _____
 2. _____

25 The following is my translation from Swedish to English.

THE *MODUS VIVENDI* OF MATERIAL SIMPLICITY

3. _____
4. _____
5. _____

iv. Which would you abstain from if you had to choose?

(3) Could you please rank both your material and immaterial goals in the same list?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

(4) Do you have enough time and money to fulfill each goal?

- v. If no, what obstacles are there?
- vi. If yes, what enables you to accomplish your goals?

BIOGRAPHY

Adel Daoud is a doctoral candidate in Sociology at the University of Gothenburg, Sweden. His research comprises the study of the concepts of scarcity, abundance, and sufficiency in economics and sociology. One of his main interests is to bring these disciplines closer together through the development of these concepts. Another research interest, is meta-theory, particularly realism.

Paper IV

Daoud, Adel and Puaca, Goran (submitted). An Organic View of Want Formation: Rational Choice, Habitus, and Reflexivity on want-formation

An Organic View of Students' Want Formation: Pragmatic Rationality, Habitus, and Reflexivity¹

By

Adel Daoud & Goran Puaca

Abstract

Based on interviews with a questionnaire completed by upper secondary school pupils (n=27) from academic and vocational programmes, respectively, the present paper focuses on some of the social and individual conditions that precede the individual decision-making process in education transitions. The paper shows that an organic view of decision-making is in better accordance with observations than is a hierarchical view and thus supports previous research claiming that pragmatic rationality (based on habitus and reflexivity) plays a more important role in students' decision-making processes than does instrumental rationality.

Keywords: habitus; reflexivity; rational choice; uncertainty; want formation; pragmatic rationality

Introduction

Rational choice theory (RCT) offers a rigorous social scientific foundation for how instrumental action and choice are carried out (Elster 2007). It is commonly used to inform methodological approaches in the sociology of education when studying and discussing educational decision-making (cf. Breen and Jonsson 2005), education inequality and social stratification related to these choice processes (cf. Becker 1993; Boudon 1974; Breen and Goldthorpe 1997; Coleman 1990; Erikson and Jonsson 1996; Gambetta 1987). One of the main merits of RCT is that it explains choice based on relatively simple principles, namely the principles of minimization of costs and maximization of gains. Nevertheless, there is widespread critique of RCT (e.g., Archer and Tritter, 2000; Ball et al. 2002; Beckert 2003; Joas 1996; e.g. Kahneman and Tversky 2000; Sen 1977). Partly owing to this critique, RCT today is more elaborated than previously (cf. Boudon 2003; Elster 2007; Goldthorpe 1996).

One of the less strongly emphasized dimensions in the elaboration of RCT has been the concept of preferences or wants and their role in educational choice-making (cf. Sullivan

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2006). This is somewhat surprising, as a number of researchers argue that one of the root problems of RCT is that it regards wants as exogenous. For instance, Cook and Levi wrote: 'the critiques of rational choice models ... suggest that a fuller theory of human action may require greater understanding of the formation and ordering of the preferences that constitute an individual's utility function... If preferences vary for idiosyncratic reasons and if preferences are not transitive, then rational-choice theory will have little explanatory power' (Cook and Levi 1990, 7).

Another somewhat under-emphasized dimension of research into and theorizing about RCT is transitivity. Transitivity, along with other principles, is crucial to RCT's view of want formation (i.e., if I prefer coffee to tea, and tea to juice, then it must follow that I prefer coffee to juice). This means that an individual's want formation must fulfil some logical criteria if rational calculation is to be possible. Based on this notion, we would like to call RCT's view of want formation a *hierarchical view of wants*², which lead to the following question: How do students actually form their wants and how might this formation be conceptualized? We attempt to address this question in the present article by considering how students' want formation occurs in a given school environment. The following research questions have guided us:

- (1) Is a hierarchical view of want formation applicable to students' want formation? Our hypothesis is that it is not. The question is, thus, whether this hypothesis is valid, and under what conditions.
- (2) What alternative explanations are there for how students' want formation develops?
- (3) What implications do our results have for recent theoretical development in the theory of decision-making in educational contexts (Ball et al. 2002; cf. Elder-Vass 2007; Hodgkinson and Sparkes 1997)?

The article is structured as follows: We will first outline what is meant by a hierarchical view of wants and how this view is related to RCT. After that, we will present our material and describe the method we have used to address our research questions. We will then set up some demarcations for the study before presenting our results and discussing alternative interpretations of our material and its implications for research on decision-making in educational contexts. Our ambition is thus not to offer a conventional critique of RCT as such. Instead, we would like to use RCT 'as a discussant' to look at these questions with reference to an empirical study we have conducted.

Background and a hypothesis

Whether it comes in a stronger (e.g., Becker 1971) or lighter version (e.g., Boudon 1996; Elster 1989), RCT regards wants in a hierarchical manner. Preferences have to be ranked in relation to each other. They must at least follow two principles: transitivity and completeness (Eriksson 2005, 221).³

Transitivity means that if P prefers $x \geq y$ and $y \geq z$, then P also prefers $x \geq z$. Completeness refers to P 's ability to rank his preferences. A formal definition states, 'For every pair x and y of options available to P , P either prefers x to y , y to x or is indifferent between them' (Eriksson 2005, 223). However, even if completeness is fulfilled, it could lead to an inconclusive analysis, or indeterminacy (Elster 1990), meaning that the individual is hampered in his/her actions because he/she cannot hierarchically rank his/her wants. If a

² This concept will be defined more specifically in the next section.

³ The symbol \geq is used to capture a person's (P) ranking; thus, $x \geq y$ means that P prefers (wants) x to y , or is indifferent between them.

situation of indeterminacy is systematic, RCT's explanatory power is diminished. Likewise, but more seriously, if transitivity does not hold, RCT's approach cannot successfully be applied.

Accordingly, from RCT's perspective, the main goal of hierarchical preference ranking is to enable rational deliberation about trade-offs between alternative ends (minimization of cost and maximization of gains), which subsequently determines a specific rational choice or action (cf. Breen and Goldthorpe 1997). The main question here is what choices make an individual better off in terms of utility or welfare (Elster 2007). The same type of analysis applies to consumer choices as to educational choices (cf. Becker 1971).

Our hypothesis⁴ is that students will not be able to rank their preferences or wants with complete consistency, but that they will demonstrate both intransitivity and indeterminacy. There is a ready research showing that individuals systematically violate transitivity (Kahneman and Tversky, 2000). There is, therefore, good reason to believe that the same problems are present in other areas of social life as well. Nevertheless, we wish to emphasize that even if our hypothesis turns out to be valid, it will not falsify the whole idea of hierarchical want formation, for the simple reason that both our material and method are too narrow to allow such a broad generalization. Still, if the analysis supports our hypothesis, we might instead ask how some students actually form their wants, and what insights could be gained from this.

Method, material and demarcation

In this section, we will, first, describe our material, second, specify how the chosen method is related to the proposed hypothesis (research questions) and, third, set up demarcations for the study.

The empirical material underlying our discussion was collected from upper secondary school students at a middle-sized school in Sweden. Fifteen students from a vocationally oriented (VP) and twelve from an academic preparatory (AP) programme were interviewed and asked to fill in a structured questionnaire. The students in both programmes had approximately one year left before completing their education (a total of three years). Therefore, they were standing on the brink of a new phase in their lives, when rather important decisions would soon have to be made.

The students were interviewed in focus groups, two groups from each programme, and the focus group interviews were followed up by eight individual interviews, equally divided between the programmes. We chose to work with focus groups in order to involve as many students as possible and at the same time allow them to express their reflections about their wants (which is difficult when using a quantitative survey method). Each interview session lasted for approximately one hour. The students were interviewed about their wants and how they plan to satisfy them; more precisely, we asked them to reflect over what they *want to do*, *want to acquire* as well as *how they plan to satisfy these wants* (cf. Brooks and Everett 2008).

Additionally, the respondents filled in a structured questionnaire (see Appendix A),⁵ stating and prioritizing their wants, and their reflections on possible constraining and enabling factors they may encounter when pursuing their wants. They were asked to think about a time span of five to ten years. Accordingly, the semi-structured questionnaire was used to capture the students' wants, whereas the interviews were used to complement this with their reflections on their wants. This provided a more solid foundation for our analysis than if we had only used interviews or a questionnaire.

⁴ The term 'hypothesis' should be understood in a loose sense, and not statistically. It has been used to guide our research and argumentation (cf. Danermark et al. 2002; Strauss and Corbin 1998).

⁵ See Danermark et al. (2002) on multi-method use.

We also conducted complementary interviews with teachers, student counsellors, and headmasters from the two programmes to gain further insight into the socio-cultural conditions of the studied school environments – conditions that might affect how the students form their wants.⁶

One objection to the chosen method may be raised from the perspective of RCT. RCT treats preferences (wants) either as a black-box (Boudon 2005) or in terms of the concept of revealed preferences (Samuelson 1938; cf. Sen 1973). The latter idea seems to be more commonly used in RCT. This concept of revealed preferences means that RCT does not rely on individuals being able to articulate a clearly ordered set of wants, as we have set up in this paper via the questionnaire; it relies instead on actualized or manifested choice or behaviour. For example, if I am willing to buy a pizza for £5, but will only spend £2 on a cake, I must prefer the pizza to the cake.⁷ However, there are a number of serious issues associated with the notion of revealed preferences (cf. Wong 2006). One of these is that it rests on a positivistic foundation and thus rules out certain types of methods and concepts (Blaug 1992; Caldwell 1994). Positivism holds that it is only possible to talk scientifically about empirically observable or measurable phenomena (Bhaskar 2008). This means that actual choice is inseparable from assumed underlying preferences. But the more serious problem is that reflections and emotions are largely ignored, because they cannot be reliably or properly measured (Archer 2000).⁸ Because the problem of the origins of wants requires an analysis of the underlying processes of want formation (e.g., reflections, emotions, cultural conditions, social structures, etc.), we need to go beyond the positivistic foundation of revealed preferences.

Another central methodological question in the present study is how to determine whether students order their wants hierarchically. The central task is to analyse whether the students' want formation demonstrates intransitivity and indeterminacy; if not, or only with a very low degree, then the idea that students order their wants hierarchically is strengthened. Accordingly, we looked for traces of intransitivity and indeterminacy in our material (in the interviews and the 27 questionnaires). Intransitivity could take the following form: 'I want to go to university rather than finding a job, and I would rather have a job than plenty of leisure time; but I would rather have plenty of leisure time than go to university'. In the questionnaire, this could mean that the same want was repeated at different levels of priority. Indeterminacy could take the following form: 'I don't know whether I want to go to university or get a job'. In the questionnaire, this could mean that different wants were repeated at the same levels of priority.

This will be called *potential inconsistency*, namely, if a student demonstrates any of these tendencies (viz. in determinacy or intransitivity). It will be called 'inconsistency' because it leads to inconsistent results from RCT's perspective. It will be called *potential inconsistency*, however, because the material we have collected cannot be seen as entirely conclusive as regards determining inconsistency in any categorical sense. There are at least two reasons for this.

The first reason is the temporal dimension. Seemingly inconsistent wants may be consistent over time. We asked the students to articulate what they want to achieve within a time span of 5-10 years. Therefore, a student might articulate inconsistency between two

⁶ Interviews with parents would have been highly desirable, but this was not possible due to lack of research resources.

⁷ We wish to thank the anonymous referees for making us aware of this problem.

⁸ Ignoring the role of reflections in want formation might also lead us to ignore cognitive dissonance, namely that individuals might want to do one thing but end up choosing something else – which could occur for various reasons, e.g., pressure from family, friends, etc.

wants (e.g., finding a job and go to university) at the time of the interview, but these might be achievable within the time span specified.

The second reason is that we cannot be fully conclusive about what resources a student has at his/her disposal. Seemingly inconsistent wants may be consistent if the student has more than enough resources to satisfy all his/her wants at a given moment in time. For example, a student might want both to study abroad (in the U.S.) and to be with her family back in Sweden at the same time. Yet this is only inconsistent if the student does not have the resources (e.g., ticket expenses, travel time) to commute (weekly or monthly) back and forth between the U.S. and Sweden.

One important demarcation of our study must be noted. In RCT, given a well-behaved hierarchical set of preferences, a rational choice theorist can calculate what the 'rational choice' is (Becker 1971). In this way, RCT is more interested in how certain choices or behaviours (see Figure 1, point 2) relate to certain educational outcomes (point 3), which is calculated in terms of a cost-benefit analysis. The origins of these assumed preferences or wants are thus of lesser research interest (point 1). In the present paper, we will focus more on students' want formation (point 1) and less on their actual choices and actions (point 2), and thus highlight some of the non-cost-benefit aspects that condition rational choice or decision-making in general (cf. Ball et al. 2002; Hodgkinson and Sparkes 1997). This demarcation is important because it situates our account not as a competitor to RCT, but more as a complement. We will argue, nevertheless, that a better understanding of the underlying processes of students' want formation can deepen our knowledge of why certain decisions are made, and thus enrich our understanding of why certain observations about educational outcomes can be made (point 3).

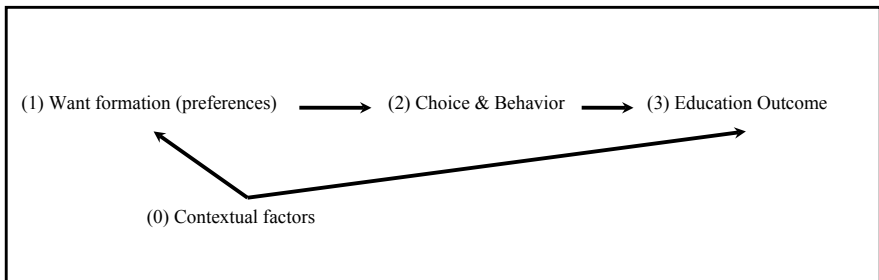


Figure 1: Differentiating want formation from actual choices

Are students' want formation ordered in a hierarchical manner?

The material we have collected – the want lists of the 27 students supported by the interviews – shows a relatively high degree of possible inconsistency. It indicates a combination of both indeterminacy (from completeness) and intransitivity (violation of transitivity). Let us look at some empirical illustrations.

AP student 1 presented the want list in Table 1. At want₁, she states '...I want to go to university, but it depends on what my friends are going to do ...'⁹ She also wants to find a proper job and be with her family because '... they are one of the most important things in my life'. At the same time or later on, at want₂, 'I would like to travel and have some time for myself...but this will require some money'. Regardless of what she is going to do, she wants

⁹ Cf. to Almquist *et al.* (2010) on students' transition to higher education with regard to their friends.

to maintain a good relationship with her friends from high school. Even if she managed to work a bit and then travel, she would like to keep travelling a lot during her studies or work. However, at this point, she will probably have satisfied a portion of her wants for travel and meeting new people, which she writes at want₃. While she is travelling and through her university studies, she would like to meet many new people. At want₄, she finally wishes to begin to establish a family, ‘... when I’m a bit older and have a good education, I want to meet somebody I can marry, have children with and a nice house’.

This AP student’s want list does not seem to contain any intransitivity. There are no wants on a higher order repeated on a lower order. But she does demonstrate a high degree of indeterminacy, especially at want₁. She seems to be undetermined about whether she wants to go to university, work, or stay in the same town as her family and friends. In terms of RCT, she seems to derive equal gain, or utility, from all of these four wants. This is problematic in terms of a hierarchical view of wants: a rational choice cannot be calculated because wants are not articulated clearly enough (Eriksson 2005).

Nevertheless, as discussed in the method section, this is only a problem for RCT when the resources to satisfy these wants are scarce. If an individual can satisfy all his/her wants all at once, then there is no problem of choice (cf. Daoud 2007; 2010). That individual can have it all. It is only when resources are scarce relative to competing wants that a (rational) choice becomes relevant.

Table 1 AP student 1 (girl): a Hierarchical View

	Want-list
Want ₁	Higher Education + Work + Family + Friends
Want ₂	Travel + ‘time for myself’
Want ₃	Meet new people
Want ₄	Family (establish one)
Wants ₅₋₁₅	
Analysis:	<i>Contains indeterminacy = yes</i> <i>Contains intransitivity = no</i>

AP student 2 reports a somewhat similar want list, but the degree of potential inconsistency seems to be higher in this case. Her want list seems to contain both intransitivity and indeterminacy. She tells us: at want₁, ‘...I want to spend a year in the U.S. as an au pair, I want to do something other than study for a year... I need a break’. At the same time, however, she wants to maintain a good relationship with her friends and family back in Sweden. After that, at want₂, ‘...I want to come back and start my university studies... I want to become a teacher’. From want₃ to want₆, she wants to get married, start working, buy a house and have children. When she has done that, she wants to start traveling around the world. While she is pursuing all these wants, ‘... it’s very important to maintain a good relationship with family and friends, it’s the most important thing...’. Lastly, at want₈, she wants to have a lifestyle that allows her to do what she wants to ‘...have enough money to do the things I want’.

Intransitivity becomes a problem in this case, because family and friends are repeated throughout the whole want list, ranked at higher and lower positions simultaneously. AP student 2 is more problematic than AP student 1 is for RCT’s hierarchical view of wants, because transitivity is violated. AP student 2 prioritizes one year in the U.S. as an au pair over higher education (want₁ ≥ want₂) and higher education over family (want₂ ≥ want₃). No w, according to the principle of transitivity she should also prioritize 1 year in the U.S. as an au pair over her family (want₁ ≥ want₃), but this does not follow. What can we make of this?

Is this just a problem of method (we are not really measuring what we set out to measure) or an indication of something else? Or are these students simply inconsistent? Let us briefly outline some VP students before we attempt to answer these kinds of questions.

Table 2 AP student 2 (girl): a Hierarchical View of Wants

	Want-list
Want ₁	Au pair 1 year in U.S + Family + Friends
Want ₂	Higher Education (teacher) + Family + Friends
Want ₃	Get married + Family + Friends
Want ₄	Start working + Family + Friends
Wants ₅	Buy a house+ Family + Friends
Wants ₆	Have children + Family + Friends
Wants ₇	Travel + Family + Friends
Wants ₈	Be able to do and buy what I want
Wants ₉₋₁₅	
Analysis:	<i>Contains indeterminacy = yes</i>
	<i>Contains intransitivity = yes</i>

Intransitivity and indeterminacy do not seem to be specific to AP students; VP students manifest similar kinds of potential inconsistency.

VP students generally have a shorter want list than AP students do, and most of them ranked a job, nice colleagues and a good income as more wanted. VP student 1 and 2 are no exceptions. VP student 1 says, ‘...what does one want more than a good job, salary, family, house and maybe pets?’ The want list of this student contained indeterminacy, because he could not really differentiate between these wants. They are not necessarily mutually exclusive, but they could be. Having a job does not necessarily lead to a good income or nice colleagues. This could then result in potential inconsistency from RCT’s point of view.

Nevertheless, most of the VP students reason in a relatively similar way. After they graduate from high school, their primary concern is to get a job, with nice colleagues and hopefully a good income. VP student 2 says, ‘...one can maybe start off with a bit lower salary just to get a job, but I want high salary later on’. At want₂, most of the VP students say that given a good job position, they would like to buy a nice house and establish a family. VP student 1 says that he wants children, but ‘... only if they like cars and engines...’. VP student 2 wants to have children, ‘... but only later on’.

The want list of VP student 2 seems to contain intransitivity, because ‘good income’ is repeated on different levels of ranking. Is higher income ranked over establishing a family, or is family ranked over higher income? During the interview, this student could not really make this clear. He said, at want₃, that he might need further vocational training to get a better job or income, ‘... there are a lot of extra courses when we’re out and working in the factories’ (cf. Lehmann 2009), but could not order the relative ranking of income, work, and family.

Table 3 VP student 1 (boy): a Hierarchical View of Wants

	Want-list
Want ₁	‘Nice colleagues + ‘Good income’ + ‘Enjoyable work’
Want ₂	Family + House
Want ₃	Friends
Want ₄	Car
Wants ₅₋₁₅	
Analysis:	<i>Contains indeterminacy = yes</i>
	<i>Contains intransitivity = no</i>

Table 4 VP student 2 (boy): a Hierarchical View of Wants

	<i>Want-list</i>
<i>Want₁</i>	'Nice colleagues + 'Good income'+ Work
<i>Want₂</i>	Family + have children + good income
<i>Want₃</i>	Vocational education + 'good income'
<i>Want₄₋₁₅</i>	
Analysis:	<i>Contains indeterminacy = yes</i>
	<i>Contains intransitivity = yes</i>

AP student 1 and 2 are only two examples of the fifteen AP students, and VP student 1 and 2 are only two examples of the twelve VP students. A majority of the want lists contains intransitivity and indeterminacy to varying degrees. Table 5 summarizes our analysis of all the want lists of AP and VP students (composed on the basis of the interviews and the questionnaires).¹⁰ Consequently, the hypothesis we articulated does hold, a majority of the students' want lists (about 67%) did contain some kind of potential inconsistency.

What we have done in this section, exemplified by these four students' want lists, is to 'squeeze' the wants of these students into a strictly hierarchical view. We have tried to fit our empirical observations into the theoretical propositions of RCT. Now, given that the material demonstrates a relatively large degree of potential inconsistency, we may ask why this has not worked, and if there is a more appropriate way of characterizing these students' want formation.

Table 5: VP and AP students' want-lists with regard to potential inconsistency.

	VP (n=12)	AP (n=15)	VP and AP (n=27)
Number of want-lists containing intransitivity	3 (25%)	8 (53%)	11 (40%)
Number of want-lists containing Indeterminacy	8 (67%)	10 (67%)	18 (67%)
Total want-lists with no intransitivity or indeterminacy.	4 (33%)	5 (33%)	9 (33%)
Total want lists containing potential inconsistency	8 (67%)	10 (67%)	18 (67%)

Note:

a = there can be more 'potential inconsistency' than student cases because the same case can contain both indeterminacy and intransitivity. This number is calculated additively, viz. cases of intransitivity plus cases of indeterminacy.

Given our interviews with these students, there seems to be a basic problem with human wanting, namely that people tend to form their wants in an organic manner owing to the problem of fundamental uncertainty that is embedded in social life. This fundamental uncertainty refers to the problem of gaining knowledge about what resources (social, cultural and economic capital) can be assembled to satisfy one's wants, which in turn also conditions what wants one actually articulates. Therefore, as Eriksson writes, '...if I do not know enough about the alternatives to be able to determine how well they would satisfy my desires, failing to construct a complete ranking is not irrational, it is a sound response to the lack of information' (Eriksson 2005, 98). In the remainder of the paper, we will outline an alternative interpretation of AP and VP students' want formation based on the concepts of pragmatic

¹⁰ The qualitative data assistant software ATLAS.ti was used to compose these tables.

rationality, habitus and reflexivity (Archer 1979; Ball et al. 2002; Elder-Vass 2007; Hodkinson and Sparkes 1997).

How students seem to regard their wants

Many students expressed their concern about not knowing what they really want, what is socially allowed to express as a want (relative to class, gender, and ethnicity positions), and what the best strategy would be to satisfy their wants once they articulate them. One AP student says, '... I would like to study at university, ... but I'm uncertain about what to study... I have a lot of options... big options, maybe history, there are good universities in the U.K. and U.S. But there are places in Uppsala and Lund as well'. Another AP student states, 'I'm not sure, I want to go abroad and work but I'm too much of a coward... I'm so indecisive about everything'. One AP student says, 'I've become more uncertain about what to do now...', while another discusses how she 'wanted to be a teacher but I have begun to have second thoughts... many teachers are so stressed... and there are a lot of teachers graduating now... I should maybe choose something else'.

VP students demonstrate the same uncertainty, but it is more about the labour market and less about university, family or travel. One of the VP students says, '... I don't know what job I can get... it doesn't matter as long as I can make some money for a couple of years... maybe buy a house then'. Another VP student states, 'I'm worried about working too much in some factory ... I might get ill or become an invalid because of some working injury There are a lot of chemicals in the factories, did you know that... I want to be able to play with my children when I get older'. Yet another VP student says, 'who knows what the labour market will be like in 2 years... we could all be employed or unemployed...?'

