University of Bayreuth

Department of Philosophy

Faculty V – Cultural Studies

PhD Thesis

Sufficientarianism in Theory and Practice

Author: Philipp Kanschik

Address: Treptower Straße 90,
12059 Berlin
Germany

Phone: 0049 175 318 2446

E-mail: p_kanschik@hotmail.com

Supervisors: Prof. Dr. Rudolf Schüßler, University of Bayreuth

Prof. Dr. Kirsten Meyer, Humboldt University of Berlin

Handed in: April, 20th, 2016

Accepted: July, 13th, 2016

Oral Examination: July, 19th, 2016

Eidesstattliche Versicherung (Declaration under oath)

„Ich versichere hiermit an Eides Statt, dass ich die vorliegende Arbeit ohne unzulässige Hilfe Dritter und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe; die aus fremden Quellen direkt oder indirekt übernommenen Gedanken sind als solche kenntlich gemacht. Darüber hinaus versichere ich, dass ich weder bisher Hilfe von gewerblichen Promotionsberatern bzw. -vermittlern in Anspruch genommen habe noch künftig in Anspruch nehmen werde. Die Arbeit wurde bisher weder im Inland noch im Ausland in gleicher oder ähnlicher Form einer anderen Prüfungsbehörde vorgelegt und ist auch noch nicht veröffentlicht.

Darüber hinaus erkläre ich, dass die eingereichten Exemplare mit der Version übereinstimmen, für die die Druckgenehmigung durch den Dekan der Kulturwissenschaftlichen Fakultät erteilt wurde. “

"I hereby declare this work to be my own, that I have acknowledged all the sources I have consulted in the paper itself and not only in the bibliography, that all wording unaccompanied by a reference is my own. I ensure that I have neither used the services of commercial PhD advisors nor will do this in the future. I acknowledge that this work has not been handed in at another university in Germany or abroad in order to obtain an academic degree, and as a whole has not been published before.

Further, I declare that all handed-in exemplars are identical to version that was approved for publication by the Dean of Faculty of V – Cultural Studies."

Preface

This PhD thesis discusses sufficientarianism as a doctrine of distributive justice in theory and application. Work on this dissertation was carried out between January 2014 and April 2016. It was handed in on April 20th, 2016 and evaluated by Prof. Rudolf Schüßler (Philosophy, Bayreuth), Prof. Kirsten Meyer (Philosophy, HU Berlin) and Annette Dufner (Philosophy, Bayreuth). Based on the evaluators reports, the examination board of Faculty V – Cultural Studies (German: "Prüfungskommission der Kulturwissenschaftlichen Fakultät") accepted the dissertation on July, 13th, 2016. The oral examination took place on July 19th, 2016 in Bayreuth. The examiners were Prof. Schüßler, Prof. Meyer and Prof. Bernhard Herz (Economics, Bayreuth). Prof. Dufner took the minutes. On the same day, the Dean of Faculty V, Prof. Dr. Kurt Beck, issued the PhD certificate. The final grade of the thesis was 0,43 (summa cum laude).

I would like to thank my supervisor Rudolf Schüßler for countless productive and insightful discussions, and for giving me guidance on the overall project whenever necessary. I could have not imagined a better supervisor. Further, I also like to thank my co-supervisor Kirsten Meyer for tremendously helpful discussions and letting me be part of her great weekly research seminar in Berlin.

Various people have substantially contributed to my thinking about the topics of this thesis throughout the last two years in numerous different ways, including (in alphabetical order): Maike Albertzart, David Axelsen, Oliver Bätz, Matthew Braham, Sean Dyde, Peter Heindl, Roland Hesse, Johannes Himmelreich, Benjamin Huppert, Robert Huseby, Arne Manzeschke, Lukas Meyer, Darrel Moellendorf, Lasse Nielsen, Daniel Petz, Johanna Privitera, Merten Reglitz, Olivier Roy, Liam Shields, Lukas Tank, Christian Uhle, Makoto Usami, Ulla Wessels, Gabriel Wollner, Nathan Wood, and Joachim Wündisch. Financial support during the time of