This is the problem of uncertainty that characterizes most aspects of social life, and a proper way of responding to this, it would seem, is not to express your wants in a hierarchical or rational way, but to let them instead adapt as the context changes. Beckert articulates the problem even more firmly, saying that we may 'want to maximize our utility, but we do not know which strategy of behavior we should choose for that because we do not know the causal relations from which we can deduce an optimizing decision. It is not *irrational* to act rationally but rather *impossible* to act rationally' (Beckert 2002, 37). This impossibility, we argue, is not only directed outwards (society) but also inwards (cognitively) (Kahneman and Tversky 1982). Accordingly, a hierarchical view of wants (instrumental rationality) presupposes that an individual has knowledge about his/her (1) *inner* (what one wants) and (2) *outer* state of affairs (how to satisfy what one wants). Naturally, the inner state of affairs does not only refer to the wants of an individual (Levine 1998), but also includes emotions, memories, experiences, and not least, one's own reflections (Archer 2003). It defines these students' horizon of action (Hodkinson and Sparkes 1997, 35).

We will call this kind of uncertainty *personal epistemological opacity*. The concept refers to the fundamental uncertainty characterizing an open system, this uncertainty being from the agent's own perspective. It merely refers to one's subset of the problem of fundamental uncertainty (cf. Dequech 2004), namely that an agent's action is oriented towards finding ways of acquiring knowledge about feasible means and desirable wants (ends) in a given social field. This process is micropolitically based, contingent and fallible (Archer 2003; Ball 1987). It allows for a dynamic formation and re-formation of one's wants, depending on practical situations and experiences over time (Archer 2000; 2007; Bourdieu 1977; 1984; 1992; Elder-Vass 2007).

Accordingly, personal epistemological opacity seems to explain the manifested inconsistencies of an individual's want list, but one may then ask how action is even possible given this uncertainty? This question seems to have a relatively simple sociological answer (cf. Beckert 1996). The key is to give an account of the underlying causal conditions of the

formation of wants in organic terms, and to explain the decision-making process in terms of pragmatic rationality (Hodkinson and Sparkes 1997; cf. Joas 1996).

Structuring the horizons of action

Given our material, individuals seem to be more interested in maintaining and developing all their wants, as well as in creating relationships between each separate want, rather than discriminating between them. Their want formation is thus shaped by their whole horizon of action – ‘... the arena within which actions can be taken and decisions made’ (Hodkinson and Sparkes 1997, 35). They are not hierarchically oriented towards their wants, but rather organically oriented towards their whole body of wants (i.e., wants that are functionally related to each other). By ‘organic’ we mean that each distinct want (e.g., work, family, house) is not conceived atomistically. Each distinct want in a given body of wants tends to occupy a unique position in that body. It performs a function in this totality, the aim being to realize a way of life (aesthetically and practically) (Bourdieu 1984). A hierarchical view of want formation is dependent on transitivity and completeness, whereas an organic view is not. In this view, individuals are not obligated to state their wants rationally, but they can still make pragmatically informed decisions (Bourdieu 1998).

An organic view of wants does not eliminate the problem of personal epistemic opacity, it merely mitigates this fundamental problem for agency. It allows the student or agent to reflexively change his/her wants over time, and to define and redefined them in practice (Archer 2003; 2007; Bourdieu 1977; 1992). We propose then, that the individuals’ *habitus* and *reflexivity* are the basic mechanisms underlying how these different wants emerge, take shape and relate to each other. If *habitus* explains variations between different groups (the set of wants), then *reflexivity* explains variations between the individual and its group (want lists).¹¹

On the one hand, we have *habitus*, which ‘...function[s] below the level of consciousness and language, beyond the reach of introspective scrutiny or control by the will’ (Bourdieu 1984, 466). This means that what a student wants does not emerge in a completely voluntary fashion. Wants emerge as a consequence of structural dispositions (cf. Bourdieu 1984). This is clearly reflected in our material.

There are some interesting differences between the AP and VP group with regard to what their bodies of wants look like; see Table 6. Eight of fifteen AP students wanted to go to university directly after high school, whereas no VP student mentioned higher education on their want list (not even at a lower ranking). One VP student stated, ‘...I might need to take some courses to get a decent income, but only via my future employer’. This tendency among VP students, not expressing a desire to continue to higher education, is enforced by the conditions in their field. Several VP teachers believe that these students’ best chance in life is to find a job after high school, and work their way up. One says ‘...because a lot of these students usually fail to get a complete degree from high school, their only chance is to be as employable as possible and act towards that’. Interestingly, what almost all VP students wanted, eleven of the twelve students, was to find a permanent job, with a good income and nice colleagues (cf. Gewirtz et al. 1995). Nevertheless, *habitus* does not explain all of the variations we found within the two groups.

¹¹ This follows Elder-Vass’s interpretation of Bourdieu and Archer (2007).

Table 6: Mostly and less frequently wanted: AP vs VP students

	AP	VP
Mostly wanted (highly ranked want _{1,2})	<i>Higher Education</i> (8 of 15) <i>Temporary work</i> (6 of 15) <i>Travel</i> (5 of 15)	<i>Work</i> (11 of 12) <i>Income</i> (8 of 12) <i>Colleagues</i> (5 of 12)
Absent or less frequently wanted ^a (lower ranked wants ₄)	n/a	<i>Higher Education</i> (0 of 12)

Note

a = this is defined relative to the other group.

On the other hand, we have reflexivity, which allows people to ‘...reflexively deliberate upon the social circumstances that they confront. Because they possess personal identity, as defined by their individual configuration of concerns, they know what they care about most and what they seek to realise in society’ (Archer 2003, 130). Thus, even if we can establish that each student has relatively similar wants compared to his/her group, there are still no want lists that are identical. There is variation all the way down to the individual level. This is explained by reflexivity, we argue. One VP student, for example, said ‘... I’ve been playing ping-pong for a long time, I dream about being a professional player, but that’s uncertain...I need to find something secure, a good job’. One AP student wants to be a journalist, and her idol is a famous Swedish journalist, ‘...I want to be like him, I want to win the big journalist prize like he did’. There is a great deal of variation between the students, within and between the two groups; this could be attributed to each individual’s personal thoughts and deliberation, which cannot be explained by any group habitus.¹²

Accordingly, in order to understand the empirical material, it is important to synthetically use both reflexivity (creativity) and habitus, as these concepts cover slightly different dimensions of human wanting and the decision-making process (cf. Hodkinson and Sparkes 1997). The two concepts allow us to see different aspects of social action, which ultimately facilitates a deeper understanding of human wants. Based on these arguments, students’ want formation is neither reducible to individual emotion-cognitive processes nor to previous socialization or socio-structural processes and contexts; instead, want formation emerges in the relation between these processes and contexts and is mediated by practice (Elder-Vass 2007). Subsequently, it seems that decisions will ultimately be based on what Hodkinson and Sparkes called pragmatic rationality. As they argued:

Young people also have resources, and can exert considerable influence on their own futures. But that influence can only be understood as part of complex interactions it is helpful to see all the players making pragmatically rational decisions, from their own differing standpoints, within their own differing horizons and with their own differing objectives (1997, 37).

This pragmatic rationality is closely related to individuals’ want formation. Figure 2 and Figure 3 are graphical representations of an organic view of the want formation of two ideal typical persons. Whereas the hierarchical view forces a strict ranking between wants in order to calculate an optimal choice, the organic view merely loosely illuminates the relative ranking of a particular want. The links between different wants indicate a pragmatic mutual dependence. Take, for example, the want for a good income and a house: An income enables a person to buy a house, but once you have a house you will need a continuous flow of

¹² To explain all variation using the concept of habitus would be to give a too deterministic view of action, because all of the individual’s choices would then be explained by external factors such as socialization, previous experiences, and cultural practices and expectations. Still one could of course argue that some classes of habitus are more reflexive than others are (Bourdieu 1984).

income. A similar argument also applies to wanting a good income and a family: If you have a family you will need an income, and if you have an income it enables you to start a family. In this way, intransitivity can be explained. Thus, besides indicating ranking, the organic view incorporates a network of interrelated wants. It illuminates how different wants are interconnected to each other and explains why it is possible to harbour intransitivity and indeterminacy, but still be able to act and make decisions pragmatically.

Hence, these figures capture the horizon of actions of these students. The figures portray the body of wants manifested in the social fields of AP and VP, respectively. The vertical axis describes the relative ranking of wants on a Bourdieuan *field* (Bourdieu 1984, 226-228); these are the same wants that we tried to squeeze into a hierarchical view of wants above (Watson et al. 2009). The horizontal axis is a representation of the expected time horizon. Thus, this is their intersubjective understanding of their horizon of action.

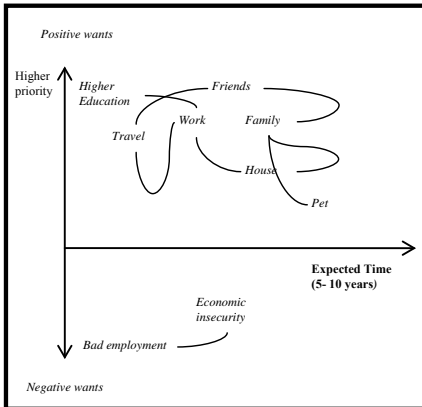


Figure2: An Organic View of wants: the horizon of action on an Academic Oriented Field (AP)

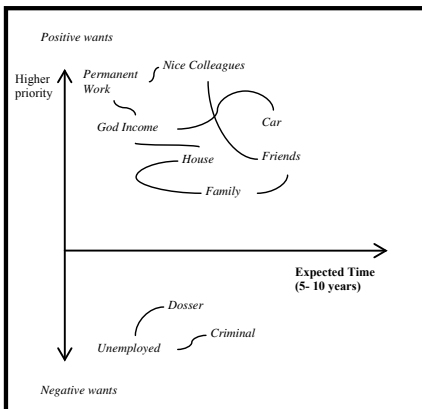


Figure3: An Organic View of wants: the horizon of action on a Vocational Field (VP)

Conclusion

Rational choice theory (RCT) is dependent on the hypothesis that students form their wants in a hierarchical manner, and in the present article we have tested this hypothesis in a way, based on material from interviews and questionnaires with a total of 27 students from academically oriented (AP) and vocationally oriented student programmes (VP), respectively. Our findings do not support this hypothesis. These students' want lists contain a relatively high degree of possible inconsistency (indeterminacy and intransitivity): more precisely, two-thirds could be seen as inconsistent with a hierarchical view of wants.

We have explained this high degree of inconsistency with reference to the fundamental uncertainty characterizing social life in general and the limited nature of human cognitive abilities (Beckert 1996; 2003). Given this uncertainty, it is pragmatically consistent not to be able to articulate your wants rationally consistently, and this translates into a specific kind of uncertainty in the school environment that we have called *personal epistemological opaqueness*. Personal epistemological opaqueness concerns knowing what 'I really want and care about' (ends) and 'the resources I have at my disposal' (means). It is conditioned by the social field one is embedded in, and we used it to re-interpret the students' want lists. What we found was that they seem to order their wants in an organic way owing to this opaqueness or uncertainty and that they therefore orient themselves towards all their wants holistically, by creating associations between separate wants, which consequently define their horizon of action (Hodkinson and Sparkes 1997). This suggests that these students make their decisions based on a pragmatic rationality (cf. Ball et al. 2002) rather than an instrumental one.¹³ The simultaneous use of the concepts of habitus (Bourdieu 1984) and reflexivity (Archer 2007) are important in explaining how pragmatic rationality functions (Elder-Vass 2007).

Based on the above, one important implication of the article is that an explicit study of human wants holds greater sociological explanatory potential that needs to be developed further – with reference to various social differentials (e.g., gender, ethnic, class) in the school environment. This is important not only to deepen our sociological understanding of human wants but also in terms of crafting proper educational policy. For example, current policy rhetoric assumes that by manipulating the costs or benefits of continuing to higher education, more (or less) students may be recruited from the lower classes or marginalized ethnic groups – in line with the view of rationality in RCT (cf. McGregor 2009; Murphy 2009). This view assumes that all students from high school would prefer to continue to higher education. But judging from our material, VP students did not have that preference, not even on a lower ranking (cf. Kupfer 2010). However, '...we must know more about individual wants than a ranking of its objects provides. We must know more about wants for a simple reason: individuals do not always, or often, know what they want, truly want what they imagine they want, or gain satisfaction from acquiring what they think they want' (Levine 1998, 1-2), and thus further research in this area is clearly needed (cf. Lynch 2008).

¹³ This interpretation converges somewhat with softer versions of RCT, see for example Boudon (1996) or Elster (2007).

Appendix A – Semi-structured questionnaire

- Given your current situation, what are the things you want and the things you want to do?
- Could you list them in order of priority?
- Do you think this list will change a lot within 5-10 years?
- What are the obstacles and opportunities for you to achieve these things?

- Please, tell us about your reflections.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

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Paper V

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Robbins and Malthus on Scarcity, Abundance, and Sufficiency

The Missing Sociocultural Element

By ADEL DAOUD*

ABSTRACT. The problem of scarcity is often talked about, but it is rarely clearly defined. In this article, two different views of scarcity are outlined: absolute and relative scarcity. These two are respectively exemplified by Malthus's and Robbins's views of scarcity. However, both of these views tend to naturalize and universalize scarcity, and thus overlook abundance and sufficiency, which are important states in the social provisioning process. It is argued that this is due to ignorance of the sociocultural causal underpinnings of scarcity, abundance, and sufficiency (SAS). The introduction of these mechanisms enables further conceptual differentiation of SAS (e.g., quasi-, artificial-, natural-).

Introduction

It is commonly viewed that resources are scarce no matter the situation. There is only a given amount of oil hidden beneath the surface, the production of food is limited, and there are only 24 hours per day to utilize. Conflict, poverty, and anxiety are all consequences of scarcity. In this view, social provisioning is hampered; finite

*The author is a doctoral candidate at the Department of Sociology, Gothenburg University, Sweden. E-mail: adel.daoud@sociology.gu.se. His research comprises a study of the concept of scarcity, abundance, and sufficiency in economics and sociology. One of the main interests is to bring these disciplines closer together through the development of these concepts. This includes both theoretical studies as well as empirical investigations (most notably, consumerism and famines). Another research interest, in proximity to this general program, includes the philosophy of science, with a focus on realist stances. The author wishes to thank Bengt Larsson, Freddy Winston Castro, and Richard Swedberg for valuable assistance and comments on previous version of this paper. The author also wishes to acknowledge the valuable insights provided by the editor and the two anonymous referees.

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resources are equated with scarcity, and scarcity is more or less given, a natural element of the human condition.

Nevertheless, if we consult the literature on scarcity, a somewhat different picture may emerge. Firstly, it may be claimed that limited resources does not equate with scarcity. Scarcity is a property that emerges in relation to human activity or social provisioning. Secondly, it seems that there are at least two different views of scarcity; namely, absolute and relative scarcity (Barbier 1989). These are, however, implicitly used in the literature and thus need to be further studied. Where this distinction is used explicitly, it mainly corresponds to the difference between human needs and desires (Baumgartner et al. 2006; Raiklin and Uyar 1996). This article will argue that this correspondence is not a necessary condition to define these two views. Thirdly, even if scarcity is the most frequently used concept in the literature, the paper will argue that abundance and sufficiency are equally important but neglected states of affairs when it comes to the provisioning process. This argument depends on showing the non-naturalness of scarcity; in other words, its sociocultural underpinnings. These arguments will be unfolded to fulfill the following purpose.

The purpose of this article is to explore two different views of scarcity, abundance, and sufficiency (SAS); and the way in which they overlap and vary. These two views will be denominated as absolute SAS and relative SAS. This study will outline the essential features of these two views, which will result in a characterization of absolute and relative SAS.

This study will be anchored in the SAS literature. However, for the sake of stringency this paper will mainly use two different accounts to exemplify absolute and relative SAS. Absolute and relative scarcity can be respectively contrasted through Malthus's and Robbins's accounts. I believe that Malthus's account is the most representative of absolute scarcity, not because he focuses on a fundamental human need (food), but because the way he uses the analytical categories is essentially what I mean by absolute scarcity. This claim is also true for Robbins's account. I believe that his account is a clear example of an analysis of relative scarcity,¹ not because he focuses more on human desires, but because the use of the analytical categories is one of relative scarcity. Nevertheless, as will be shown in this paper, absolute

and relative SAS is more about how the problem of scarcity is viewed rather than just a categorical distinction.

There is an intimate relationship between the issue of SAS and the social provisioning process. Scarcity is a given, or a postulate, in the mainstream economic conception (Dugger 1996); but from an institutionalist or sociological point of view,² as resources and wants could be studied endogenously, scarcity then is also, by definition, open for socioeconomic inquiry (Daoud 2007). By the same token, if scarcity is an interesting economic concept to study, it also follows, that abundance and sufficiency are open for investigation. This is especially true when the underlying sociocultural mechanisms of SAS are understood.

The article is divided into four sections. The first section discusses the Malthusian approach and its understanding of absolute scarcity. The second section discusses relative scarcity as viewed by Robbins's approach. The third section explores some of the central relations between absolute and relative scarcity. It is shown that these are not categorical distinctions but are rather elements that provide different focus of the SAS issue. The fourth section highlights some of the underlying sociocultural mechanisms of SAS that have been largely neglected in the outlined approaches. This discussion about the importance of sociocultural mechanism will indicate the need for further research.

Malthus and Absolute Scarcity

In his 1826 book, *An Essay on the Principles of Population*, Thomas Robert Malthus laid the theoretical foundation of the conventional wisdom that has dominated the debate, both scientifically and ideologically (Harvey 1974), on global hunger and famines for almost two centuries (Kutzner 1991). The increasing food requirements of any given population will sooner or later result in scarcity, and thus hunger and famine. This is the principle of population:

Taking the whole earth [. . .] and, supposing the present population equal to a thousand millions, the human species would increase as the numbers, 1, 2, 4, 8, 16, 32, 64, 128, 256, and subsistence as 1, 2, 3, 4, 5, 6, 7, 8, 9. In two centuries the population would be to the means of subsistence as

256 to 9; in three centuries as 4096 to 13, and in two thousand years the difference would be almost incalculable. In this supposition no limits whatever are placed to the produce of the earth. It may increase for ever and be greater than any assignable quantity; yet still the power of population being in every period so much superior, the increase of the human species can only be kept down to the level of the means of subsistence by the constant operation of the strong law of necessity, acting as a check upon the greater power (Malthus 1826: 11).

Accordingly, the strong drive for reproduction in relation to the weak expansion of food production possibilities will very rapidly result in a situation of scarcity and thus hunger. This fundamental relation between food requirements and the food production capacity is the ultimate check on population growth. However, there are more immediate checks conditioning this fundamental relationship, namely preventative and positive checks. The former refers to the human capacity to reflect on the future consequences of various courses of action. For example, the fact that forming a large family requires more resources tends to discourage individuals from establishing such a family. It also refers to custom and morality in society (e.g. marriage or other traditions and norms that restrict reproduction). Attitude towards contraceptives is another example.³ But the positive checks, as the quotation indicates, are more extreme and involuntary by nature. He argued that:

The positive checks to population are extremely various, and include every cause, whether arising from vice or misery, which in any degree contributes to shorten the natural duration of human life. Under this head, therefore, may be enumerated all unwholesome occupations, severe labour and exposure to the seasons, extreme poverty, bad nursing of children, great towns, excesses of all kinds, the whole train of common diseases and epidemics, wars, plague, and famine (Malthus 1826: 15).

Even a small unforeseen disruption in this fundamental relation, such as a bad harvest, may cause a severe famine. Consequently, the sum of the preventative and positive checks forms the set of immediate checks on population growth (Malthus 1826: 17). Hence, it is the underlying causal mechanisms of requirements that cause an exponential increase in population, while the available quantities are relatively fixed.

There are two fundamental categories that define scarcity in the Malthusian approach. The first is food needs, we will denominate this category as food requirements, or more generally *requirements* (R). The second category refers to the objects that provide direct satisfaction of these requirements, which will be denominate as *available quantities* (A). There is therefore a fundamental relationship between R and A that determines scarcity, abundance, and sufficiency (SAS). From this, we could derive the following quantitative relationships:

- Absolute sufficiency: human requirements (R) and available quantities (A) are quantitatively equal: $(R = A)$.
- Absolute scarcity: human requirements (R) are quantitatively greater than available quantities (A): $(R > A)$.
- Absolute abundance: human requirements (R) are quantitatively less than available quantities (A): $(R < A)$.

These relationships are quantified for one given system; for example, a nation, a region, or even the entire global (the earth). In the case of hunger or famines, aggregate food needs and food production are measured and evaluated. Questions about thresholds, limitations, and the subsistence prospects of a given system are investigated.

In its contemporary version (the neo-Malthusian approach), the main thrust of Malthus's argument is not restricted to foodstuffs, but is rather more general. It could, by the same token, refer to the ultimate limitation in common resources (Hardin 1968), the carrying capacity of nature (Meadows et al. 1972), or it could be as general as the availability of low entropy resources (diffusion of energy, namelys entropic processes) (Georgescu-Roegen 1971).

Accordingly, the premise of scarcity and the logic of Malthus are echoed by Hardin in his idea of the tragedy of the commons and his lifeboat ethics. He sets the scene:

So here we sit, say 50 people [requirements (R)] in our lifeboat. To be generous, let us assume it has room for 10 more, making a total capacity of 60 [available resources (A)]. Suppose the 50 of us in the lifeboat see 100 others [more requirements (R)] swimming in the water outside, begging for admission to our boat or for handouts. We have several options: we may be tempted to try to live by the Christian ideal of being "our brother's keeper," or by the Marxist ideal of "to each according to his needs." Since the needs of all in the water are the same, and since they can all be seen

as “our brothers,” we could take them all into our boat, making a total of 150 in a boat designed for 60 [A-R relation]. The boat swamps, everyone drowns. Complete justice, complete catastrophe (Hardin 1974: 38).

It is with reference to this metaphor that Hardin lays out his argument. The overuse of common resources leads to the scarcity in future supplies (Hardin 1968). Different population checks have to be manufactured in order to prevent the overuse of resources. It does not matter if it is education or famine; the imperative is the survival of humanity—or the fittest human.⁴ Along the same lines, Kenneth Boulding (1973) argues that the current world system (economy, society, and nature) has now become a closed system, or rather a system that has reached its limitation. It is not possible, as in the early civilizations, to conquer new territories or resources and thus push the production possibilities frontier further outwards (the expandability of A). In order to solve humanity’s global environmental problems, people cannot simply move from one place to another, and hope to leave these problems behind. Rather, we have to envision the human race living in a spaceship where natural resources have to be used in a cyclical manner.

Malthus’s approach is generalized even further by Georgescu-Roegen, one of the pioneers of ecological economics (Daly and Farley 2004). He vindicates Malthus’s statements and criticizes contemporary economics for neglecting this issue:

If the entropic process were not irrevocable, i.e., if the energy of a piece of coal or of uranium could be used over and over again ad infinitum, scarcity would hardly exist in man’s life. Up to a certain level even an increase in population would not create scarcity: mankind would simply have to use the existing stocks more frequently (Georgescu-Roegen 1971: 6)

The focus on the actual use of low entropy resources, rather than on the alternative use, illustrates one of the crucial differentiating elements between absolute and relative scarcity. A low entropy (non-renewable) resource is scarce in a different sense than say land (renewable). Both land and coal are limited in amount or extension. Even if a piece of coal and an acre of land have an alternative use as any element of the factors of production, a piece of coal can only be used once, whereas an acre of land can be redistributed or reallocated

later on. This shows a fundamental limitation of merely reallocating resources (relative scarcity) because reallocation does not consider the absolute dimensions of a resource. Moreover, using uranium instead of oil, oil instead of coal, and coal instead of real horse power merely exponentially increases the depletion of low entropy resources. Hence, modernization of the means of production, whether it is done via the market or via administrative measures, may merely lead to even more severe depletion of low entropy resources, and thus aggravate absolute scarcity. Furthermore, the extraction of natural resources (low entropy) is seen as a necessary act to enable economic growth, but it gradually leads to severe absolute scarcity of natural resources. The total set of low entropy resources (A_{entropy}) is shrinking, whereas the total set of humanity's requirements (R_{entropy}) for low entropy resources is expanding exponentially. This is Herman Daly's most general absolute scarcity, what he calls "the absolute scarcity of ultimate means." He writes:

Absolute scarcity . . . refers to the scarcity of resources in general, the scarcity of ultimate means. Absolute scarcity increases as growth in population and per-capital consumption push us ever closer to the carrying capacity of the biosphere. The concept presupposes that all economical substitutions among resources will be made [this is relative scarcity]. While such substitutions will certainly mitigate the burden of absolute scarcity, they will not eliminate it nor prevent its eventual increase (Daly 1977: 39).

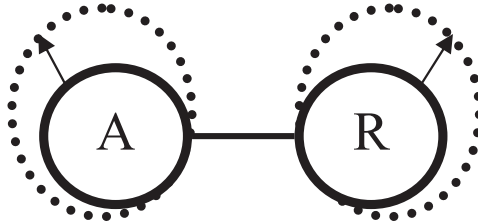
Hence, it is in this way that the (neo)Malthusians view the problem of scarcity, which commonly focuses on, but is not limited to, subsistence resources such as food, water, and land (Meadows et al. 1972). Figure 1 is a graphical representation of absolute SAS as defined in this study. First, it refers to the quantitative relationship between one kind of A and one kind of R. Second, it captures the underlying possibilities of expanding and shrinking any A-R relationship. For example, is it possible to increase the area of arable land to meet the expanding need for food; or why are energy production at a certain level versus energy consumption.

Robbins and Relative Scarcity

The concept of relative scarcity is found in Robbins's famous definition of economics, "the science which studies human behaviour as a

Figure 1

One-to-One Relationship: The Problem of Actual Use (Thresholds)



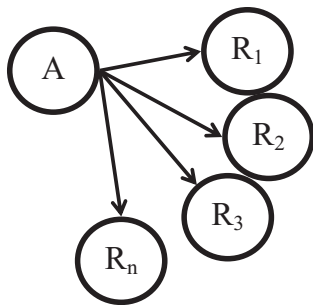
relationship between ends and scarce means which have alternative uses” (Robbins 1945: 16). The term *alternative use* (Becker 1971) or *substitutability* (Baumgartner et al. 2006) is the key to understanding relative scarcity. It is the allocating or distributing act of individuals that is of interest. This could be illustrated with reference to Robinson Crusoe, the isolated economizing individual (Robbins 1945: 10–12).⁵

Imagine Crusoe living alone on an island, where the satisfaction of his requirements depends only upon the supply of fresh water. Crusoe has four requirements: water for himself for drinking, water for his animals (provides him with milk), water for his hygiene, and some water for his flower garden, which gives him aesthetical pleasure (Menger 2004: 133). Consider two cases. In the first case, where the supply of water on the island is enough to support at least thousands of individuals with needs and wants very similar to Crusoe’s—a situation of abundance. In such a situation, Crusoe would have no reason to economize. Additionally, in this case the subject matter of mainstream economics does not apply.

The second case is where the supply of water on the island is scarce in relation to his requirements. In this case, Crusoe is forced to economize and make the best (the optimal) he can of the situation; his well-being and ultimately his existence are threatened. What is the most optimal solution (the rational choice) in terms of using the water efficiently? In principle, the problem is about allocating the limited (scarce) water to his four needs.⁶ Four different ends are competing relative to a scarce resource. Consequently, some ends have to be

Figure 2

One-to-Several Relationship: The Problem of Alternative Use (Allocation)



foregone—but which ones? Even if Crusoe's example is an unrealistic approximation of real life situations, his case is the model for solving optimization problems under relative scarcity. This kind of optimization applies regardless of the character of the needs, wants, or ends.

Relative scarcity may be illustrated graphically in Figure 2. It is one kind of resource (A) with alternative uses related to n different requirements (R_n).

Robbins summarizes the human condition in four essential points: (a) the ends are various; (b) we have the ambition to fulfil these various ends; (c) the time and the means for achieving these ends are limited and capable of alternative application; and (d) the ends differ in importance and can be prioritized (Robbins 1945: 12). Therefore, human beings have to choose. They have to economize. This is the essential economic phenomenon that is the root of mainstream economics. Robbins writes:

when time and the means for achieving ends are limited *and* capable of alternative application, *and* the ends are capable of being distinguished in order of importance, the behaviour necessarily assumes the form of choice. Every act which involves time and scarce means for the achievement of one end involves the relinquishment of their use for the achievement of another. It has an economic aspect. (Robbins 1945: 14)

To reiterate, it is the alternative use of means that condition the emergence of relative scarcity. Gordon argues, as an exercise in

logic, that this kind economizing problem, the problem of choice, applies not only to this world of finite resource but also to the afterlife (Gordon 1980). Gordon claims, even if time is infinite in length, that ‘. . . while it would be possible to do everything one wished to do sooner or later, one could not do everything *at the same time*; one could not, for example, play the harp and go swimming simultaneously. Choices would have to be made as to which to do first; that is, time would have to be allocated despite its certain infinite duration. So, everlasting life is not a sufficient condition for no scarcity (Gordon 1980: 213). This is similar to Zinam’s concept of internal scarcity (Zinam 1982). Choices have to be made about how to utilize each unit of time. Consequently, all human actions have an economic aspect because they are conditioned by alternative conduct or alternative use (Robbins 1945: 28).

Nevertheless, Robbins argues that not all means are scarce. This is crucial. To make choices is not necessarily the same thing as the problem of relative scarcity, which questions the validity of Gordon’s and Zinam’s argument. There are things in the world that are abundant such as the air for instance. An individual can have one unit of air without losing a unit of another good (e.g., water, or food). The abundance of air makes it a “free” good. We do not have to sacrifice time or other means in order to acquire a unit of air. In a situation of abundance, Crusoe has both the time and means to fulfil all his requirements; he does not have to economize despite the fact that he must make choices (Robbins 1945: 14–15, 35). This, I argue, shows that a solution to relative scarcity, in Robbins’s term, hinges on choice, but choice as such does not necessarily hinge on the problem of relative scarcity.

In general, however, abundance is a rare case according to Robbins. We have a multiplicity of objectives or requirements in relation to limited time and means. There are only 24 hours in the day. Life is short. Nature is stingy:

We have been turned out of Paradise. We have neither eternal life nor unlimited means of gratification. Everywhere we turn, if we choose one thing we must relinquish others which, in different circumstances, we would wish not to have relinquished. Scarcity of means to satisfy ends of

varying importance is an almost ubiquitous condition of human behaviour (Robbins 1945: 15).⁷

Robbins is universalizing scarcity by naturalizing it. In the last section of this article, I will argue that this is a problematic position.

Robbins argues, therefore, that relative scarcity in the form of the scarcity postulate is the starting point for economics (cf. Becker 1971; Samuelson and Nordhaus 2001; Xenos 1987, 1989).

The following definitions summarize the quantitative meaning of relative SAS:

- Relative sufficiency: A set (\mathbf{R}') which consists of different kinds of requirements, note as $\mathbf{R}' = (R_1, R_2 \dots R_n)$, in relation to the available quantities (A) with alternative uses that are quantitatively equal: ($\mathbf{R}' = A$).⁸
- Relative scarcity: A set (\mathbf{R}') which consists of different kinds of requirements, note as $\mathbf{R}' = (R_1, R_2 \dots R_n)$, in relation to the available quantities (A) with alternative uses that are quantitatively greater: ($\mathbf{R}' > A$).
- Relative abundance: A set (\mathbf{R}') which consists of different kinds of requirements, note as $\mathbf{R}' = (R_1, R_2 \dots R_n)$, in relation to the available quantities (A) with alternative uses that are quantitatively smaller: ($\mathbf{R}' < A$).⁹

The Relationship between Relative and Absolute Scarcity

Even if the different approaches to relative and absolute scarcity are comparatively distinct, it seems that the link between them is an intimate one. In reality, a resource may have both an actual and an alternative use; it may be absolutely abundant but relatively scarce and vice versa. For example, there could be more than enough land in order to meet all the food needs of a population (arable land is absolutely abundant in terms of food needs), but land may be needed for the production of housing or industry (relatively scarce in terms of alternative use). Conversely, land may be enough for agriculture, housing, and industry (relative abundance), but still misallocated in terms of agriculture (absolute scarcity), that is, more land is used for housing and industry which generates absolute abundance or over-

production in these sectors and absolute scarcity in agriculture. This example contrasts the concepts of alternative and actual use.

It is clear from the definitions of both relative and absolute scarcity that a resource (A) *by itself* is not enough to be defined as scarce. There must be a want, a need, or a requirement of some sort that stands in a relation to that resource or good. This entails that a limited amount of a good does not say anything about the scarcity character of that good. It is not until it is related to a want or a requirement that it may be denominated as scarce, abundant, or sufficient (SAS). A limited amount of a good simply means that there are given quantities of it. Robbins argues that:

the mere limitation of means *by itself* [is not] sufficient to give rise to economic phenomena. If means of satisfaction have no alternative use, then they may be scarce, but they cannot be economised. The Manna which fell from heaven may have been scarce, but, if it was impossible to exchange it for something else or to postpone its use, it was not the object of any activity with an economic aspect. (Robbins 1945: 13)

This passage clarifies the distinction between absolute and relative scarcity.¹⁰ It is the meaning of alternative and actual use that is of key importance for understanding this distinction. If there is no alternative use (no opportunity cost), then there is no relative scarcity, and consequently means cannot be economized in Robbins's terms.¹¹ However, a good may still be scarce in absolute terms (e.g. the Manna which fell from heaven). Conversely, scarcity in the Malthusian sense does not require any alternative use. It is adequate to have a situation in which the quantitative relation is $R > A$. Herein lays the major difference between absolute and relative scarcity.

The first entails a situation of choice between desired alternatives, while the second relates human requirements to their satisfiers and asks about the quantitative nature of this relationship. The first treats A - R as given, whereas the second regards it as changing. The first will seek optimal allocation of A over the whole set \mathbf{R}' , whereas the second is more interested in how far A is sufficient over one kind of R .

Nevertheless, to actually determine whether a good is scarce in either an absolute or relative sense is an intricate issue, if not an impossible distinction to make when it comes to actual observations.

How could a social economist determine the alternative use of a good? According to the marginalists Menger, Jevons, and Walras, a more subjective approach is necessary. The alternative use of a good is determined by the economizing individuals themselves. If a good could satisfy more than one want of an individual's preferences, then it also carries an alternative use (and thus marginal utility); this is strictly subjectively defined by the individual. However, what if an individual is ignorant about the known causal connections of the consumed good?¹² Or more problematically, even if an individual is aware of the causal connections, in a complex reality the unintended consequences of any choice are by definition unknown (Beckert 1996). Furthermore, what about the potential casual connections that have yet to be discovered? These are true and intriguing challenges in the study of relative scarcity. These challenges comprise a broader formulation of the problem of scarcity than Robbins's formulation because, among other things, it entails the study of alternative futures.¹³

To determine the actual use of a good seems to be less complicated. It calls for an investigation of how a given resource is used in a particular case. For example, this could entail comparing food production figures with food; or energy resources with energy consumption; or more generally, the carrying capacity of an ecosystem.

Nonetheless, contrary to Baumgartner et al., I do not believe that it is fruitful to claim that a good is either relatively scarce or absolutely scarce (Baumgartner et al. 2006; Daly 1977). Both possibilities are probably always present. Some resources have, by virtue of their natural properties in relation to human intersubjectivity and the social provisioning process, higher rates of alternative use (e.g. the factors of production, that is, land, capital, labor, or time, and low entropy resources); others have low rates of alternative use (diamonds, waste, or high entropy resources).

Hence, the problems of absolute and relative SAS tend to overlap. The two different approaches emerge because of the different questions asked about a scarcity situation. Table 1 summarizes some ideal-typical characteristics of the different ways of viewing scarcity.

In Row 1, the Malthusian problem of scarcity refers to a systemic level (a society, economy, a region, or the global system in totality); Robbins'

Table 1
An Ideal-Typical Comparison of Absolute and Relative Scarcity

	Absolute scarcity	Relative scarcity
1 Unit of analysis	Systemic	Individualistic
2 Ontology	Materialistic	Idealistic
3 Scarcity is a relationship between one kind of resource (A) and one kind of requirement (R) A-R, (one-to-one)	... a relationship Between one kind of resource and several competing requirements A-(R ₁ , R ₂ , ... R _n), (one-to-several)
4 The character of A-R	A and R are changing over time and space	Both A and R _n are given
5 Main research problem	Defining thresholds and final limitations	Finding optimal allocation
6 Kind of analysis (conclusions)	Causal impacts	Rational (optimal) choice
7 Focus	Actual use (nonsubstitutability)	Alternative use (substitutability)
8 Typical case	Carrying capacity of a system (A) in relation to human consumption (R)	Crusoe-like situations, where an individual allocates means (A) to a set of competing requirements (R ₁ , R ₂ ... R _n)
9 Disciplinary affinities	Biology, ecology	Economics (neoclassical)
10 The human condition and the view of SAS	<ul style="list-style-type: none"> • Scarcity is naturalized (inevitable) • Sufficiency may be reached in a steady-state economy • Abundance is normally unattainable 	<ul style="list-style-type: none"> • Scarcity is naturalized (inevitable) • Sufficiency is normally unattainable • Abundance is normally unattainable

main scarcity problem refers to an economizing individual (most notably a person, but could be a household, a firm, an organization).¹⁴

In Row 2, the former approach has a more materialistic ontology, whereas the latter is more idealistic because it views scarcity as a relationship between resources with alternative uses (not necessarily empirically manifested or material in its basis) and competing requirements whose utility is subjectively known only to the individual.

In Row 3, to reiterate, absolute scarcity is a relationship between one requirement (R) in relation to its satisfier (A), whereas relative scarcity refers to a relationship between one satisfier (A) relative to competing requirements (R_n).

In Row 4, these definitions entail two different views of how to perceive A-R. Absolute scarcity is a problem where both *A* and *R* are regarded as changing variables, whereas in relative scarcity these are treated as given factors.

In Row 5, the main research problem of relative scarcity is thus to find the optimal allocation of a resource. Conversely, the Malthusian problem is more about defining thresholds in a given system (locally, regionally, or globally). Here an investigator would like to study, for example, the sufficiency of food (or oil) production in relation to food requirements. Thus, this formulation of the research problem seeks to understand the final limitations of some resource.

In Row 6, consequently, the kind of analysis or conclusions the Malthusians are interested in is more causal to its nature, that is, what possible effects a given A-R constellation may have on a system (e.g., oil production and consumption); Robbins's analysis of relative scarcity focuses on the determination of the rational choice of a given situation. It is the optimization of a given resource that is of main interest.

In Row 7, in this sense absolute scarcity is a concept that captures the actual use of a resource, whereas relative scarcity captures the alternative use.

In Row 8, as a result, a typical case of absolute scarcity could refer to the carrying capacity of a system (nature, society, and the economy); Crusoe-like situations are the typical case of relative scarcity.

In Row 9, accordingly, the problem of absolute scarcity is more relevant in disciplines such as biology and (human) ecology, whereas

the problem of relative scarcity is the main focus of neoclassical economics (Baumgartner et al. 2006). Hence, this summary highlights the relevance of both approaches. A more comprehensive study of the environment, society, and the economy will surely require a conceptual integration of both approaches.

In Row 10, however, I argue that the major limitation of both approaches is that they tend to assume that scarcity is natural. This is largely due to an omission of the institutional or sociocultural dimension of SAS, which in turn veils the importance of abundance and sufficiency in socioeconomic theory.¹⁵ In addition, the introduction of sociocultural influences may generate further differentiations of the concept of scarcity; besides natural scarcity, we may add quasi- and artificial scarcity (Daoud 2007). In the next section, I want to briefly address the relevance of the sociocultural dimension.

Discussion

The Importance of Sociocultural Mechanisms

To reiterate, one of the major issues built into both approaches, is that they tend to presume that scarcity is natural and universal. Consequently, they tend to ignore the possibility of both states of abundance and sufficiency. The naturalness of scarcity emerges because the sociocultural influences on SAS are ignored:

NeoMalthusians have pointed out weaknesses both in neoclassical theory and in our present economic system. However, neoMalthusian theory shares the same basic paradigm as the neoclassical one, including its basic misconception—the assumption that scarcity is essential to the human condition and is the driving force behind our present day economy. Both neoclassical and neoMalthusian economists are blind to the fact that scarcity is a social product and, as such, can be abolished through social, especially economic, change (Matthaei 1984: 85).

I want to emphasize that this argument does not render scarcity an imaginary or a pseudo problem; it merely highlights the problem of scarcity in its totality, and in its holistic causal connections (Daoud 2007). If scarcity is possible, then abundance and sufficiency are also, by definition, possible.¹⁶ This means that scarcity is not univer-

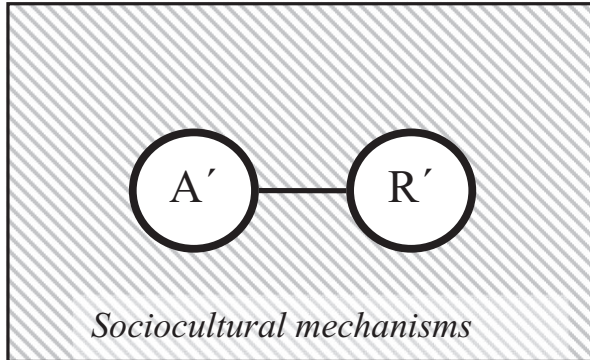
sal. This argument suggests that given their importance (Xenos 1989), the concepts of scarcity, abundance, and sufficiency should lie at the center of a conceptual arsenal of general socioeconomic theory, but in an elaborate form beyond the articulations of Malthus and Robbins.

Essentially, SAS is a function of A-R, which is in turn affected by at least two major factors, namely, environmental mechanisms (non-human intervention) and sociocultural mechanisms (human intervention). Environmental mechanisms are derived from the material basis of a system. They involve the geographic and natural conditions of the area in question (topography, climate, and the like). Sociocultural mechanisms are derived from the social conditions of a system (norms, positions, habits, rules, values, power, etc.) (Archer 1995; Lawson 2003).

Accordingly, a socioeconomic approach to SAS would focus more on how parts of this complex relation affect the manifestation of relative and absolute SAS, rather than solely on utility optimization as in Robbins's approach or on thresholds as in Malthus's approach. There are several sociocultural structures or mechanisms that could affect SAS. Institutions (systems of social rules) and habits (Hodgson 1998) may condition how different (re)allocations occur, and determine the availability of resources through property rights (Tchipev 2006). Values and norms will influence and shape the people's interests and requirements, and consequently their view of SAS (Daoud, forthcoming). Different values such as material, intellectual, aesthetical, and ethical, will surely have a causal effect; monks, artists, ordinary citizens, workers, managers will all have relatively different views and experiences of SAS. Force and fraud are an imminent dimension of social life that will affect the constellation of any A-R relationship. The power struggle between social groups will be a salient mechanism conditioning SAS (Sartre 1991). In addition, different conceptions of SAS may be at the core of any ideology (Bronfenbrenner 1962; Harvey 1974). A state of abundance is the goal of some emancipatory projects, for example, Marxism (Gowdy 1984); sufficiency for others (Daly and Farley 2004); and the inevitability of scarcity for yet others (Hardin 1974). Hence, these are some sociocultural mechanisms that SAS will be

Figure 3

The Embeddedness of the A-R Relationship



embedded in, and, therefore, conditioned by (Dugger 1996; Polanyi 1957). This is captured in Figure 3.

Even if the focus of this article has been on absolute and relative SAS, these conceptualizations of SAS should not be seen as exhaustive. There are other evocative adjectives, besides “absolute” and “relative.” Without a lengthy description, I would like to at least mention a few. For example, in previous work I suggested (Daoud 2007) a further differentiation of absolute SAS, namely, *quasi* SAS as well as *artificial* SAS and *natural*¹⁷ SAS. These adjectives indicate the causal character of absolute SAS. Other conceptualizations are internal, external (Zinam 1982), social scarcity (Hirsch 1977), and Post scarcity (Bookchin 1971; Giddens 1990; Gowdy 1984; Keynes 1972). It seems that the common denominator of all these conceptualizations is the sociocultural element. This shows that any problem of SAS is intrinsically embedded in society and the economy.

To summarize, this paper argued that there are different views of scarcity, two of which were the focus of this article. The first view, denominated as absolute scarcity, focuses on the actual use of a resource in relation to a want, a need, or a requirement. This kind of scarcity was exemplified by the Malthusian approach. It provides an

account of how the relationship between R and A changes and what causal mechanisms affect this A-R relationship. The problem of alternative use is not of primary interest to this approach. The second view, relative scarcity, focuses on the alternative use of a resource in relation to competing wants. Robbins's approach was used to illustrate this kind of scarcity. Moreover, this study has also shown that the definitions of absolute and relative scarcity do not necessarily hinge upon the distinction between needs and desires (Baumgartner et al. 2006; Raiklin and Uyar 1996).

Hence, the problem of scarcity could be further differentiated to a number of more nuanced problems. Besides Malthus's and Robbins's formulation of the issue, this paper suggested in convergence with others (Dugger and Peach 2009; Galbraith 1958; Sahlins 1998), that the problem of abundance and sufficiency is a socioeconomic problem of high relevance; despite it being ignored by Malthus, Robbins, and mainstream economics. This is probably the case because they tend to downplay the importance of the institutional or sociocultural mechanisms underlying SAS, and because they treat them as exogenously determined variables (Dugger 1996).¹⁸

Additionally, the economy is intimately linked to the social provisioning process, where not only human requirements but also resources are socioculturally conditioned (De Gregori 1987).¹⁹ These sociocultural mechanisms both precede and succeed a situation of SAS. In other words, these mechanisms tend to both generate SAS and resolve SAS issues in the socioeconomic system; but they are, of course, not reduced to them. For this reason, different views of SAS tend themselves to condition the emergence of various belief systems, or vice versa. Both Malthus and Robbins sought to promote their ideological conviction based on their respective views of scarcity. On the one hand, liberalism, as a political economic organization, is arguably based on a notion of scarcity, which Robbins promoted (Xenos 1987). On the other hand, Hardin's lifeboat ethics, which is a kind of social-Darwinian ethic, follows Malthus's own ideological intentions.²⁰ David Harvey claims that, "[i]t is sometimes forgotten that Malthus wrote his first *Essay on the Principle of Population* in 1798 as a political tract against the utopian socialist-anarchism of Godwin and Condorcet and as an antidote to the hopes for social progress aroused

by the French Revolution” (Harvey 1974: 258). Moreover, Marx’s rejection of Malthus is itself based on the belief that scarcity is merely a temporary historical specificity (Perelman 1979). However, in order to reach a better socioeconomic understanding of a given situation, we need a clarification of the concept of SAS. This study has sought to contribute to this clarification.

Hence, the issue of SAS is embedded in the socio-economic fabric. This is an important conclusion, because it shows, among other things, that economic, political, and social studies are intimately linked through the SAS issue. An institutional or sociological approach to the economy should not repeal the issue of SAS; it should rather embrace it by showing its underlying sociocultural causality (Dugger 1996).

Notes

1. Compare this with the concept of relative scarcity in Lee and Keen (2004). This concept is used in a slightly different way in this study.

2. On heterodox economics, see for example, Lee (2009).

3. Contraceptives were, of course, less developed during Malthus’s time.

4. Hardin’s example highlights also the Malthusian problem of two often contradictory rationalities, namely, the rationality of individuals and the internal logic of a system. Therefore, what is rational for an individual is not necessarily rational for a system (e.g., the free rider problem). Moreover, because Robbins departed from methodological individualism, the rationality of the individual will coincide with the rationality of the system. Conversely, Malthus seems to have more of a methodological holistic view, and as a result, individual rationality contradicted systemic logic. I thank one of the referees for making me aware of this important point.

5. As Robbins builds on Menger’s approach, I will use Menger’s Crusoe example.

6. In a system of more than one individual (beyond Crusoe), n individuals will through their exchange with each other on a free market automatically find an optimal equilibrium in terms of utility. Pareto efficiency is reached when no exchange can enhance general utility.

7. This also exemplifies the naturalness of scarcity, natural scarcity, which could be contrasted to social scarcity (Hirsch 1977).

8. This notations can be exemplified as, a consumers has an given income (which is noted as **A**) and a list of things he wants or require (R_1 = housing, R_2 = food, R_3 = a new car, etc.). The income (**A**) is sufficient when it is more or less enough to buy the things the consumer require. The

same kind of reasoning applies for other kind of means, time, land, or labour power. See Daoud (forthcoming).

9. The index $n \geq 2$.

10. Similarly, Becker argues that: "When there are no alternatives, there is no problem of choice and, therefore, no economic problem" (Becker 1971: 1).

11. Observe that even if there is an alternative use and thus an opportunity cost, the question "who pays for this cost" is an open ended question. Should the individual who, the social group, or some other third party? Compare to Frédéric Bastiat's "the parable of the broken window" and the broken window fallacy (Bastiat 2007).

12. The access to information is in itself dependent on the social position of individuals.

13. Compare this problem to Keynes's concept of "known and unknown probabilities" (O'Donnell 1989: 50 ff.). He also compares the subjectivist view of alternatives to his own approach about probability: "what particular propositions we select as the premises of *our* argument naturally depends on subjective factors peculiar to ourselves; but the relations, in which other propositions stand to these, and which entitle us to probable beliefs, are objective and logical" (Keynes, cited in Carabelli 1988: 32).

14. However, even if the individual is the starting point of Robbins's approach (methodological individualism), on the aggregate level and via the market, it is assumed that a general equilibrium will be reached. See footnote six.

15. However, Herman Daly's approach, which is in agreement with Malthus's approach, argues in favor of a steady-state economy, which could be understood as more or less a state of sufficiency (Daly 1974).

16. Whether scarcity, abundance, or sufficiency exists in a particular situation is a matter of practical inquiry.

17. By "natural" I mean a situation in which human intervention is very limited or nonexistent; I do not refer to a situation, as Samuelson claims, where "by definition, natural scarcities are such that nothing can be done about them" (Hegeland 1967: 33).

18. A major part, if not all, of the heterodox literature seems to emphasize the importance of the social and cultural factors (Lawson 2003; Hodgson 1998).

19. On the "making of resources," I want to thank Dr. Stefan Kesting, Faculty of Business, AUT University, for making me aware of this issue.

20. Robbins claims: "You must remember that, among other things, it was the reading of Malthus which convinced Darwin of his fundamental principle of evolution. And since Darwin's theory has done more to alter our conception of mankind and its destiny than anyone except perhaps Copernicus, you can't regard that as a minor influence" (Robbins 1998: 175).

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Scarcity, Abundance, and Sufficiency

Contributions to Social and Economic Theory

Adel Daoud

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UNIVERSITY OF GOTHENBURG
DEPT OF SOCIOLOGY

Distributed by:
Adel Daoud
Department of Sociology
University of Gothenburg
Box 720
SE 405 30 Gothenburg
Sweden

[E-mail: adel.daoud@sociology.gu.se](mailto:adel.daoud@sociology.gu.se)

Scarcity, Abundance, and Sufficiency – Contributions to social and economic theory

Author: Adel Daoud

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To my parents – for their unconditional love.

ABSTRACT

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Economic sociology has established itself as a strong and vibrant field in the social sciences. A number of significant studies have been conducted on the relation between the economy and society: on firms, markets, networks, money, and general action theory. But little has been done on the issues of scarcity, abundance, and sufficiency (SAS). Both economical and sociological approaches seem to assume scarcity as an important premise. But none seems to question the deeper nature of it. The SAS theme seems to be analytically underdeveloped in both disciplines.

This thesis aims to explore an alternative ground for critical economic sociology or more generally for social and economic theory. Instead of focusing on the problems of rational choice, which a number of sociological studies have done, the thesis starts even earlier in the set of assumptions that condition human agency, it focuses on the premise of scarcity. The central question posed is: 'What is the nature of SAS in social and economic theory?' Five studies have been carried out in order to answer this question. These studies focus on quite divergent empirical fields – famine, voluntary simplicity, and educational choice – in order to explore the varying importance of the sociocultural mechanisms underlying SAS.

Paper I deals with absolute SAS and the assumption of universal scarcity in neoclassical economics. A critical examination of this assumption is conducted by studying the empirical phenomenon of global hunger in relation to a theoretical elaboration of SAS. It also proposes a framework for explaining and understanding absolute SAS.

Paper II further tests the framework developed in Paper I. The food entitlement decline and the food availability decline are commonly seen as conflicting approaches to explaining famine. The paper analyses the relation between these two approaches and argues that these approaches can in fact be reconciled under

one framework by outlining their causal sources. This analysis also shows that there is a third causal source that needs to be incorporated with the other two approaches. The whole analysis is exemplified by the Bengal Famine of 1943.

Paper III focuses on relative SAS. It studies how voluntary material simplicity countervails the causal effect of relative scarcity generated by the environment of a consumer society. Analyses of both interviews and texts were carried out. It is shown that voluntary material simplifiers manage, though with difficulty, to neutralize the causal effect of the consumer society. This is achieved by mediating the cultural properties of the economic ethic of material simplicity, which promotes the deflation of human wants. They actualize what has been called the *modus vivendi* of material simplicity, a practical state of relative abundance.

The aim of *Paper IV* is to study the formation of wants based on interviews with upper secondary school pupils. The paper shows that an organic view of decision-making is in better accordance with observations than is a hierarchical view and thus supports previous research claiming that pragmatic rationality (based on habitus and reflexivity) plays a more important role in students' decision-making processes than does instrumental rationality.

Paper V compares two classical economists and their views on scarcity, namely Thomas Malthus (1766-1834) and Lionel Robbins (1898-1984). However, both scholars' views tend to naturalize and universalize scarcity, and thus to overlook abundance and sufficiency, which are important states in the social provisioning process. It is argued that this is due to neglect of the sociocultural causal underpinnings of SAS.

Hence, the thesis offers three main contributions to social and economic theory in general: (1) a tentative typology of SAS; (2) a holistic (multi-causal) explanatory approach to SAS; and (3) an alternative foundation for social and economic theory, based on what has been called the SAS theme. It is shown that this theme contains various socioeconomic phenomena that are intimately linked to SAS (famine, want, property, market, justice, poverty, action, conflict, etc.), which then set the stage for new kinds of socioeconomic inquiries as well as new relationships between existing ones. Hopefully, this will enable an even deeper understanding of how SAS conditions social and economic life.

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Adel Daoud, Uddevalla – February 2011

Frequently used abbreviations

- Paper I* = Daoud, Adel (2007). (Quasi)Scarcity and Global Hunger: a Sociological Critique of the Scarcity Postulate with an Attempt at Synthesis, *Journal of Critical Realism* Vol. 6 no. 2
- Paper II* = Daoud, Adel (submitted). Linking Food Requirements, Entitlements, and Availability: exemplified by the 1943 Bengal Famine.
- Paper III* = Daoud, Adel (forthcoming). The Modus Vivendi of Material Simplicity: Counteracting Scarcity via the Deflation of Wants, *Review of Social Economy*.
- Paper IV* = Daoud, Adel and Puaca, Goran (submitted). An Organic View of Want Formation: Rational Choice, Habitus, and Reflexivity on want-formation.
- Paper V* = Daoud, Adel (2010). Robbins and Malthus on Scarcity, Abundance, and Sufficiency: The Missing Sociocultural Element, *American Journal of Economics and Sociology* Vol. 69 Issue 4.
- HASAS = The holistic model of absolute scarcity, abundance and sufficiency
- HRSAS = The holistic model of relative scarcity, abundance and sufficiency
- SAS = Refers to the various dimensions and conceptual differentiation of Scarcity, Abundance, and Sufficiency in general (e.g., relative, absolute, micro, macro, natural, social).
- The SAS theme = Refers to the set of issues that are directly related to SAS (e.g., famine, poverty, conflict, solidarity, markets)

Introduction

More than a billion people experience hunger in a world where there is more than enough food to go around. At the same time, obesity is a growing problem. Some people are on the verge of death from starvation, while others engage in gluttony. How is this possible? Some researchers argue that starvation is caused by ever-increasing food prices, poverty, climate shocks, or political unrest. Irrespective of the cause, starvation radically effect individuals' possibilities to develop their capacities, and to participate in social life (Sen 2006): Ultimately people's life and well-being hinge on having access to various resources in society.

Food is only one of the essential goods that people require, and that they may be excluded from accessing. There is also water, land, medicine, energy, oil, jobs, capital, money, time, housing, clothing, knowledge, education, the Internet, roads, seats in a bus, mobile phones, candy, cakes and so on and so forth. Individuals want various things, from essential to non-essentials goods, and things with different characteristics and varying social effects when they are used. Governments will go to war to control some essential resources, and conflicts between individuals may arise over that last piece of cake. It would seem that the availability of resources, their absence or presence, fundamentally conditions human action and interaction. These are all issues associated with scarcity, abundance or sufficiency.

The purpose of this thesis is to study the nature of *scarcity*, *abundance*, and *sufficiency* (SAS). It provides a critical analysis of these concepts as they are used in economics and sociology. The thesis also suggests an alternative way of explaining SAS. It provides a theoretically driven, but empirically exemplified account. It constitutes an attempt to elaborate a general socio-economic account of SAS that is both sociologically as well as economically relevant. This work is thus intended for both sociologists and economists. Ultimately, it regards the contemporary division of labour of the social sciences as artificial, and so hopes to transcend this division. As they stand today, it seems to me that both disciplines can learn valuable lessons from the other (cf. Swedberg 1990). Therefore, this work has focused on some of the central assumptions underpinning economics (heterodox and neoclassical)

and sociology, and attempts to bring them closer together via a foundation based on the SAS theme.¹

The problem of the nature of SAS is reformulated into the research question ‘What is SAS?’ This is an ontological question (Archer 1995; Bhaskar 1997; Lawson 1997), a question about being. It is a question about what constitutes, structures and differentiates SAS both as concepts and as real entities. This general question, ‘What is SAS’, gives rise to at least three more specific research questions – which of course does not exhaust all possible questions that can be posed about the nature of SAS:

- (a) Are there different kinds of scarcity, abundance, and sufficiency?
- (b) How could scarcity, abundance, and sufficiency be properly explained in relation to real events?
- (c) How could a sociological theory of want formation be developed?

The thesis consists of this introductory chapter accompanied by five articles; taken together this chapter and the articles offer three main contributions to socioeconomic theory.

1. A tentative typology of SAS.
2. A holistic (multi-casual) explanatory approach to SAS.
3. An alternative foundation for socioeconomic theory based on the SAS theme.

The new set of problems generated via this thesis is denominated *the SAS theme*.² It is a theme that shows how various socioeconomic phenomena (famine, want, property, market, justice, poverty, action, conflict, etc.), which seemingly have very little in common, if anything, can actually be seen as cases of the same thing, namely cases of SAS. Accordingly, the elaboration

¹ This attempt also means that there is some risk for misunderstanding or miscommunication. This thesis needs to balance arguments from economics (heterodox and neoclassical) as well as sociology. What appears to be a trivial argument from one perspective can be original from another. For example, it is sociologically trivial to claim that ‘the economy is embedded in society’ or to claim that ‘culture is important in order to explain changes in preferences’ (Polanyi 1977), but this is somewhat controversial from a neoclassical point of view (Becker 1996). Similarly, economically it is a basic fact that a rational choice is also the most optimal or efficient choice under conditions of scarcity, but this is relatively controversial from a sociological perspective (Bourdieu 2005). Therefore, I urge the reader to consider both the sociological as well as the economical arguments not separately, but in totality.

² As kindly suggested by Professor Richard Swedberg.

of this theme is one of the main contributions to both economics and sociology.

The thesis has the following disposition: The background section discusses why the research problems presented here are important and how they are related to a number of other problems in the SAS theme. I have found eight main problems that I will discuss in this section, some more extensively than others. These will of course not exhaust all possible problems that can be linked to the SAS theme, but they will provide a good introduction to this field of study. Nevertheless, the thesis will limit itself to studying one of these eight problems: namely, the nature of SAS. Thereafter the main contributions of the five papers will be outlined and discussed in the results section; all contributions are obviously related to the problem of the nature of SAS. Finally, the implications of the first and second section are discussed, as well as how the study of the SAS theme may be taken further.

CHAPTER 1

Background

There are at least two excellent reviews of the literature on SAS, especially of the classics and their authors' views on the issue – Hume, Smith, Marx, Mill, etc. The first was given by Hegeland (1967)³ and the second by Xenos (1989). Because they give a general picture of how SAS has been conceptualized in social and economic theory, I will focus here on what research problems one might pinpoint or derive from this general picture of SAS. Eight problems will be discussed, originating from different fields: one problem is generically related to various disciplines of the social sciences (the effects of SAS); another problem is related to neoclassical economics (the problem of allocation), three to heterodox economics or an internal critique of neoclassical economics (*viz.* the universalization of scarcity, the limits to growth, and the assemblage of resources), and three to sociology or an external critique of neoclassical economics (the problem of foundations of the social sciences, the origins of human wants, and the nature of SAS). This thesis, however, will study one of these eight in depth, namely the problem of the nature of SAS.

These eight problem areas of SAS should not be understood in a categorical sense. Many of the issues originating from one problem area may overlap with another problem area. Accordingly, even if six of the problems of the SAS theme have been characterized as originating from either inside or outside neoclassical economics, I wish to emphasize that this distinction should be understood only in a loose sense. Some heterodox economists' arguments could be seen as essentially sociological, and vice versa. Take the work of Karl Polanyi, for example. He was trained as an economic historian and thus heavily influenced by a historical methodology – he is thus by definition a heterodox economist (Stanfield 1980). However, his work did not only influence economic history, and institutional economics, but also economic sociology (Smelser and Swedberg 2005, p. 3). He is very much regarded as a classical scholar of this subfield of sociology. The same view is true of thinkers such as Adam Smith, Karl Marx, Max Weber, Talcott Parsons and Amartya Sen. They have influenced the formation of concepts, perspectives and

³ It is written in Swedish.

applied research in both (neoclassical and heterodox) economics and sociology. The first problem of the SAS theme, that is, the effects of SAS, is a token of that.

Problem 1. The effects of SAS

The somewhat surprising vastness of the SAS theme can be briefly highlighted – just as an appetiser – in the first problem of this theme, namely what I call *the problem of the effects of SAS*. Various socioeconomic phenomena seem to presuppose, hinge on or arise as a causal effect of SAS. Some central examples are: market (Menger 2004), private property (Tchipev 2006), justice (Hume 1896, pp. 494-495), public good (Héritier 2001; Sandler 2001, p. 165), poverty (cf. Clark 2002), power (Cook, Cheshire and Gerbasi 2006), action (Balla 1982), liberalism (Macpherson 1973; Wolin 2004; Xenos 1987), time (Burenstam Linder 1970; Gordon 1980), citizenship (Turner 1999, p. 262 ff.), and history itself (Sartre 1991). Sartre, for instance, claimed that ‘In the framework of scarcity, constitutive relations are fundamentally antagonistic. If one considers their temporal development, they manifest themselves in the form of the event constituted by struggle...this is the very definition of the *historical process*, in so far as it is an ongoing temporalization of *human history*’ (Sartre 1991, p. 15: original italics). In this perspective, scarcity of resources is one of the fundamental conditions of why struggle exists; but at the same time, struggle and antagonism are only examples of one essential principle of social life, that is, social exclusion. There is a social need for inclusion as well. As Turner argued, ‘Societies face two contradictory principles. They are organized around issues of scarcity, which result in exclusionary structures such as gender divisions, social classes and status groups, but they must also secure social solidarity...citizenship functions as a major foundation of social solidarity’ (Turner 1999, p.262). Citizenship is a mechanism that controls the access or entitlement process of individuals and groups to scarce resources in society. There are social needs for defining excluding and including mechanisms, which citizenship is only one example of. However, one might ask: Do these mechanisms arise as a consequence of private property or scarcity? Or does private property also arise because of scarcity? These questions are only examples of some issues related to the problem of the effects of SAS; additional issues will be discussed more extensively in the review of the other problems of the SAS theme. More generally, one of the main questions related to the problem of

the effects of SAS is: In what way is SAS causally related to other social phenomena?

The neoclassical perspective on scarcity: problem 2, efficient allocation

I believe that *the problem of allocation*, or more specifically the problem of *efficient allocation* of neoclassical economics, sets the scene for the SAS theme in general. This is so because both heterodox economists and sociologists have to various extents related their accounts to this problem as defined by the neoclassical school (Beckert 2002; Lawson 2006). The existence of scarcity has been taken as the central point of departure for neoclassical economics since the establishment of the marginalist revolution in the late nineteenth century, which in a sense also marks the beginning of the end of classical political economy (Sandelin, Trautwein and Wundrak 2001, p. 132; Schabas 2001; Tribe 2001). All three pioneers of marginal utility theory – Walras, Jevons, and Menger – referred to scarcity as the starting point for economic analysis (Jevons 1888, p. 37; Menger 2004, p. 94; Walras 1954, p. 65). Through the work of these pioneers, especially Menger's⁴ marginal utility theory, the centrality of scarcity became an important theoretical premise for the advancement of contemporary neoclassical economics (Hayek 1994, p. 18; Robbins 1998, p. 277; Roll 1973, p. 387).

As a result, virtually every neoclassical economic book and textbook refers to scarcity – and this is so even though economics is becoming increasingly differentiated (Ashenfelter 2001; Backhouse and Medema 2008; cf. Becker 1993; Beckert 2002; Davis 2006). The following overview of scarcity definitions demonstrates the various articulations this may take.⁵ They have been organized according to six basic ontological premises that I have found.

First, economics is said to be *about scarcity* (Estrin et al. 2008, p. 1), or 'how society manages its scarce resources.' (Mankiw 2007, p. 284). Economics is '...the study of resource allocation under conditions of scarcity' (Waldman 2004, p. 2); 'how societies use scarce resources to produce valuable commodities and distribute them among different people' (Samuelson and Nordhaus 2001, p. 4), or it deals with 'the allocation of limited resources to satisfy unlimited human want' (Besanko and Braeutigam 2008, p. 3). This has implications for how resources are used, as scarcity is related to 'unlimited and competing uses' (Burkett 2006, p. 1), which means that economics

⁴ *Paper I* deals with Menger in depth.

⁵ I took a random sample of 17 economic books from the Marshall Library, Faculty of Economics, University of Cambridge (February 2010), all contained a reference to scarcity.

studies choices that ‘individuals, businesses, government, and entire societies make as they cope with scarcity’ (Bade and Parkin 2002, pp. 4-5), or ‘to attain their goals, given their scarce resources’ (Hubbard and O’Brien 2006, p. 4).

Second, scarcity is believed to be *general* (Himmelweit, Simonetti and Trigg 2001, p. 4), *universal* (Parkin 2000, p. 36), or even ‘the fundamental economic fact of every society’ (Salvatore 2003, pp. 4-5). This means that ‘unfortunately, most of the good things in life are scarce – we can’t all have as much as we want’ (Perloff 2009, p. 1). We are said to ‘...live in a world of scarcity’ (Hubbard and O’Brien 2006, p. 4), and thus, ‘...scarcity is the mother of economics’ (cf. Begg, Fischer and Dornbusch 2008, p. 16; Perloff 2009, p. 1).

Third, universal scarcity arises because we have *unlimited wants* and *limited resources* (Hubbard and O’Brien 2006, p. 4; Parkin 2000, p. 36).⁶ ‘By assuming scarcity as a fundamental human condition, neoclassical theory presupposes that there is an inevitable imbalance between limited resources and the extent of human desires’ (Himmelweit, Simonetti and Trigg 2001, p. 5). These two facts are said to ‘dominate our lives, We have limited resources, We have unlimited wants... resources available are insufficient to satisfy people’s wants’ (Parkin 2000, p. 36), ‘Scarcity means that society has limited resources and therefore cannot produce all the goods and services people wish to have’ (cf. Bade and Parkin 2002, pp. 4-5; Mankiw 2007, p. 3). The notion of unlimited wants is exemplified in the following way: ‘Think of human wants as being all the goods and services that individuals desire, including food, clothing, shelter, and anything else that enhances the quality of life. Since we can always think of ways to improve our wellbeing with more or better goods and services, our wants are unlimited’ (Besanko and Braeutigam 2008, p. 3; cf. Estrin et al. 2008, p. 2).

Fourth, because resources are limited and our wants are virtually unlimited, all ends are seen as competing ends. In other words, there are *trade-offs* or *alternative uses*; ‘Scarcity means that trade-offs are a basic fact of life’ (Stiglitz and Walsh 2006, p. 7) and ‘When there are no alternatives, there is no problem of choice and, therefore, no economic problem’ (Becker 1971, p. 1). Thus, ‘people must make choices. We cannot have everything we want’ (Ruffin and Gregory 1997, p. 6), and ‘choices have to be made between competing ends which require alternative uses of scarce resources, and between alternative ways of achieving those ends’ (Himmelweit, Simonetti and Trigg

⁶ Nevertheless, it is not unusual to find economists who argue that wants or preferences are fixed (cf. Becker 1996). See also *Paper IV*.

2001, p. 5). We might ask, ‘Why do individuals have to make choices? The ultimate reason is that resources are scarce’ (Krugman and Wells 2009, p. 6). Economics is then ‘...the study of the choices people make to cope with scarcity’ (Parkin 2000, p. 36). But society also must make (public) choices: ‘society must choose which commodities to produce and which to sacrifice. In short, society can only satisfy some of its wants’ (Salvatore 2003, pp. 4-5).

Fifth, accordingly, these definitions claim that *choice confronts any individual, organization, or human endeavour*: ‘This simple fact applies to societies as well as to individuals. It applies to the rich and to the poor (Ruffin and Gregory 1997, p. 6), ‘...[it] confronts each one of us individually, and it confronts our families, local communities, and nations...’ (Parkin 2000, p. 36). ‘Just as a household cannot give every member everything he or she wants, a society cannot give every individual the highest standard of living to which he or she might aspire’ (Mankiw 2007, p. 3). The point is sometimes illustrated by examples from our contemporary consumer culture similar to the following:

The poor and the rich alike face scarcity. A child wants a \$1.00 can of soda and two 50c packs of gum but has only \$1 in his pocket. He faces scarcity. A millionaire wants to spend the weekend playing golf *and* spend the same weekend at the office attending a business strategy meeting. She faces scarcity. A society wants to provide vastly improved health care, install a computer in every classroom, explore space, clean polluted lakes and rivers, and so on. Society also faces scarcity. Faced with scarcity, we must make choices (Bade and Parkin 2002, pp. 4-5; cf. Sloman and Sutcliffe 2003, pp. 4-5).

Sometimes this is illustrated by a comparison between different kinds of societal organization:

No matter what the mix between socialism and private enterprise in any specific society’s economic organization, then, the fact of scarcity and the choices it imposes will impinge upon individual agents, be they people, families, capitalist firms, co-operative or state-owned enterprises, government departments, etc. All and any such agents must make choices about how to use the scare resource under their control (Estrin et al. 2008, p. 2).

Sixth, by positioning scarcity as the general or universal point of departure for economics, the *existence of abundance* (and sufficiency) is placed outside the set of possible objects of study, at least implicitly: ‘If human want were limited or resources unlimited, there would be no scarcity and there would be no need to study economics...’ (Salvatore 2003, pp. 4-5); ‘If each of us could get all the food, clothing, and toys we want without working, no

one would study economics' (Perloff 2009, p. 1). In the real economy, 'People would not worry about stretching out their limited incomes because they could have everything they wanted...since all of us could have as much as we pleased, no one would be concerned about the distribution of incomes among different people or classes. In such an Eden of affluence, all goods would be free, like sand in the desert or seawater at the beach. All prices would be zero, and markets would be unnecessary. Indeed, economics would no longer be a useful subject' (Samuelson and Nordhaus 2001, p. 4). However, even in affluent countries, abundance is not the economic reality some neoclassical economists believe:

But no society has reached a utopia of limitless possibilities. Ours is a world of scarcity, full of economic goods. A situation of scarcity is one in which goods are limited relative to desire. An objective observer would have to agree that, even after two centuries of rapid economic growth, production in the United States is simply not high enough to meet everyone's desires...Moreover, outside the United States, particularly in Africa and Asia, hundreds of millions of people suffer from hunger and material deprivation (Samuelson and Nordhaus 2001, p. 4).

Of course, the second ontological premise, the one concerning universal scarcity, effectively eliminates the possibility of a world of abundance in the first place. Thus, the analytical circle is closed, and hence, the economic approach is universalized.

In summary, the six ontological premises are: (1) economics is about scarcity, (2) scarcity is general or universal, (3) universal scarcity arises because of unlimited wants and limited resources, (4) all wants or ends are competing, there are trade-offs, or alternative uses, and thus choices have to be made about which wants to satisfy, (5) scarcity and thus the necessity to make choices confront all levels of organization (individual, household, firm, and society), (6) a situation of abundance and sufficiency is not part of economic analysis. The next section will address the question of what role scarcity plays in neoclassical economics in relation to the problem of efficient allocation.

The function of scarcity in economic theory

The function of scarcity, it seems, is to conceptualize certain kinds of conditions or constraints that an individual needs to consider when acting or choosing. In a general economic approach to social behaviour, that is rational choice theory, constraints can be anything that restricts the choice opportuni-

ties of an individual. Constraints are not only economical in nature (e.g., income), but can also be social (e.g., norms) (Becker and Murphy 2000) or psychological (e.g., self-bounding) (Elster 2000). These kinds of social or psychological constraint, however, are not necessarily solely a matter of scarcity of resources. It seems that all scarcities are about constraints in the perspective of economic theory, but not all constraints are about scarcity in a general social scientific perspective. Scarcity is a specific kind of constraint in so far as it refers to the set of means or resources that can be directly used to satisfy a set of wants or needs (Menger 2004, p. 77 ff.).

In what has been criticized as an overly mathematical economic theory (cf. Lawson 1997; Weintraub 2002), the notion of scarcity is translated into basic mathematical constraints, assumptions or principles. Most notably, it seems that the concept of scarcity is translated into budget constraints in various optimizations problems. In economics, a budget constraint describes the possible consumption bundles, usually defined by income, an individual, household, or any other organization faces (Samuelson and Nordhaus 2001). Two textbook examples will illustrate more concretely how scarcity functions in economic theory.

The first example deals with how choice is analysed with reference to utility, indifference curves and budget constraints. Robinson Crusoe's situation is the classical textbook example of this (cf. Robbins 1945, p. 11 ff.). Imagine Crusoe living alone on an island, where the satisfaction of his needs depends upon the supply of fresh water.

For the sake of simplicity, let us assume that Crusoe has only two needs: his first need is 50 units of water for his personal use (water for drinking and maintaining a good hygiene), and his second need is 35 units of water for the animals who provide him with milk and meat. In total, Crusoe needs 85 units of water to fully satisfy his two needs (Menger 2004, p. 104). Now assume that the supply of water available to Crusoe is only 40 units, which constitutes a situation of scarcity. In this case, Crusoe's well-being and existence are threatened, and therefore he is forced to economize his use of water in order to make the best of the situation. Crusoe's situation could be analysed in the following way.

In principle, the problem is how to allocate scarce water among Crusoe's two needs. In other words, two different ends are competing relative to scarce means. Consequently, a portion of both of these two needs has to be foregone, but how large a portion? Figure 1 is a graphical illustration of Crusoe's situation. The horizontal axis represents water that may be allocated to Crusoe's second need and the vertical axis represents water that may be allocated to Crusoe's first need.

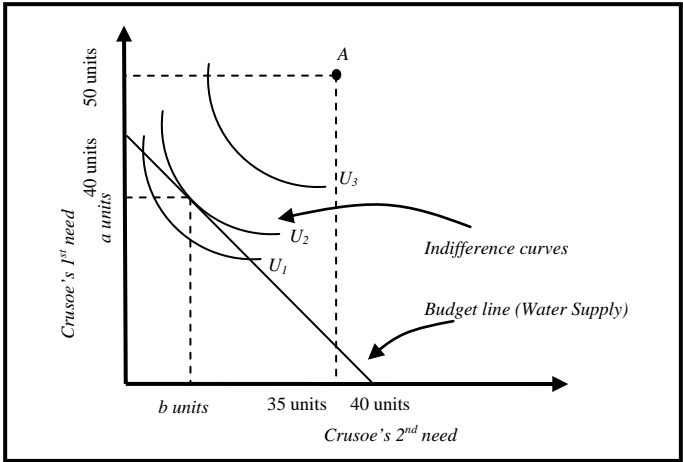


Figure 1 Crusoe's preferred consumption choice in a situation scarcity.

The indifference curve represents any combination of allocation or consumption possibilities that Crusoe is believed to be indifferent to at that level of satisfaction, given his water supply restrictions: the three indifference curves represent the utility Crusoe derives at different levels of consumption. Naturally, Crusoe would prefer to consume or chose point A where he would be fully satisfied⁷ or a point as close as possible to point A (say along curve U_3), but that is not possible given his budget restriction which is represented by the budget line (Crusoe's water supply). It is possible to choose a consumption bundle below this line (say, along curve U_1), but this is an ineffective way of utilizing scarce means (which could in other case be a government's finances or a household's total income). Therefore, a rational economic actor will choose the point at which that actor's indifference curve is tangent to the budget line (which is U_2). This tangent point, also called an equilibrium point, is the predicted allocation or consumption combination that an economic actor will choose. In Crusoe's case, it is likely that he will value his first need more than his second, owing to the larger utility he derives from such consumption. If so, Crusoe will allocate a larger portion of the water supply to his first need, say about 30 units (point a) and the rest 10 units (point b) to his second need. Accordingly, given these conditions, there

⁷ This is also called a bliss point (cf. Barnett 1973). I want to thank Andy Denis, City University of London, for making me aware of this problem.

is a well-defined unambiguous solution to the problem of how to allocate scarce resources.⁸ Now one might ask, how are these indifference curves constructed?

In applied economics, the construction of indifference curves, budget lines and the analysis of consumer preferences depend on various factors (prices, income, etc.) (Böhm and Haller 2008; Samuelson and Nordhaus 1985, p. 422 ff.; cf. Walras 1954). In this Crusoe example, we just stipulated the conditions, that is, his available budget and how much he needs. In a real analysis, what a consumer wants or needs is often measured as what that consumer has chosen or bought. Preferences are neither given in this straightforward way nor are consumers interviewed about what they want to buy: preferences are often measured in terms of observed consumer behaviour, that is, preferences are revealed (cf. Richter 2008; Wong 2006). Nevertheless, these kinds of issues, about how preferences are formed, have been dealt with in more depth in *Paper IV*.

Naturally, Crusoe's case is an unrealistic approximation of real-life events, but still this case illustrates the basic rationale behind how neoclassical economics regards the problem of allocation; it also shows how the premise of scarcity plays a crucial role in the neoclassical analysis. In a case of abundance (say that the budget is now 4000 units of water), there is really no economic problem, as there are more resources than needed. Given the specified needs of Crusoe, he will always choose to consume at point A.⁹ Crusoe does not have to relinquish any of his needs. He reaches his maximum satisfaction at 85 units of water, and even if he uses more than 85 units of water, there is still no real economic problem in the neoclassical sense.¹⁰ In other words, the main neoclassical focus is allocation of resources under scarcity: questions about the origins of these needs, how resources are socially defined, or questions about rationality are not of primary interest here.

The above illustration is an example of how the assumption of scarcity functions in microeconomics. The function of scarcity can also be shown in an example from macroeconomics. It deals with how the output of an econ-

⁸ It should be stressed that it is not uncommon for economic problems to contain solutions with more than one equilibrium. Generally, nevertheless, one or a few solutions are preferred over many.

⁹ Even if we do not define Crusoe's needs as specifically as we did, there will be some interval (say that he needs 40-60 units for his first need, and 20-50 units for his second need) in which he will choose different consumption combinations depending on factors other than economic ones (e.g., habit). In this case, there will be infinite solutions given within the continuous interval.

¹⁰ An economic situation may re-arise if we add further needs. This could be the case if we assume that Crusoe starts hoarding water because he is expecting a drought, or that he wants to build a dam. Or this could occur if he simply cannot freely dispose of all the excess water, for example, in a situation of flood. He then must make an effort (a cost) to clear away the water.

omy is analysed in terms of a production possibility frontier. This is an important example because ‘the production-possibility frontier provides a rigorous definition of scarcity’ (Samuelson and Nordhaus 1985, p. 30). Very briefly, one could claim that it is a textbook problem similar to that faced by Crusoe, but with a different task. The task is now to answer to the question: ‘What should society produce?’

Real economies produce thousand of goods and services, but let us imagine an economy in which only two goods are produced: guns and bread; see Figure 2. The production possibility frontier defines the combinations of goods (X and Y; or guns and bread) an economy can produce at a certain time, which is in turn defined by the available factors of production in the economy (land, labour, capital) (Stiglitz 1988, p. 10 ff.). Production at point D is not possible because of scarcity. If all resources were used to produce guns, this economy will produce 600 units of guns and no bread. At point C, this economy will produce 200 units of guns and 200 units of bread. But this point is regarded as an inefficient output, because the economy is not using its resources to a maximum (this could arise because of a financial crisis, mass unemployment or any other problem).

So which point along this frontier is most efficient? All points along the production possibility frontier represent output in which the resources of this economy are used to a maximum. Accordingly, all points along the production possibility frontier give productive or technical efficiency. These points are efficient in terms of utilization of this economy’s resources, but this does not say much about the social welfare (or Pareto efficiency) any of these points might produce (cf. Beckett 2002; Markovits 2008). For example, producing at point E (550 guns, 200 bread) might be rational in times of war, but less so in times of peace. Consequently, one cannot derive a straightforward solution to which production bundle along this line is most beneficial if one only uses the production possibility frontier – more information is needed about, for example, the aggregate preferences of the individuals populating this imagined economy.¹¹ This is one of the central issues in welfare econom-

¹¹ Nevertheless, there is the problem of tradeoffs or opportunity costs, which is represented by the shape of the production possibilities frontier curve. A rational individual or economy is assumed to seek to lower the opportunity costs as much as possible (Elster 2007, p. 214 ff.). At point A, the economy produces 400 units of guns and 410 units of bread; if the economy shifts its production towards guns, to point B (410 guns, 400 bread), this imagined economy then has to give up or trade off bread for guns. This trade-off or opportunity cost means 10 units less bread and 10 units more guns. Each gun costs 1 bread (the ratio bread/gun). The farther towards guns production this economy moves, the higher the opportunity cost is in terms of bread. From point B to E (550 units of guns, 200 units of bread), the economy has to pay in terms of 200 units less bread but gains 140 units more guns: in this exchange each gun costs about 1.4 units of bread, which is about one and a half as much as compared to the move from A to B (where the exchange ratio is one gun for one

ics that I will not go into here (see, e.g., Feldman 2008). The central point here is to show how scarcity plays a central role in economic analysis.

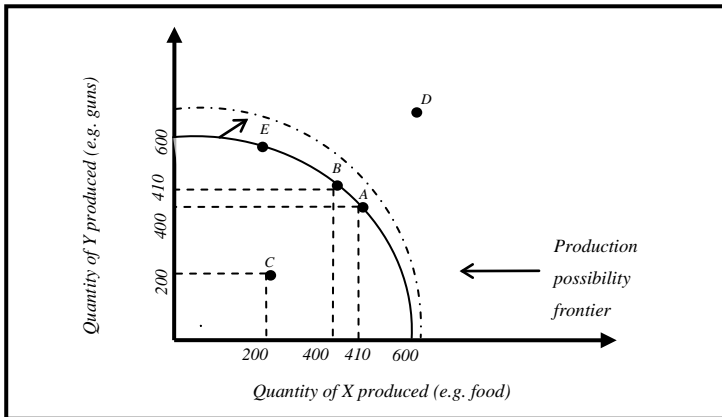


Figure 2 Production possibilities frontier and scarcity

As the economy grows, say because of investments in technology and capital, the production possibilities frontier moves outwards, which reflects the increased capacity of the economy; see Figure 2. This also reflects the notion that it is possible to reduce the strain of scarcity. Subsequently, some even believe, as Keynes did, that ‘...the economic problem may be solved, or be at least within sight of solution, within a hundred years’ (Keynes 1963, p. 365; Smith 1982, p. 333), if the economy expands sufficiently.¹²

Both examples show how scarcity plays an important role in economic theory. Scarcity functions as a kind of constraint. It is basically an assumption, a premise in an optimization problem. This problem of efficient allocation is in itself not unimportant, I maintain. However, one of the major problems of the neoclassical approach is that it reduces the general study of socioeconomic affairs to being mainly about the problem of efficient allocation under conditions of scarcity (cf. Beckert 2002; Bourdieu 2005; Etzioni 1988; Lawson 1997; Polanyi 1977). For example, it usually does not account for how various constraints and preferences, and so scarcity, arise in the first place – which is crucial to a deeper understanding of SAS. In the following

bread). Consequently, the opportunity cost is lower around the belly of the production possibility frontier, and so, one could argue that this imagined economy benefits from choosing a production combination around this belly. Nevertheless, if this economy is related to another neighbouring economy, it could still be efficient to produce merely guns or bread in terms of comparative advantage and specialization (Findlay 2008).

¹² See discussion below, on heterodox economics.

two sections, I wish to highlight six additional problems associated with the SAS theme. These problems are drawn from two kindred lines of critique of neoclassical economics, one internal and one external.

Heterodox economists on abundance and sufficiency: the internal critique

The internal line of critique comes from within economics and is made by economists who argue that economic studies in general should concern wider issues than the neoclassical focus if a deeper understanding of the economy is to be achieved (e.g., Hodgson 1998; Lawson 2003; Lee 2009; Sen 2006). Economic theory should go beyond the neoclassical perspective and embrace a wider array of economic schools, for example post-Keynesian economics, feminist, Marxist, Austrian, institutional, ecological and green economics. This is the heterodox critique. ‘Heterodox’ is an umbrella term for the various non-neoclassical economic schools (Lawson 2006; Lee 2009). This line of critique presents at least three additional kinds of problems associated with the SAS theme that I would like to discuss in this section: namely, the problem of the universalization of scarcity, the limits to growth, and the assemblage of resources.

Problem 3. The universalization of scarcity

There exists a vibrant tradition of heterodox economists (Davis 2008; Lee 2008) who have criticized the assumption of and the exaggerated focus on scarcity in neoclassical economics, this is *the problem of the universalization of scarcity*. This universalization of scarcity also implies that the problem of abundance and sufficiency is largely neglected. This sole focus on the assumption of scarcity is not surprising, from a neoclassical perspective on economics, because its main problem of efficient allocation completely hinges on it – as shown above. However, it is not clear why some non-neoclassical approaches ignore the concepts of abundance and sufficiency (e.g., Turner and Rojek 2001). It is apparent that abundance and sufficiency are important concepts (Dugger and Peach 2009). They sometimes play an even more important role than scarcity does. Chase illustrated this point: ‘Two men are lost on a great desert. One has a full bottle of water, the other a bottle quarter filled. As they move wearily onward, hoping for an oasis, justice demands that they pool the water supply and share it equally. Failure to do so will undoubtedly result in a fight’ (Chase 1934, p. 51). In a situation of abundance, conflict is unnecessary, Chase argued:

Now let us transport these two men to a row-boat on Lake Superior. Again they are lost, and again one has a full bottle of water, and one a bottle a quarter full. The full bottle man refuses to share and a battle ensues. Maniacs! There is a plenty of fresh water over the side of the boat. The desert is the Economy of Scarcity; the lake, the Economy of Abundance. The choice between sharing or fighting is chronic in the former, pointless in the latter. Today, throughout western civilization, men in boats are fighting, or preparing to fight, for fresh water. They do not know they are in boats; they think they are still on camels. The lake...is not limitless, but nobody need go thirsty. (Chase 1934, p. 51)

In line with Chase's argument, some social scientist, a majority of them economist by training, have gone beyond the neoclassical approach and advanced studies of abundance (e.g., Benammar 2005; Bronfenbrenner 1962; Dugger and Peach 2009; Fricker 1999; Galbraith 1958; Hoeschele 2008; Horner 1997; Sheehan 2010; Sherburne 1972). These studies have focused, among other things, on unemployment, which is seen as abundance of labour power (Dugger and Peach 2009, pp. 41 ff., 173 ff.; Perelman 1979; Perelman 1987), on consumer society with its cornucopia of goods and services (e.g., Xenos 1989), on the possibilities of a post-scarcity society as well as on emancipator reasoning (Bataille 1991; Bookchin 1971; Giddens 1990, p. 164; Gowdy 1998; Sherburne 1972; Stoekl 2007). Most of these accounts rest on the assumption that continuous technological development accompanied by deeper self-awareness of what our actual needs are may enable a society that harbours an abundance of resources.

In his famous essay *The Economic Possibilities for our Grandchildren*, Keynes, for instance, argued that the past has been characterized by plague, war, and famine – in short, a struggle for subsistence. The future, however, may bring about the abolition of this problem:

Now for my conclusion, which you will find, I think, to become more and more startling to the imagination the longer you think about it. ... assuming no important wars and no important increase in population, the economic problem may be solved, or be at least within sight of solution, within a hundred years. This means that the economic problem is not – if we look into the future – the permanent problem of the human race (Keynes 1963, p. 365).

Progress, Keynes argues, is mainly a function of capital accumulations (trade) and technological innovation (via science and innovation). A number of modern classics concur with Keynes's account, such as those by economic anthropologist Marshall Sahlins and economist John Kenneth Galbraith, but

they even argued that the possibilities of abundance are already present in contemporary society (Galbraith 1958; Sahlins 1972, p. 5). They claim that the problem of the universalization of scarcity in neoclassical economics prevents us from seeing this (at least in Western societies). Nurit Bird-David, when commenting on Galbraith and Sahlins, argued that ‘...the assumption of scarcity continues to influence economic conduct in the increasingly wealthy West and thereby acts to preserve poverty’ (Bird-David 1998, p. 133).

Problem 4. The limits to growth

In terms of sustainable development or the problem of *the limits to growth*, all three concepts play a major role, that is, scarcity (e.g., Baumgartner et al. 2006), abundance (e.g., Hoeschele 2008) and sufficiency (e.g., Princen 2005). There are fundamental limitations to how much consumption the planet can handle. Fred Hirsch (2005) argued that there are not only physical limits, but also social limits to growth – even with unparalleled economic growth. He refers to social scarcity as part of the explanation of the social limits of growth. The term social refers to the intrinsic properties of what Hirsch called the positional economy. The positional economy ‘...relates to all aspects of goods, services, work positions, and other social relationships that are either (1) scarce in some absolute or socially imposed sense or (2) subject to congestion or crowding through more extensive use’ (Hirsch 2005, p. 27). This kind of economy can be contrasted with the material economy, which is defined ‘... as output amenable to continued increase in productivity per unit of labor input’ (Hirsch 2005, p. 27). Social scarcity is divided into direct and incidental (Hirsch 2005, p. 20).

Direct social scarcity refers to a want that derives its satisfaction from the phenomenon of scarcity itself. Hirsch gave the example of an art snob: if the satisfaction of owning a Rembrandt comes only or mostly from the fact that the object is scarce, then we have a case of direct social scarcity. If, however, a replica of a Rembrandt gives equal satisfaction as the original, then there is only physical scarcity, which could be mitigated by producing further replicas of Rembrandt.

Incidental social scarcity arises more or less as a by-product of social interaction. Congestion, both physical and social, is an example of this kind of scarcity. Physical congestion refers to crowds and queues of various sorts. This kind of congestion arises not only because of the physical limitation (of highways, in the football arena, or similar), but also because of their extensive social use. Social congestion, conversely, arises purely from social rela-

tionships: job opportunities, leadership positions (e.g., captain of a football team, head of departments), or partnerships (e.g., monogamous or best-friends relationships). These social positions are intrinsically scarce (Hirsch 2005, pp. 19-22). You can of course have many friends, but what defines a best-friend? Similarly, there could of course be shared positions, two persons in the position as head of department, but what if there are five persons, ten or a hundred sharing the same position as head of department?

As long as material deprivation is common, economic growth will have a dominant role. This is not to say that social scarcity is not present in materially deprived conditions, especially in terms of incidental social scarcity. But as society reaches material saturation, direct social scarcity will be more prevalent, for example, in the form of conspicuous consumption (Hirsch 2005; cf. Veblen 2007).

I believe that Hirsch's concept of social scarcity captures something essential about economic and social life. Nevertheless, one might ask in what ways this concept differs from the concept of scarcity used in other accounts, for instance the neoclassical approach, or say the neo-Malthusian approach. There seem to be some differences.

Contemporary ideas about the natural or physical limits to growth build on an elaborate account of Thomas Malthus's notions (Malthus 1826). Malthus's original concern was overpopulation, but the same principles Malthus developed apply to other fields as well: for example, energy use, environmental degradation or water scarcity. The neo-Malthusian approach critiques the classical (specifically Smith's version) and the neoclassical conviction that markets can fully solve or at least mitigate the problems of scarcity. This links directly to the problem of efficient allocation in the SAS theme. Julie Mattheai argued that '...contemporary neoclassical economics views the market economy as the optimal solution to the universal human problem of scarcity.... The market's invisible hand 'allocates scarce resources among competing ends' by adjusting prices...' (Matthaei 1984, p. 82). But markets cannot fully solve the problem of scarcity, neo-Malthusians have argued, because it does not consider absolute availability or final limitations of various resources (Daly 1974; Daly and Farley 2004).

The rejection of the Malthusian approach was emphasized by Karl Marx, among others. He rejected the notion that scarcity is a necessary part of the human condition. Marx argued vigorously:

Malthus's theory, which incidentally was not his invention...is altogether false and childish ... because he regards overpopulation as being of the same kind in all the different historic phases of economic development; does not understand their specific difference, and hence stupidly reduces these very complicated and varying relations to a single rela-

tion, two equations, in which the natural reproduction of humanity appears on the one side, and the natural reproduction of edible plants (or means of subsistence) on the other, as two natural series, the former geometric and the latter arithmetic in progression. In this way he transforms the historically distinct relations into an abstract numerical relation, which he has fished purely out of thin air, and which rests neither on natural nor on historical laws (Marx 1978b, p. 276)

Marx saw the problem of scarcity differently, at least when it comes to the problem of unemployment. In order for the ruling class to secure their power over the production apparatus of the economy, they need a “reserve army of the unemployed”. One way of achieving this is by promoting population growth in the lower classes. The result is overpopulation, lower wages and poverty. Hence, Perelman wrote ‘...In place of overpopulation, he [Marx] taught us to see the reserve army of the unemployed. Instead of allowing us to become bogged down in concepts of resource scarcity, he demanded of us that we grasp the social content of each situation’ (Perelman 1979, p. 86).

Despite these differences, John Gowdy argued that the Malthusian and Marxian approach are complementary (Gowdy 1986): the former considers the natural mechanisms (e.g., carrying capacity) of scarcity, while the latter focuses on the social mechanisms (e.g., class interests). He argued that ‘With a few exceptions, both Marxian and neoclassical economics take the position that the natural world, in the long run, imposes no constraints on economic activity’ (cf. Georgescu-Roegen 1973, p. 38; Gowdy 1988, p. 34). Marx, however, declares in *The Critique of the Gotha Programme* that ‘Labour is not the source of all wealth. Nature is just as much the source of use values (and it is surely of such that material wealth consists!) as labour, which itself is only the manifestation of a force of nature, human labour power’ (Marx 1978a, p. 525). Nevertheless, one might ask: How is value related to the creation of resources in society?

Problem 5. The assemblage of resources

This discussion about the limits to growth shows by the same token the importance of the problem of *the assemblage of resources*. The concept of resources is central to the SAS theme (De Gregori 1987; Peach and Constantin 1972). It is scarce resources that neoclassical economics seeks to allocate optimally, and it is abundance of resource that some heterodox economists seek to draw our attention to; but what is a resource anyway? A precise definition of the term ‘resource’ or ‘good’ can be found in the writings of one of

the pioneers of neoclassical economics (Menger 2004, p. 51 ff.),¹³ but it seems to be more or less given in modern neoclassical economics. A study of the concept of resources is often neglected because it is assumed that only natural scientists can provide an appropriate answer (Peach and Dugger 2006, p. 8). But, as shown via the problem of the limits to growth, there are social as well as cultural processes that condition how resources are created and defined (cf. Hacking 1999; Pinch and Swedberg 2008).

Accordingly, one can pose several questions here: What is a resource, and how is it related to technology?¹⁴ How do social, cultural and natural mechanisms interact in order to create a resource (cf. Callon 2001; Callon 1998; MacKenzie, Muniesa and Siu 2007; Swedberg 1993)? How does society in total (macro) or groups in society (micro) combine, control, guard, share, merge, duplicate, produce, create, invent or simply assemble resources.¹⁵ These kinds of questions are of great interest for the SAS theme.

In this section on the internal line of critique of neoclassical economics, I have discussed three of the eight main problems of the SAS theme: namely, the universalization of scarcity, the limits to growth, and the assemblage of resources. The next section will deal with the sociological perspective on scarcity, or more specifically, in which way the concept of scarcity has figured in sociological theory. By doing this, the remaining problems of the SAS theme will be discussed.

Sociological perspectives on scarcity: the external critique

The external line of critique comes from outside the economic tradition (e.g., philosophical, psychological, and sociological critiques). I will focus more specifically on the sociological critique of neoclassical economics. This line of critique has many similarities to the internal critique, namely, it holds that economic theory should embrace a wider array of problems, beyond the problem of efficient allocation. But it is unique with regard to at least one feature. Whereas heterodox economics has focused more on the economy as such (e.g., what is inflation, the role of central banking, conditions for development, etc.), a considerable part of the sociological critique has focused on the relation between the economy and society (Parsons and Smelser 1956; Smelser and Swedberg 2005). Generally speaking, the sociological perspective

¹³ See *Paper I*.

¹⁴ See, e.g., the special issue on technology, *Cambridge Journal of Economics*, volume 34 issue 1, 2010.

¹⁵ These kinds of issues, not traditionally defined as sociological, raise various questions, not least ontological ones. There is unfortunately no space to discuss these in this thesis; see e.g. Lawson (2008).

argues that the economy is essentially social in nature and should therefore be studied as any other social relationship. With the SAS theme in mind, I would like to discuss at least three more problems that stem from the sociological approach: namely, the foundations of the social sciences, the origins of human wants, and the nature of SAS.

The sociological discipline was established partly as a response to neo-classical economics. Sociologists developed theories, at a macro level, to supplement the problem of efficient allocation with issues such as solidarity, social integration and conflicts of interest; at a micro level, it questioned the universality of instrumental rationality by introducing concepts such as traditional and value-oriented action (Swedberg 1998; Turner 1999). However, the assumption of scarcity seems to be present in sociology as well. If scarcity functions as constraints in various optimization problems for neoclassical economics, it seems to function in parts of sociology as an important element of establishing it as a legitimate field of study.

Problem 6. The foundations of the social sciences

Bryan S. Turner and Chris Rojek wished to advance sociology as the discipline that is based on principles of scarcity and solidarity (Turner and Rojek 2001). They claimed that, 'If sociology is to survive it must establish a position of disciplinary boundaries which is both defensible and practical. We hold that the principles of scarcity and solidarity must be the foundation of such a position' (Turner and Rojek 2001, p. 23). This is achievable, according to them, through a reinterpretation of the sociological literature and particularly Parsons's work (Turner and Rojek 2001, p. 68). Through Parsons's work, there is a unique answer to the Hobbesian problem of order (Parsons 1949, p. 89), which only sociology may provide. Whereas economics concerns the allocation of the scarce resources of a system, political science is about the coercive dimensions of that system, and psychology is about the study of individual cognitive dispositions; consequently, none of them addresses the importance of common norms, values and culture for the establishment of social order (Turner and Rojek 2001, p. ix). Accordingly, Parsons's approach establishes the appropriate conditions for a division of labour within the social sciences.

Turner and Rojek's account may be sound, but my primary reason for highlighting Parsons's work is not only because he can '...be considered the last sociological theorist whose work is formed by the debate with economics' (Beckert 2002, p. 133), but because his account rests on the assumption of scarcity. This assumption, it seems, is unwarily imported via the Hobbe-

sian formulation of the problem of social order. Hobbes claimed that ‘...if any two men desire the same thing, which nevertheless they cannot both enjoy, they become enemies; and in the way to their end, which is principally their own conservation, and sometimes their delectation only, endeavour to destroy, or subdue one another.’ (Hobbes 1839, p. 111; cf. Parsons 1949, p. 89).

It is not clear whether Parsons was aware of many of the issues associated with the concept of scarcity. Both classical and neoclassical economists regards scarcity as fundamental prerequisite for the existence of economics, but is scarcity equally fundamental to sociology? How is Parsons’s account altered if we introduce abundance and sufficiency into his analysis? What if scarcity, as a phenomenon in society, can be created and manipulated by actors to serve some vested interest?

Thus, one of the main points of asking these questions is to make the reader aware of the fact that some of the main problems of the SAS theme require a more elaborate view of SAS and its role in social and economic theory.

I argue that a problematization of SAS casts a different light on Parsons’s thoughts on social order. This claim is not really new; the early criticism of Parsons (and functionalism) attacks him for not providing a proper sociological understanding of the issues of social conflict, social change and dialectical contradictions (cf. Habermas 1985, p. 199 ff.; Holmwood 2005). Nevertheless, a focus on SAS rather than on conflict takes a slightly different grip on the critique of Parsons, in so far as it questions the assumed reasons for why conflict arises in the first place (the assumption of scarcity) rather than criticizing the absence of an account of how conflict should be integrated into social and economic theory. Even the concept of conflict seems to harbour or assume the notion of scarcity: ‘Conflict refers to a situation in which there is disagreement over how to divide scarce resources’ (Citrin 2001, p. 2547), which resonates well with traditional thinking on why large scale armed conflicts arise (Gleditsch 1998); it is thus not surprising that some sociological theories also assume the relevance of scarcity for social conflicts (cf. Turner 1975). Accordingly, from the perspective of this thesis, both Parsons and some of his critics simply assume scarcity without really questioning the deeper nature of the concept. I do not doubt that scarcity, conflict and social order are causally related somehow; what I am questioning is the internal working of the concept of scarcity, which in turn may have some bearing on how we understand social order as well as conflict.

This also means that in order to be better fit to provide some answers to *the problem foundation of the social sciences*,¹⁶ and to the other problems outlined, we need an elaborated conceptual understanding of what scarcity actually is: With some exceptions, neither sociologists nor economists (neo-classical and heterodox) seem to accomplish this.

Problem 7. The origins of human wants

Turner and Rojek offered three possible explanations of why Parsons did not define scarcity properly. The first explanation is that Parsons simply assumed that nature is niggardly,¹⁷ there are simply too few resources available in the global ecosystem, and left the question for the natural sciences to study (biology, ecology, etc.). The second explanation is that scarcity exists because human beings having infinite wants. This is an idea partly based on his reading of, among others, Durkheim, Hobbes, Marshall¹⁸ and Freud (Parsons 1970; cf. Turner and Rojek 2001, p. 96). The third explanation is that scarcity exists because of the social plasticity of wants (cf. Veblen 2007; Xenos 1989). The difference between the second and third explanation is that, in the former, human beings are seen to be, by their very nature, equipped with infinite wants or desires,¹⁹ whereas the latter assumes that it is society that plants infinite wants in the minds of individuals. Nevertheless, whether nature or society is the root cause, the result is similar, namely an insatiable human being (Levine 1998; Marglin 1998).

With reference to the literature that interested Parsons, Turner and Rojek argued that it is the second explanation that is the most probable position of Parsons. It is also this position that they themselves embrace. It is the hedonistic nature of man, not the plasticity of wants, that accounts for general scarcity. They argue:

...that sexual appetite is the underlying reality of the notion of hedonism. It is human sexuality which is infinite, unsatisfied, excessive, vicious and uncontrolled...it is hedonis-

¹⁶ There are of course numerous issues related to the foundation of the social sciences not discussed here (e.g., the nature of causality, ontology, methodology), but SAS is clearly part of it.

¹⁷ This is a position taken by many economists it seems (cf. Hegeland 1967, p. 9); see also *Paper V*.

¹⁸ Marshall, nevertheless, did not take this hedonistic position fully; even if there is an assumption in his account that man ‘...desires not merely larger quantities of the things he has been accustomed to consume, but better qualities of those things; he desires a greater choice of things, and things that will satisfy new wants growing up in him’ (Marshall 1920, p. 73). He based his ideas about preference formation on the relationship between activities and wants (Aspers 1999, p. 655; Chasse 1984, p. 382). It is a relatively simple idea: ‘...the preferences (wants) are generated; by activities. Activities must be understood broadly embracing most of what men do in business and in every-day life’ (Aspers 1999, p. 656).

¹⁹ Culture, then, tames these infinite wants, and culture makes human beings civilized (cf. Freud 1961).

tic sexuality which produces wants in the form of an absence or lack with the result that man appears as a perpetually unsatisfied animal. (Turner and Rojek 2001, p. 97).

This does not mean that Parsons or his proponents disregarded cultural influences. On the contrary, culture is the source that restrains or constrains infinite wants. Content can thus only be found through submission to the social forces of society; one of the most important forces is morality, as claimed by Durkheim. He argued ‘...the passions...must be limited. Only then can they be harmonized with the faculties and satisfied. But since the individual has no way of limiting them, this must be done by some force exterior to him...society alone can play this moderating role; for it is the only moral power superior to the individual, the authority of which he accepts’ (Durkheim 1979, pp. 248-249). Sociology has as its object of study to account for how the constraining force of morality functions, how various ultimate ends are grounded in rituals and ceremonial acts, enchanted with meaning. Sociology studies how these acts essentially link, glue or tie different individuals or social classes together, among other things, through studies on the processes underlying how the restraining of impulsive desires as well as the formation of common wants occurs in society.

Irrespective of how one conceptualizes the human being and her wants (hedonistic, rational, culturally determined, etc.), it seems to me that scarcity as a concept depends on the existence of some sort of want, lack or craving (cf. Heller 1976; Peterson 2001; Springborg 1981; Townsend 1985). Therefore, a study of SAS will have to deal with this problem in one way or another. I shall call this problem *the origins of human wants*. Accordingly, one of the main questions here is: ‘Where do human wants come from?’ or ‘How are wants generated?’

Problem 8. The nature of SAS

As shown, specifically in relation to the problem of the foundations of the social sciences, the assumption of scarcity can be found in both classical (e.g., Parsons) as well as modern definitions of sociology (e.g., Turner and Rojek). Nevertheless, there are other important social theorists who define their subject matter with reference to scarcity, but without really questioning the relevance of the concept of scarcity – with the exception of Polanyi.

For example, scarcity can be found in Weber's definition of socio-economics. Weber regarded socioeconomics as consisting of three closely interrelated disciplines: namely economic theory, economic sociology and economic history (Swedberg 1998, ch. 2). The object of study of all three disciplines refers to scarcity:

Most roughly expressed, the basic element in all those phenomena which we call, in the widest sense, "social-economic" is constituted by the fact that our physical existence and the satisfaction of our most ideal needs are everywhere confronted with the quantitative limits and the qualitative inadequacy of the necessary external means, so that their satisfaction requires painful provision and work, struggle with nature and the association of human beings. (Weber 1949, pp. 63-64)

Needs, desires or individuals' interest are not give, Weber claimed. They are conditioned by subjective factors. They are related to the cognitive and cultural environment of specific societies. According to Weber, the general problem of the social sciences is that, 'By a social science problem we mean a task for a discipline the object of which is to throw light on the ramifications of that fundamental social-economic phenomenon: the scarcity of means' (Weber 1949, p. 64). In other words, understanding and explaining scarcity is one of the central tasks of social science. But one might ask: What is actually meant by this concept? Should it be defined in terms of a neoclassical understanding²⁰ or in a Malthusian fashion?

Conversely, Polanyi used the concept of scarcity to distinguish between the formal and substantive meaning of the term 'economy' (1957; 1971); which he then also used to distinguish his approach to studying the economy from the neoclassical one. The substantive meaning refers to individuals' dependence on each other and on nature for their livelihood. It is a basic fact of social and economic life. The formal meaning refers to the logical relation between the categories 'means' and 'ends'. It is a situation of choice, under scarcity. This latter meaning of 'economic' is thus basically equivalent to the

²⁰ Which I think Weber leans towards.

neoclassical view of scarcity, which he is critical of (Polanyi 1957, p. 243; Polanyi 1971). He writes that neoclassical economics ‘...fuses the ‘subsistence’ and the ‘scarcity’ meaning of economic without a sufficient awareness of the danger to clear thinking inherent in that merger’ (Polanyi 1957, p. 244). This fusion reduces all activities in the economy to being merely about the formal meaning of the term economic. This fusion might be consistent in a capitalistic system, because capitalism is partly about instrumental and maximizing behaviour, but this is not in any way representative of economic activity in a historical perspective. Polanyi wrote:

The use of the term "economic" is bedeviled by ambiguities. Economic theory has invested it with a time-bound connotation that renders it ineffective outside of the narrow confines of our market-dominated societies. Terms like supply, demand, and price should be replaced by wider terms such as resources, requirements, and equivalencies. The historian will then be able to compare the economic institutions of different periods and regions without running the danger of foisting upon the bare facts the market shape of things. (Polanyi 1977, p. xl)

Accordingly, one might ask: If scarcity gives rise to economizing behaviour (cf. Robbins 1945), do the various sociological references to scarcity then refer to the substantive or formal meaning of the term economic, or both? Or is there some third meaning of the term economic (cf. Holton 1992, pp. 11-14; Luhmann 1982, p. 194)? Nevertheless, some critical question might be posed in relation to Polanyi’s account as well: Is the concept of scarcity really only relevant when it comes to the formal meaning of economic? What about the relevance of abundance and sufficiency for social and economic theory?

Nevertheless, the concept of scarcity has apparently also influenced the definition of contemporary economic sociology. Consider Smelser and Swedberg’s definition of economic sociology:

Economic sociology...is the application of the frames of reference, variables, and explanatory models of sociology to that complex of activities which is concerned with the production, distribution, exchange, and consumption of *scarce* goods and services (Smelser and Swedberg 2005, p. 3: my italics)

Accordingly, scarcity seems to be an important concept for sociology, but it is unclear what is meant by this concept and how it should be used in sociological theory, compared to, say, neoclassical economics. Should scarcity be assumed to be similar to neoclassical theory? The sociological approach, it seems to me, does not hinge on the existence of scarcity in the same way as

the neoclassical approach does. Neoclassical economics explicitly focuses on allocation of scarce resources, whereas sociology does not really specify its 'scarcity focus'. There is sufficient support to suspect that both disciplines do not regard scarcity in the same manner, but both still assume it. This suspicion is fuelled by the fact that several adjectives are combined with the concept of scarcity, often without being properly defined. To mention a few: absolute scarcity, relative scarcity (Baumgartner et al. 2006; Raiklin and Uyar 1996), anti-scarcity (Foucault 2009, p. 54), social scarcity (Hirsch 2005), external scarcity, internal scarcity (Zinam 1982), post-scarcity (Bookchin 1971; Giddens 1990), scarcity-*scarcity* (Dobkowski and Wallimann 2002, p. vii), subjective-objective scarcity (Baumgartner et al. 2006, p. 491; Weber 1978, pp. 63-34), artificial scarcity (Menger 2004, p. 104), general scarcity (Daly 1974), universal scarcity (Polakoff 1958) and natural scarcity (Hegeland 1967, p. 9). Accordingly, these questions highlight the importance of the eighth and last problem of the SAS theme, namely, the nature of scarcity, or generally *the nature of scarcity, abundance and sufficiency (SAS)*. The main question here is: 'What is SAS?'

Do different theoretical accounts, say Parsons's, Webers's, Malthus's and Menger's, refer to the same kind of scarcity? If they do, why does neoclassical economics become useless under a situation of abundance, while other kinds of economic approaches are still applicable (e.g., some heterodox approaches, or economic sociology)? If they do not refer to the same kind of SAS, does this also mean that there are actually different kinds of scarcity, or merely different ways of approaching and using these concepts?

Research problems and demarcation

To reiterate, there are at least eight major research problems that are intricately related to the SAS theme. One of the purposes of discussing these eight quite different problems is to show that they all, in one way or another, spring from questions about SAS. These eight main problems are merely different areas or dimensions of the same thing, that is, the SAS theme. Hence, the discussion in the background section creates an analytical space for the five studies I have conducted.

The SAS theme, I argue, has implications for how social scientists view various empirical cases (Ragin 1987). Cases such as famine or voluntary material simplicity are very different from each other: They have very different causes (frustration of basic food needs vs. satisfaction of some economic ethics) and different effects (starvation and death vs. simple living); and in terms of normative judgment, the former can be viewed as socially catastrophic whereas the latter may be ecologically desirable. Still, what the SAS theme suggests is that they are actually not so very different with respect to one thing: namely, that they are both about SAS.

Hence, my primary intention has not been to challenge all the research and theories presented, but rather to reconceptualize some central problems in the social sciences in terms of the concepts of SAS. Through this reconceptualization, we may obtain an Archimedean vantage point from which solutions to or explanations of old problems can be seen in a different perspective, and from which, consequently, new kinds of problems may be articulated.

Nevertheless, I need to limit the aim of the thesis in order to more carefully explore specific issues concerning the SAS theme. I have traced the following problems, and they are outlined according to one important element: whether or not they, as a research area, tend to assume scarcity:

Tend to assume scarcity

1. The effects of SAS
2. The problem of allocation
3. The universalization of scarcity
4. The limits to growth
5. The foundation of the social sciences

Tend not to assume scarcity

6. The assemblage of resources
7. The origins of human wants
8. The nature of SAS

In terms of an explanatory approach to SAS, logically speaking, the origins of human wants, the assemblage of resources and the nature of SAS are more central in the SAS theme. This is because they tend not to assume scarcity, whereas the other five problems tend to. For example, one of the most central questions in relation to the problem of the nature of SAS is: 'What is scarcity' (or SAS). It is a question that seeks to illuminate how scarcity, abundance and sufficiency are constituted as concepts as well as how they appear in real cases. These sorts of questions cannot assume the exact form of scarcity, because you cannot assume what you are going to explain: or more correctly formulated, one needs to ask 'in which ways does scarcity exist', 'how is it constituted', 'in what situations does it exist and in what situations does it not exist', and so forth. These kinds of questions require both theoretical and empirical engagements.

Conversely, the problem of the foundation of the social sciences does assume scarcity of some sort. Naturally, this problem contains much wider issues than the issue of scarcity; it encompasses wider ontological (what exists in the social domain), epistemological (theoretical propositions) and methodological issues (what appropriate methods can be employed). Nonetheless, as argued in the previous section, a subset of the problem of the foundation of the social sciences comes down to questions about SAS, and this seems to be the case regardless of whether we follow some central sociologists, or neoclassical or heterodox economists. In a similar manner, in regard to the problem of the universalization of scarcity, researchers do ques-

tion the general usage of the assumption of scarcity, but they tend to do the opposite, namely, they tend to universalize or assume the importance of abundance instead (cf. Bataille 1991; Galbraith 1958; Hoeschele 2008). I argue that the concept of abundance needs as much scrutiny as scarcity does.

I maintain that of the three problems that tend not to assume scarcity, we can even focus on the problem of the nature of SAS. If we do so, we will also necessarily study some central elements of the problem of the origins of human wants and the assemblage of resources. The problem of human wants contains questions about scarcity, but it also leads to much wider questions about philosophical anthropology and thus the nature of human being (cf. Wolfe 2000, p. 1233); although important, these kinds of issues stand outside the main concern of this thesis. Similarly, the problem of assemblage of resources leads to much wider issues, for example, about human ecology and sustainability, as discussed in the previous section. If we manage to illuminate some of the issues surrounding the nature of SAS, we may also gain some insight into the remaining problems in the SAS theme – still, a more thorough study about linking the nature of SAS to the other problems will be left for future studies.²¹

The problem of the nature of SAS could be reformulated into the question: ‘What is SAS?’ It is an ontological question (Archer 1995; Bhaskar 1997; Lawson 1997), a question about being. It is a question about what constitutes, structures and differentiates SAS, both as concepts and as real entities. This general question – ‘What is SAS?’ – elicits at least three more specific research questions – which of course does not exhaust all possible questions that can be articulated concerning the nature of SAS:

- (a) Are there different kinds of scarcity, abundance, and sufficiency?
 - This was one of the foci of *Paper I, III and V*.
- (b) How could scarcity, abundance, and sufficiency be properly explained in relation to real events?
 - This was one of the foci of *Paper I, III and II*.
- (c) How could a sociological theory of want formation be developed?
 - This was one of the foci of *Paper III and IV*.

Questions (a) and (b) are more obviously related to the general problem. As discussed in the literature review, the question about human wants is an important part of the study of SAS, and question (c) seeks therefore to un-

²¹ What this thesis will offer to these problems that tend to assume scarcity is at least what different forms SAS may take and at which analytical levels it may exist.

CHAPTER 3

ravel some of the issues associated with it. It seeks to understand how wants are formed rather than explicitly focusing on the origins of human wants, because the latter problem is a more extensive issue. Five articles have been written in an attempt to answer these three questions. In turn, even more specific research questions have been formulated, each with regard to their own particular research context.

Results and discussion: the five papers

Before presenting the results from each paper, I would like to say something about the use of empirical cases. All empirical cases referred to in the papers, except one (*Paper IV*), should be seen more as empirical examples than as original empirical inquiries. I have selected various critical²² cases that exemplify something crucial with respect to SAS (Ragin 1992). For example, we already know that global food production is enough to meet global food needs (cf. Devereux 2007; FAO 2004; Shaw 2007); what *Paper I* does is to take that observation and reconceptualize it order to make a theoretical point about SAS. A great deal of research has already been done about the Bengal famine of 1943 (cf. Bose 1990; Islam 2007; Sen 1981), but what *Paper II* aims at is a theoretical synthesis of competing explanations of famines via the framework of SAS developed in *Paper I*. We already know, as studied in *Paper III*, that there are people who voluntarily reduce their consumption (Etzioni 2004: cf. Rudmin and Kilbourne 1996), but what we know less about is how this behaviour is related to SAS. There is also a great deal we already know even with regard to *Paper IV*, namely that people tend to violate transitivity when ranking their preferences (cf. Archer and Tritter 2000; Kahneman and Tversky 2000); what is original, however, is that this violation may arise because of a personal epistemological opaqueness and that want formation could be conceptualized in terms of a organic view instead of a hierarchical view. *Paper V* does not use any empirical cases at all, but it provides the reader with some of the background knowledge needed to understand the message of the other papers.

²² 'Critical' with respect to some theoretical problem I wished to illuminate.

CHAPTER 4

Table 1 Overview of the five papers

	Purpose	Field		Material & Method	Main results (keywords)
		Empirical engagement	Theoretical engagement		
<i>Paper I</i>	To formulate a sociological critique of "scarcity" in mainstream economics by synthesising conceptions with greater explanatory power than the current mainstream explanation	Hunger	Entitlement approach, Carl Menger, Critical realism	Descriptive statistics Secondary sources: FAO, WHO, and UN data	Universal scarcity, Absolute SAS, Holistic model
<i>Paper II</i>	To analyse if food availability decline (FAD), food entitlement decline (FED), and food requirements increase (FRI) are reconcilable	Famine	Entitlement approach, food decline approach	Descriptive statistics Meta-analysis Secondary sources	Test of the holistic model of absolute SAS
<i>Paper III</i>	To study how voluntary material simplicity may countervail the causal effect of relative scarcity generated by the environment of a consumer society	Consumerism	Consumer Studies	Interview & document analysis Primary sources: Interviews (n=3), books (n=3)	Relative SAS, Economic ethic, Modus vivendi of material simplicity
<i>Paper IV</i>	To develop an economic sociological account of want formation	Education	Rational choice, Habitus, Reflexivity	Interviews & survey Primary sources: focus interviews (n=27) solo interviews (n=8) school staff (n=6) Want lists survey (n = 27)	Transitivity, Organic want formation, Personal epistemological opaqueness
<i>Paper V</i>	To explore two different views of scarcity, abundance, and sufficiency (SAS); in which way they overlap and vary	n/a	Thomas Malthus, Lionel Robbins	Conceptual study	Absolute SAS, Relative SAS, Sociocultural mechanisms

In this section, I will outline the main results of the five papers and the various choices made during the actual research process. Table 1 gives an overview of the basic characteristics of all five papers – it is perhaps helpful to consult this table while reading the main results. The starting point of the thesis was the research question (a): *Are there different kinds of scarcity, abundance, and sufficiency?* As outlined in the background section, there do seem to be different kinds of scarcity. One of the most important distinctions is the one between absolute and relative scarcity (Baumgartner et al. 2006; Raiklin and Uyar 1996). These seem to refer not only to different objects (physical vs. social), different states (post-scarcity), or different spatial positionings of resources (extrinsic vs. intrinsic), but actually to different *kinds* of scarcities. This distinction, therefore, seemed to be a reasonable starting point for the thesis.

According to both Raiklin and Uyar (1996) and Baumgartner *et al.* (2006), the needs-wants distinction is an important element of the definitions of absolute and relative scarcity. Baumgartner *et al.* added substitutability of resources as well. That is, if a resource can be substituted or allocated differently, then we can talk about relative scarcity: if not, then we have a case of absolute scarcity (Baumgartner et al. 2006, p. 490). Both accounts claim, consequently, that ‘absolute scarcity is not the *raison d’être* of neoclassical economics; it is relative scarcity, the paradoxical scarcity of abundance that is the focus of this kind of economics’ (cf. Baumgartner et al. 2006; Raiklin and Uyar 1996, p. 55). Nevertheless, this distinction between relative and absolute scarcity does not seem to be widely utilized.

The distinction between ‘absolute’ and ‘relative’ has been widely discussed among poverty researchers. In this case, the distinction is related to the notion of basic needs. That is, people are in absolute poverty if they are denied access to resources that are absolutely necessary to maintain bodily functions, whereas relative poverty relates to situations where people, owing to limited economic resources, are socially excluded (e.g., Rowntree 1902; Sen 1983; Townsend 1979). However, this distinction is far from clear because of the difficulties of defining basic bodily needs and of separating them from social needs (Halleröd 2006; Marmot 2004).

This thesis questions whether the concept of needs is really important to differentiating between relative and absolute scarcity. Even if the focus of this thesis has partly been on famines and the failure to satisfy basic food

needs, the concepts do not seem to call for the need-want distinction.²³ For example, in *Paper I*, I used needs and requirements, in *Paper II* requirements, in *Paper III* wants, in *Paper IV* wants, and in *Paper V* I used requirements for describing both relative and absolute SAS. Consequently, there seem to be some strong arguments for regarding absolute and relative SAS not as defined in terms of the needs-wants distinction, contrary to what has been suggested by a number of researchers, but in terms of how the analytical categories are related to each other when defining SAS.

Nevertheless, this distinction calls for further exploration, both theoretical and empirical. Accordingly, for the studies I have conducted, I chose empirical cases that were ambiguous in terms of their scarcity character in order to allow for the concepts of abundance and sufficiency to play a role in the analysis. This appeared to be enough of a challenge for deepening our understanding of the nature of SAS. Accordingly, different areas of research were selected to investigate their relation to SAS: *global hunger, famines, voluntary material simplicity* and *decision-making in education*. These cases have nothing in common except the fact that they are all cases of SAS, by virtue of the SAS theme (Ragin 1992).

Paper I

Paper I deals with absolute SAS and the assumption of universal scarcity in neoclassical economics. There are three main results or contributions of this paper. First, it criticizes the universality of scarcity. It does this by using the empirical case of global hunger. There is extensive research showing that there is enough food to go around, yet people still starve. This indicates that the assumption of universal scarcity is too strongly emphasized by neoclassical economists. This paper does not criticize existence scarcity in all possible cases (e.g., scarcity of money, land, water, etc.), but it shows that the assumption of scarcity is misplaced in some cases (e.g., global hunger), which is enough to question the universalistic assumption of scarcity. Accordingly, if we accept that the assumption of scarcity does not apply to some cases, then we have, by the same token, questioned the universalistic importance of scarcity. This allows for an introduction of the concepts of abundance and sufficiency into the analysis.

Second, this paper answers the question: ‘How can there be starvation despite there being enough food?’ It does that by differentiating the systemic

²³ Take our Crusoe example above; it does not seem to matter whether he is allocating his water supply to imaginary needs or real needs. The problem of efficient allocation remains, that is how to allocate the scarce water supply to Crusoe’s preferences, whatever those preferences may be.

level from the individual level. In this way, we can more clearly see that there is an abundance or sufficiency of food on a systemic level, but that there is socioeconomic exclusion of people on the individual level. People are, for some reason (e.g., gender, ethnicity, class), not given access to available food; they are not entitled to such access. This is the definition of a situation of quasi-scarcity (viz. enough food on the systemic level, but invalid entitlements on the individual level) – that is, it looks like scarcity of food, but it is not. This reasoning is adopted from Amartya Sen’s entitlement approach.

The first two contributions were arrived at in a fairly straight forward manner; the third one required a more creative research manoeuvre. *Paper I* proposes a framework or model of how one can understand and explain not only absolute scarcity, but also absolute abundance and sufficiency: on both the systemic and the individual level. I called this model *the holistic model of absolute scarcity, abundance, and sufficiency* (HASAS). This model was developed in three analytical steps. The first step was to study one of the most important contributions to neoclassical economics with regard to its being founded on the assumption of scarcity, that is, the work of Carl Menger (Menger 2004). The second step was to integrate Menger’s account of SAS with one of the most important contemporary contributions to social and economic theory, namely Amartya Sen’s entitlement approach (Sen 1981). The third step was to ground this model in a wider ontological perspective inspired by critical realism – which is also an approach that has informed the thesis in general (Archer et al. 1998; Bhaskar 1997; Bhaskar 2005; Fleetwood 1999; Fullbrook 2009; Lawson 2003; Seldén 2005). Whereas the scarcity postulate of neoclassical economics causes us to accept the problem of efficient allocation as the starting point of economic analysis, this model instead makes us ask why scarcity arises in the first place. The neoclassical perspective assumes scarcity, whereas this model seeks to explain how SAS emerges. Hence, this model compels us to ask different questions, not only about scarcity, but also about abundance and sufficiency.

However, there were some unresolved issues. One of these issues is the following: It is not clear how the developed framework would be suited to other more empirical cases, because it was still relatively abstract. This became the task of *Paper II*.

Paper II

The framework developed in *Paper I* (HASAS model) needed further testing. Upon working on *Paper I*, I came across several important cases of famine, and there was one case in particular that piqued my interest, namely, the Great Bengal Famine of 1943. There was, and still is (see, e.g., Islam 2007),

a rather infected controversy over whether this famine was caused by a food availability decrease (essentially a Malthusian argument) or by a food entitlement decrease (Sen's entitlement approach). The HASAS model was designed to deal with both kinds of approaches, and my research question was, accordingly, whether it is possible to transcend this controversy by using the HASAS model.

I believe that Paper *II* arrives at the following somewhat overlapping three results. First, it is indeed possible to transcend the 'food availability decrease'-'food entitlement decrease' debate. This was done by arguing, via the HASAS model, that these causal accounts actually focus on different dimensions of the same thing, namely, how famines arise. The HASAS model shows, as a general ontological map of the chain of causality of famines, that absolute scarcity can arise from the following three causal sources: (1) food availability decreases on the systemic level, (2) decreases in people's food entitlements on the individual level. This overlaps neatly with the 'food availability decrease'-'food entitlement decrease' debate. It seems to me, then, that some of the confusion surrounding the research on the Bengal Famine could be resolved by differentiating the systemic from the individual level. These two levels have their own distinct causality, but both make up famines, and more generally SAS. Nevertheless, this model also shows that there is a third causal source of SAS, namely (3) food requirements can increase on the systemic level. The academic debate on the Bengal Famine, accordingly, focused only on the first two, and very little on the third causal source.

Second, by developing the first result, one can argue that there are not two but three causal sources of how absolute SAS can emerge. Accordingly, there are three main causal sources, each of which can cause scarcity on its own, for example: climate shocks may lower food availability; changes in the labour market may cause mass unemployment and thus affect people's entitlements to access food; or, continuous growth in the population increases food requirements in that system.

Third, *Paper II* offered a specific hypothesis or explanation of the Bengal Famine, synthesized from the literature, based on a study of the underlying human actions related to famines. It was a 'sudden shift in government priorities' that should be seen as the focal explanation – but only in a causal context of other factors (e.g., population increase, Japanese aggression, colonialism). In summary, the government of Bengal, supported by the central government of India and the British authorities, was controlling the food market from the middle of 1942 until March 1943, when it suddenly decided to de-control it. This was unexpected and caused a steep inflation on foodstuffs,

despite there being enough food, which enforced social unrest, resulting in socioeconomic exclusion of the urban population (mass unemployment, and little or late arriving help from the local authorities), and which ultimately resulted in starvation and death. Hence, similar to *Paper I*, this is a situation of quasi-scarcity. There was sufficient food on the systemic level, but people were excluded from accessing these supplies. Hence, *Paper II* arrived at this conclusion by focusing more on different actors' priorities, as suggested by more recent famine research (Devereux 2007), and less on agricultural data and entitlement mapping.

There is another point, which is not necessarily a result because this was only indicated and not shown. If HASAS, as applied in *Paper II*, could be regarded as a successful way of transcending this kind of controversy, then it might also be useful in relation to famines other than the one in Bengal. In fact, it might even be useful in non-food-related issues, for example, water, housing, transportation, education, medical service, Internet access, jobs, and so on and so forth. It is difficult to say at this stage how far one could take the HASAS model, but it certainly represents an interesting attempt at utilizing the SAS theme – additional research is needed to find out more about this question.

Paper III

Paper III focused on relative SAS. The point of departure was a combination of research questions (a) and (b). It focused on a conceptual differentiation of relative SAS, namely, on internal and external SAS, adopted from Oleg Zinam (1982).²⁴ Relative external scarcity means that the resource that is going to be allocated to alternative ends is located outside or external to the point of reference. The point of reference is the individual who is going to perform the act of allocation (a person, a household, an organization). The resource that is going to be allocated could be, for example, money, land or water. Conversely, relative internal scarcity means that the resource that is going to be allocated is located inside or internal to the point of reference. This resource could be, for example, an individual's own labour power, cognitive capacity, or time. Essentially, it seems to me that the difference between external and internal scarcity refers to whether the resource that is going to be

²⁴ Observe, however, that Zinam uses the concept of relative and absolute SAS in a different way compared to how it is used here. For Zinam, absolute abundance occurs when both internal and external scarcity have been eliminated (Zinam 1982, p. 64), whereas relative abundance occurs when external or internal scarcity has been eliminated. His argument is, though, that relative external abundance may be achieved (via technological development) but not relative internal abundance, because 'As long as human beings are mortal and have to live within time and other limits imposed on them by their nature, internal scarcities cannot be removed' (Zinam 1982, p. 64).

allocated is the property of the individuals who will allocate the resource or the property of an entity external to that individual. The aim of *Paper III* was a focus on the material aspects of external SAS, the primary question being: Is it possible to achieve relative abundance in an environment characterized by the consumer society?

As argued in the beginning of *Paper III*, considerable research has been devoted to voluntary reduction of consumption. However, little research has linked insights about voluntary simplicity to issues related to SAS. Even if research shows that voluntary simplicity leads to lowered consumption, it does not discuss whether this also leads to a state of abundance. Moreover, it is not certain what status abundance has as a normative ideal of the ideological core of some social groups (as an empirical phenomenon).

In line with these questions, *Paper III* arrives at the following four results or contributions. First, it does show indeed that individuals or voluntary simplifiers may seek to achieve a state of abundance or sufficiency as a socioculturally desired state. Thus, from the perspective of these simplifiers, scarcity is regarded as something undesired. The specific economic ethic that these simplifiers followed, which I called the economic ethic of material simplicity, normatively encourages individuals to reduce their wants in order to achieve relative abundance.²⁵ This shows the importance of abundance and sufficiency as a real phenomenon for social and economic theory. This links directly to the second contribution.

Second, abundance can be achieved within the conditions of the consumer society, and not by working more but by wanting less – what I have called *the modus vivendi of material simplicity*.²⁶ Some individuals do not only reduce their consumption, but also achieve a state of relative abundance (which refers to resources relative to wants or needs), which is not the same as affluence (which implies having plenty of resources regardless of what you want or need). For social and economic theory, this means that there is another solution to the problem of efficient allocation: Neoclassical economics argues that in situations of scarcity, the best thing one can do to cope with scarcity is to use one's resources as efficiently as possible – here, means and ends are given; conversely, these voluntary simplifiers try to abolish a situation of scarcity altogether by wanting less.²⁷

²⁵This concept was informed by Weber's ideas, namely, the idea that a certain kind of economic ethic (culture) could condition actual socioeconomic events (economy and society).

²⁶The use of the concept of *modus vivendi* was inspired by Margaret Archer's work (Archer 2003, p. 148).

²⁷One could argue that poor people often tend to do the same thing, that is, they adjust their preferences to what they can afford (cf. Halleröd 2006). However, there is one crucial difference, simplifiers voluntarily choose to reduce their preferences even if they have more, or much more, resources than they require. Poor individuals

Third, whereas *Paper I* and *II* focus more on the systemic level and on how SAS emerges, this paper focuses on SAS on the individual level. This shows that SAS is not solely a macro phenomenon (Malthus's primary focus), but exists both on the micro and the macro level.²⁸ Of course, famines and voluntary simplicity are very different things, but they nevertheless share some essential characteristics with respect to SAS. They are both cases of SAS. This also shows the relevance of SAS to different units of analysis. These questions, about the various divergent cases of SAS as well as the fact that SAS is found in various units of analysis, have not been properly developed in this thesis or the papers. I believe that this needs to be analysed further in order to properly illuminate what constitutes the various cases of SAS, not least for reasons of comparison (cf. Ragin 1987).

Fourth, this paper developed a framework to explain relative SAS that I called *the holistic model of relative scarcity, abundance, and sufficiency* (the HRSAS model). This model, similar to the HASAS model, encourages an explanatory stance on SAS, rather than assuming scarcity, as is done in neo-classical theory. It focuses on how a situation of SAS emerges, and what underlying mechanisms generate it. Moreover, the HRSAS model demonstrates the concrete difference between relative and absolute SAS. Relative SAS focuses on the alternative use of a resource relative to competing requirements, whereas absolute SAS focuses on the actual use of a resource in relation to one kind of requirement. Nevertheless, as discussed in *Paper V*, there is some conceptual overlapping between relative and absolute SAS, which brings up the question of whether the concepts of absolute and relative actually constitute different kinds of SAS or merely different views on the same thing.

However, some important issues have still not been fully addressed in this paper. The first issue is that only the material aspects of voluntary simplicity were studied; the immaterial dimensions was omitted. The individuals studied in *Paper III* may have achieved relative abundance of material or external resources, but not of immaterial or internal, especially their time resources. For example, the individuals I interviewed often felt unsatisfied about the more immaterial things they wished to do, because they lacked the time or energy to do them: They wanted to spend more time with their family, meditate more and study more, but felt they had no time – their scarcity was time. This is what Zinam (1982) would call relative internal scarcity. Accordingly, they did not need to allocate their material resources, but it seems as though

do not choose to live in poverty, they are forced to live in poverty (Rudmin and Kilbourne 1996, p. 169 ff.; cf. Sen 1983).

²⁸Cf. *Paper V*.

they really needed to allocate their time (cf. Becker 1965; Larsson 2007). This point highlights the fact that the neoclassical problem of allocation does not easily disappear.

The second issue is that although voluntary material simplicity is an interesting phenomenon that contributes to our theoretical understanding of SAS, it is relatively hard to make any empirical generalizations on the basis of this paper. Research shows that consumption has increased steadily, for different reasons, without any strong indication of weakening (Bauman 2007; de Grazia 2001; Sennett 2006); this is so even in a post-materialistic value system (Inglehart 1997; Inglehart and Welzel 2005). The real or more general relevance of this case is thus questionable. This is something that needs to be accounted for through more research, which I unfortunately lacked the resources for in this context.

The third issue is that *Paper III* used a basic sociological claim that human wants could vary or change altogether, via the influence of a certain kind of economic ethic (viz. via social and cultural mechanisms). But this influence was only assumed to exist, not really accounted for. This third issue motivated the aim of *Paper IV*.

Paper IV

The aim of *Paper IV* (co-authored by Goran Puuca²⁹) was specifically to study the formation of wants. The thesis thereby moved from studying research question (b), to focusing on research question (c): *How could a sociological theory of want formation be developed?* The formulation of this question reveals that we did not doubt that a sociological theory of want formation could be developed. In fact, there are already versions of such theories in addition to Parsons's early attempts, especially in consumer research (see, e.g., Bauman 2007; Brekke and Howarth 2000; Campbell 1987; Princen, Maniates and Conca 2002). The question was rather how this could be done in relation to theoretical advancements including a better understanding of human wants, from our perspective. In order to narrow down our research question, we focused on some critical problems associated with the concept of preferences in rational choice theory, and focused on students' decision-making process in education as an empirical field (not least because rational choice theory was, and still is, dominant in this field).

²⁹ A note about the division of labour: It is difficult to clearly define 'who did what', but in general terms, Goran had the main contact with the respondents when it came to planning the interviews; he also conducted most of the interviews with the staff at the studied school. I had the main responsibility for structuring and wrapping up the article. We were both equally involved in interviewing the students, transcribing, and analysing the material.

Paper IV makes one central contribution, which is essentially a theoretical innovation. It sought to combine three central concepts – *habitus* (Bourdieu 1984), *reflexivity* (Archer 2003), and *human practice* – in an explanation of want formation (Elder-Vass 2007). The main line of argument is that the habitus generates the set of wants that individuals manifest, whereas reflexivity creates the interrelations between various wants (work, friends, income, partner, etc.). We called all the wants with their crisscrossing links the *body of wants* or *an organic view of want formation*.³⁰ It is organic because each separate want serves a function within the totality of the body of wants. For example, wanting to work is not separate from wanting to form a family or to travel. The want to educate oneself is not separate from the want to work or follow the path of friends and family.

This might seem to be sociologically trivial, but from a rational choice point of view, the set of preferences may or may not have any interrelations. The important thing is to be able to rank them in a rational way. If Crusoe cannot rank his needs, he will not be able to rationally choose between them, regardless of whether there is any relationship between them. We called this view an atomistic or “hierarchical” view of wants. This view holds, accordingly, that each want can be separated and isolated from all other wants and put in a strict hierarchical order of priority. Nevertheless, instead of seeing rational choice as underpinning the decision-making process and human action, we argued that the body of wants guides it. It is this body of wants that forms, grows or changes according to a person’s life history.

Moreover, besides the fact that Crusoe is a factitious example, there is an important difference between his situation and the students we studied. In Crusoe’s case, the resource or the satisfier is very clear, explicitly defined. For example, in the case given above, water supply is clearly defined: he wants only water and he knows exactly how much he wants (see the discussion in the background section). For the students we interviewed, the situation is much more complicated – as they are embedded in an open system. Not only did they have difficulties articulating what they want, but there existed a kind of uncertainty about how to satisfy these wants. These satisfiers are unclear, undefined, or opaque, which makes decision-making inherently difficult. This is what we called *personal epistemological opaqueness*. Hence, the concept refers to the fundamental uncertainty involved in gaining knowledge about feasible means and desirable ends, from the agent’s own perspective. This problem concerns how resources are created and defined in

³⁰ These terms are indeed inspired by Durkheim’s concepts.

a given social context³¹ – which is both tangent to the problem of the assemblage of resources as well as the problem of human wants.

Hence, one of the central contributions to the thesis made by *Paper IV*, which was just touched upon in *Paper III*, is that the concept of wants is grounded more firmly in cognitive, social and cultural structures. Of course, many questions were left out of the paper. For example, what are the relations between needs and wants? What is a need anyway? Why merely use needs and wants – what about aspiration, attachment, attitude, caprice, craving, choice, concern, commitment, drive, desire, demand, end, incentive, feeling, goal, identity, intentionality, interest, meaning, motivation, objective, pleasure, passion, requirement, subjectivity, taste, urge, whim, and so on and so forth? Most of these questions come from the problem of the origins of human wants. These are indeed important questions, but they do not seem to affect directly the conceptual typology of SAS developed here.

³¹ One might ask, in which way are the satisfiers, or the resources, pre-defined by other agents, for example teachers, headmasters, or policy-makers?

Paper V

Paper V compares two prominent (classical) economists and their view of scarcity, namely Thomas Malthus (1766-1834) and Lionel Robbins (1898-1984). This paper makes two contributions. First, it shows the importance of integrating sociocultural mechanisms for further deepening our understanding of both relative and absolute SAS – thus emphasizing the embeddedness of the SAS theme (Polanyi 1977). This is also something indicated in the other papers, but further emphasised on in this paper.

Second, it discusses more thoroughly how absolute and relative SAS can be conceptualized, as well as some of the relationships between them. Basically, the relative dimension regards SAS in terms of the efficient allocation problem, or a resource's alternative use (what I call a one-to-several relation: how to allocate one kind of resource to several competing requirements); whereas the absolute dimension concerns the actual use of a resource (one-to-one: how one kind of resource is used to satisfy one kind of requirement).

Nonetheless, even after completing this paper and despite the tracked conceptual differences of absolute and relative SAS, I am still not fully convinced that these constitute different kinds of SAS. The analytical models that were developed, HASAS and HRSAS, suggest that they are different, but it seems that one can still regard the same empirical case as both a case of absolute SAS and a case of relative SAS. For example, the problem of global hunger discussed in *Paper I* was seen as a problem of absolute SAS. That is how people could access, become entitled to, food that already existed in the system they were embedded in as well as what conditioned the food production of that system. However, the same phenomena could be seen as a problem of relative SAS. One could argue, in neoclassical terms, that the factors of production might be misallocated on a systemic level in a situation of food scarcity – in terms of the production possibility frontier, a nation might be producing more guns and so less food (see Figure 2 above). This situation could arise, for example, because of political instability, war, or ambiguous property rights. In other words, hunger and famine can arise as a consequence of misallocation.³²

One can also employ the case of *Paper III* to question the absolute-relative distinction. To reiterate, the relative dimensions of SAS refer mainly to the problem of allocation. But once an individual transcends the problem of allocation, the problem of relative scarcity ceases to exist; and one might thus ask: 'What does relative abundance mean in this context?' Accordingly,

³² Or, conversely, one could argue that producing more guns in relation to food is more rational in terms of deterring enemies (in a war or cold war situation). Famine among some of the population, then, is just a price one has to pay.

there is a tension or overlap between relative and absolute SAS. Even if I believe that the distinction between absolute and relative SAS, as shown in *Paper V*, refers to something substantial, there is a clear need for further investigations of this problem, both theoretically and empirically. This calls for a deepening of the problem of the nature of SAS. It refers to the relation between other differentiations as well, for example, physical scarcity, social scarcity, internal scarcity, external scarcity, post-scarcity, objective scarcity, subjective scarcity, etc.

Summary

In this section, I have discussed some of the central results of the five papers; Table 1 above provides an overview of the papers. Each paper makes specific contributions to answering the three research questions derived from the general question: ‘What is SAS?’ I shall repeat a very brief response to each question.

Question (a) – *Are there different kinds of scarcity, abundance, and sufficiency?* – is answered through this thesis by stating: Yes there seem to be, but more research is required in order to investigate the relationship between relative and absolute SAS. Moreover, there are other kinds of SAS that have not been discussed extensively in the thesis.

Question (b) – *How could scarcity, abundance, and sufficiency be properly explained in relation to real events?* – is answered by the suggestion that HASAS and HRSAS are sound ways of explaining real cases of SAS, but further applications are needed to secure these explanatory models.

Question (c) – *How could a sociological theory of want-formation be developed?* – is answered by the provision of a theory of an organic view of want formation. Nonetheless, many issues have been necessarily left to future research, especially the question of human needs.

Contributions

The general contribution of this thesis has been to show the importance of the SAS theme for social and economic theory, but its specific contributions lie in the problem of the nature of SAS. Derived and highly condensed from the five papers, I wish to stress the following three contributions:

1. A tentative typology of SAS.
2. A holistic (multi-casual) explanatory approach to SAS.
3. An alternative foundation for general social and economic theory, based on the SAS theme.

The first contribution, a typology of SAS, shows that these concepts are applicable on different levels (macro, micro) and that they cover various situations (e.g., quasi-scarcity, which means that there are enough resources on the systemic level, but individuals are hindered from accessing them). This typology is, however, incomplete, because there are further differentiations of SAS not thoroughly studied here. The second contribution is that the underlying causality of SAS should be regarded in a holistic totality. Two such models, HASAS and HRSAS, have been developed, and it has been shown that they can be applied to different cases – it has also been indicated that they can be applied to the same case, but more research is needed to study this in depth. The usefulness of these models seems to depend on the case, the goal of analysis and the unit of analysis. The third contribution, which is probably the most profound, is that the SAS theme offers an alternative foundation for social and economic theory in general. It emphasizes the importance of not only scarcity, but also abundance and sufficiency. One can regard the SAS theme as an alternative foundation because many seemingly divergent social and economic problems have at least one common element, namely, that they concern how individuals provide for their wants or needs, what kind of resources are available as well as which individuals are entitled to access them (cf. Polanyi 1957) – these things are about SAS.

Let me give a brief summary of how this thesis arrived at these contributions and how a study of SAS may be taken further. This work can be summarized in three analytical steps. As a first analytical step, the thesis started from the fact that scarcity is treated primarily as an assumption in neoclassical economics, as well as in some central heterodox and sociological approaches. Instead of assuming scarcity, this thesis has sought to show the value of explaining it, along with abundance and sufficiency. As a second analytical step, by reviewing the literature, eight main problems were pinpointed. These seemingly different problems have at least one common denominator, I argued, namely that the element of SAS plays a central role in their formulation. This is the SAS theme. A set of problems that are all associated with SAS in various ways. As a third analytical step, however, I chose to focus on a smaller part of the SAS theme, namely the problem of the nature of SAS. Five studies were carried out in order to illuminate what SAS is and how it is manifested in some empirical examples. Consequently, some contributions have been made, but many questions remain unanswered, as the SAS theme elicits a myriad of research enquiries.

I shall briefly summarize some of these enquiries into the SAS theme that I believe are the more interesting ones, most of them discussed in the background section. This is done to emphasize the need for future research and thus serves as an invitation to the reader.

On conflict, social order and solidarity. This is a central issue in the social sciences (Turner and Rojek 2001). According to Hobbes, the war of all against all can only be ended by establishing a social contract enforced by a strong actor (the state). Parsons challenged this conclusion, and argued instead that social integration via common values is the answer. However, I have argued that the problem of social order, and thus the Hobbsian as well as the Parsonian answer, assumes the existence of scarcity in the first place. Both these answers surely have their merits, but one might question the use of the concept of scarcity here. Is the problem of social order only relevant under scarcity? What if scarcity is induced or created by a third party in order to serve vested interests (cf. Swedberg 2005)? After all, some would argue that '...The home of vested interests is amidst social scarcity. The term has no meaning in the context of natural abundance' (Archer 1995, p. 204). One might also ask whether scarcity always leads to conflict (cf. Gleditsch 1998; Homer-Dixon 1994). Some would say yes: 'To enter an age of scarcity ... is to enter an age of increased conflicts that contain a great potential for mass death and even genocide...' (Dobkowski and Wallimann 2002, p. xxix). But does this mean that there is no conflict when abundance of resources exists (cf. Chase 1934)? Is solidarity only relevant when scarcity exists?

On wealth and poverty. Regardless of whether poverty is defined in absolute or relative terms (Doyal and Gough 1991; cf. Halleröd 2004; Halleröd 2006; Sen 1983), the creation of wealth, according to Adam Smith, cures poverty. In other words, wealth could be seen as the reduction of scarcity (Xenos 1987). Smith envisions a future in which there is abundance of all kinds of goods, where no poverty exists. Smith writes that ‘...the object of police [policy, politics, governance] in general is the proper means of introducing plenty and abundance into the country, that is, the cheapness of goods of all sorts’ (Smith 1982, p. 333). Could there be an actual situation of sufficiency or abundance that would entail the end of the problem of allocation and so the end of poverty? Keynes, for instances, thought this was the case (Keynes 1972). But what kind of scarcity are they really referring to, micro or macro? Absolute or relative? What about the social limits to growth as defined by Hirsh (2005); and if the economic problem can be solved, how would that influence Hobbes’s problem of social order?

On allocation. The neoclassical approach is specifically tailored to account for the problem of efficient allocation under scarcity. But how is allocation of resources conducted under sufficiency or abundance? Neoclassical economics seems to have little to say here, as it needs to clearly define the scarcity constraints in any given optimization problem. Is there any meaning to the concept of efficient or rational allocation under abundance and sufficiency? Moreover, it is necessary to differentiate between the problem of *efficient* allocation and the problem of allocation in general (cf. Beckert 2002; Weber 1978, p. 65 ff.). From a sociological perspective, allocation of resources can occur in many ways, not only via rational choice. For example, allocation can occur through exercise of power (e.g., state coercion), be guided by norms (Parsons 1949), habits (Bourdieu 2005), or through mutual exchange (Holton 1992, p. 16; Polanyi 1977). Bourdieu, for instance, argued that ‘Homo oeconomicus, as conceived (tacitly or explicitly) by economic orthodoxy, is a kind of anthropological monster...It is one of the virtues of Gary Becker, who is responsible for the boldest attempts to export the model of the market and the (supposedly more powerful and efficient) technology of the neoclassical firm into all the social sciences...’ (Bourdieu 2005, p. 209). As an alternative, Bourdieu proposed a model of man based on habitus. Individuals do not allocate mechanically in terms of over-rationalized instrumentality, but in terms of a ‘...socialized subjectivity, a historic transcendental, whose schemes of perception and appreciation (systems of preferences, tastes, etc.) are the product of collective and individual history’ (Bourdieu 2005, p. 211).

On property, justice and emancipation. In terms of social and economic theory, scarcity and private property (and the call for justice when violation of private property occurs) have the same root in liberal thinking (Wolin 2004; Xenos 1989). David Hume, for example, argued that private property and justice are a consequence of scarcity. In a world of abundance, these two have little meaning. He writes:

...if every man had a tender regard for another, or if nature supplied abundantly all our wants and desires, that the jealousy of interest, which justice supposes, could no longer have place; nor would there be any occasion for those distinctions and limits of property and possession, which at present are in use among mankind. (Hume 1896, p. 494)

This also suggests that in a situation of abundance, private property is not a necessary institution.³³ This seems to be in line with Marx's emancipatory vision. John Elliott argued that '...the original Marxian image of communism presumes a level of economic and technological achievement so advanced as to "abolish" both scarcity and the division of labor' (Elliott 1980, p. 275). In fact, in this context even the market seems to be a superfluous institution, as it presupposes the existence of scarcity. One of the main questions is, then, from an emancipator point of view, what is desirable to achieve?

Naturally, all of these problems are not specific to sociology. If we accept that the SAS theme is one of the essential common denominators of several central problems in the social sciences, then we might also accept that this theme gives an alternative interdisciplinary (or even transdisciplinary) foundation for social science itself (Bhaskar and Danermark 2006; Max-Neef 2005).

The approach I am arguing in favour of is one that incorporates not only scarcity, but also abundance as well as sufficiency. It could utilize the formal as well as the substantive meaning of "economic" in order to illuminate the world we are living in (cf. Polanyi 1977). It prefers an explanatory stance (Lawson 1997; Lawson 2003), which does not merely add these concepts to an analysis, but puts them at the very heart of that theory: letting other relevant concepts (such as interests, action, choice, market, solidarity, conflict, etc.) revolve around SAS. These three concepts should exercise a power over the other analytical concepts comparable with that of a centrifugal force. Only neoclassical economics, as we have seen, is entirely dependent on the

³³ See Menger for a brief passage about communism, private property and abundance (Menger 2004, pp. 100-101).

scarcity postulate – it is not wrong to assume scarcity in some cases, but we should be aware of the limitations this assumption entails. Economic sociology or social and economic theory in general can explore the issues of the SAS theme in a freer manner.

Therefore, instead of positioning scarcity and solidarity at the centre of sociological inquiry (cf. Turner and Rojek 2001), I would like to propose that the SAS theme provides a more suitable foundation, that is, how SAS is conditioned by and conditions various social and economic events. It should also be emphasized that the various problems associated with the SAS theme are not new in themselves. A considerable amount of work has been devoted to many of these problems, e.g. the limits to growth, poverty, solidarity. Rather what this thesis argues is that they all essentially arise from a common denominator, namely, SAS.

By now, I hope the reader has realized that the approach advanced here is not merely different from the neoclassical approach, but also that it incorporates and reinterprets part of it. The approach advanced in this thesis is not fundamentally opposed to the allocation problem posed in neoclassical economics, but suggests rather that the SAS theme subsumes it.

CHAPTER 5

Sammanfattning på svenska: summary in Swedish

Ett antal viktiga studier har gjorts om relationen mellan ekonomi och samhälle inom fältet ekonomisk sociologi (jmf. Smelser and Swedberg 2005). Forskare har bland annat studerat centrala fenomen som företagens sociala organisering och marknadens inbäddning i sociala och kulturella strukturer, och nya teorier om ekonomisk och socialt handlande har utvecklats. Men alltför lite kraft har lagts på att studera knapphet, överflöd och tillräcklighet (SAS Scarcity, Abundance, Sufficiency), både som teoretiska begrepp och som fenomen i samhället.

Neoklassisk ekonomisk teori har i huvudsak fokuserat på problemet med allokeringen av knappa resurser. Det neoklassiska perspektivet tar sitt avstamp i teorier om rationella val och menar att en analys av ekonomiskt handlande bör baseras på idén om instrumentell rationalitet (Beckert 2002). Med detta menas att ekonomiska aktörer handlar med ett givet mål i sikte och att dessa individer avser att optimera sin nytta genom att maximera vinster och minimera förluster, oavsett vad dessa vinster och förluster är (investeringar, produktion eller konsumtion). Även om det neoklassiska angreppssättet har en dominerande ställning när det gäller nationalekonomiska frågor så har det varit föremål för kritik både inom och utanför den ekonomiska disciplinen. Kritiken inifrån den ekonomiska disciplinen, ibland också kallad heterodox ekonomisk teori (Lee 2009), har primärt fokuserat på en alternativ förståelse av ekonomin i sig. Kritiken utifrån – framför allt den ekonomisk-sociologiska kritiken – har i huvudsak fokuserat på att lyfta fram relationen mellan ekonomin och samhället, samt de problem som karakteriserar den rationella valhandlingsteorin. Både heterodoxa ekonomer och ekonomiska sociologer har således försökt att utveckla mer realistiska alternativ till neoklassisk teori.

Denna avhandling försöker använda inslag från både heterodox och sociologisk teori till att fördjupa vår förståelse om SAS. Men istället för att ta som utgångspunkt den kritik av begreppen rationalitet och mänskligt handlande som den klassiska sociologin har levererat, så utgår denna avhandling från de problem som själva knapphetsantagandet genererar för ekonomisk och socio-

logisk teori. Den generella frågan för alla fem studier som ingår i avhandlingen är, 'vad är knapphetens, överflödets och tillräcklighetens natur i social och ekonomisk teori?', eller helt enkelt: 'vad är SAS?'. Denna generella fråga innefattar i sig tre mer specifika frågor, vilka behandlas i avhandlingens fem studier:

- (a) Finns det olika sorter av knapphet, överflöd och tillräcklighet?
- (b) Hur kan knapphet, överflöd och tillräcklighet förklaras i relation till empiriska fenomen?
- (c) Hur kan en sociologisk teori om formationen av individers vilja eller önskemål utvecklas mot bakgrund av detta?

I introduktionen till avhandlingen (den s.k. kappan), diskuteras inledningsvis åtta olika problemområden som alla tillhör vad jag har kallat *SAS-temat*. Detta tema inbegriper alla substantiella frågor som går att relatera direkt till SAS som fenomen och begrepp. De åtta problemen som diskuteras är visserligen inte helt uttömmande för allt som går att relatera till SAS, men de samlar de frågor som varit de centrala i litteraturen om SAS. Dessa åtta problemområden berör sålunda olika frågor om ekonomin och samhället, men de har ändå det gemensamt att de är direkt relaterade till SAS-problematiken. Dessa åtta problem är: (1) Problemet med *SAS kausala effekter*, vilket handlar om hur ett antal andra sociala och ekonomiska fenomen är kausalt relaterade till SAS; (2) *allokeringsproblemet* som inbegriper den neoklassiska teorins huvudfråga, nämligen vad som är en effektiv allokering av knappa resurser; (3) *universaliseringen av knapphet* som rör föreställningen om knapphetens allmängiltiga existens, vilken kritiserats i teorier som försöker förstå överflödets roll i samhället; (4) problemområdet rörande *tillväxtens gränser* som behandlar huruvida ökad produktion kan lösa knapphetsproblemet överhuvudtaget; (5) problemet med *konstruktionen av resurser* som aktualiserar frågorna vad en resurs egentligen är och vilka sociala och kulturella processer är involverade i skapandet av resurser; (6) problemområdet *samhällsvetenskapernas grund* som rör frågan om på vilka grunder arbetsdelningen mellan olika discipliner kan relateras till knapphetsfrågan; (7) problemet rörande *ursprunget för människors vilja-önskningar* (the origins of human wants) som handlar om vilka processer genererar människans vilja och önskningar; samt (8) frågan om *SAS natur* som bland annat berör vilka begreppsliga differentieringar som finns inom SAS-problematiken.

Det har inte varit smöjligt att studera alla dessa problemområden i denna avhandling. Syftet med att ändå presentera dessa åtta breda problemområden är att aktualisera vikten av att studera SAS. Ett annat syfte är att visa att olika

problemområden egentligen handlar delvis om samma sak, nämligen SAS. För att avgränsa avhandlingen menar jag att en avgränsning omkring det åttonde problemet – *SAS natur* – är rimlig, då detta problemområde handlar just om att klargöra begreppen knapphet, överflöd och tillräcklighet. Genom att studera detta problemområde kan dock även vissa insikter ges som har relevans för de övriga problemområdena. Tre övergripande frågor formulerades utifrån denna avgränsning (se ovan). Fem studier (artiklar) utfördes för att besvara dessa tre frågor.

I *studie I*, "(Quasi)Scarcity and Global Hunger: a Sociological Critique of the Scarcity Postulate with an Attempt at Synthesis", undersöktes begreppet "absolut SAS" samtidigt som en kritik mot neoklassisk teori formulerades med avseende på knapphetsantagandet. Denna studie ger tre bidrag till forskningsområdet: Det första är en kritik av idén om universell knapphet. Denna studie använder världssvält som empiriska fall för att illustrera denna kritik. Beskrivande statistik (från förenta nationerna) visar att det globalt sett finns tillräckligt med mat, men att en betydande del av världsbefolkningen ändå svälter. Detta indikerar att antagandet om universell knapphet är alltför starkt formulerat. Det andra bidraget som denna studie gör är att den utvecklar begreppet "kvasi-knapphet" för att beskriva en situation där människor svälter trots att det finns tillräckligt med mat på systemnivå. Detta resonemang baserar på Amartya Sen's teori om svält. Det tredje bidraget är något mer omfattande än de första två. Det består av utvecklingen av en teoretisk modell kallad '*the holistic model of absolute scarcity, abundance, and sufficiency*' (HASAS). Denna modell representerar en ontologisk karta över kausaliteten i absolut-SAS. Tanken är att denna modell skall kunna användas i olika konkreta fall i förklarande syfte.

I *studie II*, "Linking Food Requirements, Entitlements, and Availability: exemplified by the 1943 Bengal Famine", testas HASAS-modellen. Detta test görs med avseende på svälten i Bengalen 1943. Även denna studie ger tre bidrag till forskningsområdet SAS: Det första består i ett försök att förena de två centrala konkurrerande perspektiven på hur svält uppstår. Dessa två perspektiv är Sen's 'entitlement approach', som fokuserar på människors socioekonomiska förmåga att byta till sig mat, och den Malthusianskt inspirerade 'food availability decrease' som fokuserar på mattillgången på systemnivå. Det andra bidraget är att denna studie med hjälp av HASAS-modellen visar att det egentligen finns tre kausala källor som svält kan genereras av: den totala tillgången på mat, populationens behov, samt enskilda individers tillgång till mat. De två konkurrerande perspektiven täcker endast två av dessa källor: den totala tillgången på mat samt individers tillgång till mat. Detta implicerar att det går att formulera ytterligare ett perspektiv, ett som fokuse-

rar på populationens behov på systemnivå. En sådan fokus är ju Malthus egentliga position, men modern svältforskning har mestadels fokuserat på produktionen av mat – speciellt gäller detta för Bengalfallet. Det tredje bidraget är den alternativa hypotes om hur Bengalsvälten kan förklaras som förs fram, baserad på den sociala interaktion som föregick svälten.

I *studie III*, "The Modus Vivendi of Material Simplicity: Counteracting Scarcity via the Deflation of Wants", fokuseras på "relativ SAS". Empiriskt handlar den om fenomenet frivillig enkelhet, mer specifikt en buddistisk version av frivillig enkelhet. I denna studie görs fyra bidrag till forskningsområdet: Det första är analysen av hur individer försöker uppnå ett tillstånd av överflöd eller tillräcklighet genom att följa en ekonomisk etik om materiell enkelhet. Detta visar också den teoretiska vikten av att studera begreppen "relativt överflöd" och "-tillräcklighet". Det andra bidraget är analysen av hur dessa individer försöker att upphäva knappheten, inte genom att skaffa sig mer resurser (t.ex. genom att arbeta mer), utan genom att reducera sina egna behov. Detta tillstånd har jag valt att kalla *the modus vivendi of material simplicity*: ett praktiskt tillstånd där man lyckats att nå materiell enkelhet genom reduktion av behov, vilket individen behöver fortsätta att kämpa för att upprätthållas. Det tredje bidraget är att SAS studeras på individuell nivå, till skillnad från de första två studierna som främst fokuserade på den systemiska nivån. Detta visar vikten av att fortsätta differentiera och nyansera SAS begreppet. Det fjärde bidraget är utvecklandet av en modell för att förstå relativ SAS, kallad '*the holistic model of relative scarcity, abundance, and sufficiency*' (HRSAS).

Studie IV, "An Organic View of Want Formation: Rational Choice, Habitus, and Reflexivity on want-formation", behandlar frågor gällande problematiken om individers vilje- eller önskningsformation. Fokus är alltså inte explicit på SAS som sådant utan mer på hur viljan eller önskemål produceras i sociala och kulturella processer. Det huvudsakliga bidraget i denna studie är en teoretisk innovation. Denna består i ett försök att (i samarbete med Goran Puaca) kombinera begreppen "habitus" och "reflexivitet" för att förstå hur gymnasieelever formerar sina viljor och önskningsformationer gällande framtiden. Det perspektiv som vi utvecklat kallar vi en *organisk syn* på viljeformation, i kontrast till den hierarkiska syn som präglar den rationella valhandlingsteorin. Den senare hävdar att en individ kan dela upp och rangordna sina viljor och önskemål för att sedan göra rationella val på basis av denna preferensordning. Den organiska synen menar däremot att individer tenderar att länka eller skapa relationer mellan olika viljor. Individer orienterar sig därmed gentemot totaliteten av dessa relationer och inte mot enskilda önskemål så

som den hierarkiska synen menar. Detta illustreras av vår analys av elevintervjuer (n=27).

I den sista studien, *studie V*, ”Robbins and Malthus on Scarcity, Abundance, and Sufficiency: The Missing Sociocultural Element”, jämförs begreppet *absolut* och *relativ SAS*, med utgångspunkt i två klassiska ekonomer, Thomas Malthus och Lionel Robbins. Två bidrag görs i denna studie: Det första är att visa vikten av sociala och kulturella mekanismer för hur både absolut och relativ SAS genereras, vilket varken Malthus eller Robbins kunde göra på ett tillfredställande sätt. Det andra bidraget är att kartlägga de centrala likheterna och skillnaderna mellan begreppet absolut och relativ SAS. En slutsats är att det inte är helt självklart att absolut och relativ SAS utgör olika sorter av SAS (ontologiskt), utan att de kanske bäst ses som uttryck för olika perspektiv på SAS (epistemologiskt).

Avhandlingen ger genom dessa fem studier följande tre övergripande bidrag till social och ekonomisk teori:

1. En tentativ typologi av SAS.
2. Ett holistisk (multikausal) och förklarande angreppssätt på SAS.
3. En alternativ grund för generell social och ekonomisk teori med utgångspunkt i SAS-temat.

Det första bidraget visar att social och ekonomisk teori behöver komplettera knapphetsbegreppet med begreppen överflöd och tillräcklighet – därav ’SAS’. I avhandlingen visas att alla tre begrepp är nödvändiga för att förstå det ekonomiska och sociala livet. dessutom är en vidare differentiering och nyansering av SAS-begreppen (kvasi-, mikro-, makro- osv.) möjlig och nödvändig för att förstå fenomenen i fråga. Denna typologi är som noteras tentativ i det att det finns utrymme för fler elaboreringar.

Det andra bidraget är utvecklingen av HASAS- och HRSAS-modellerna. Dessa förklaringsmodeller ger två versioner av en ontologisk karta som klargör de kausala samband som finns i verkliga empiriska fenomen av SAS.

Det tredje bidraget är det med störst implikationer för social och ekonomisk teori. Detta består dels i att jag i diskussionen om de åtta problemområdena i avhandlingens inledning visade att ett antal centrala problem i samhällsvetenskaperna har att göra med knapphet, överflöd och tillräcklighet på ett eller annat sätt. Detta är själva SAS-temat, och genom att klargöra dess olika aspekter och centrala begrepp läggs en alternativ grund för en generell social och ekonomisk teori.

Nu kan det visserligen hävdas att en del av de frågor som analyseras i denna avhandling inte är originella i sig, eftersom mycket forskning har redan

gjorts på många av de frågor som hör till SAS temat (t.ex. effektiv allokering, tillväxtens gränser eller samhällsvetenskapernas grund). Det som skulle kunna ses som originellt i denna avhandling är dock påståendet att många empiriska fenomen och teoretiska frågor som till synes inte har något med varandra att göra trots detta är relaterade genom att de är delar av samma problematik, nämligen SAS. Vad denna avhandling syftar till är att fördjupa vår förståelse av SAS, både som begrepp och som empiriska problem. Den har försökt att knyta an till resonemang som finns i olika traditioner och omtolkat delar av dessa inom ramen för en och samma övergripande teoretiska problematik. Det angreppssätt som här presenteras är alltså inte antagonistiskt inställt till allokeringsproblemet som återfinns i neoklassisk teori. Tvärtom, vad som föreslås här är att SAS temat inbegriper detta problem. Med SAS-temat som utgångspunkt så framkommer att sociologiska och ekonomiska frågeställningar ofta ligger närmare varandra än vad man först kan ana. Denna avhandling ger endast ett litet bidrag till detta stora forskningsområde, och mycket återstår förstås att göra när det gäller att utforska SAS-temats olika problemområden.

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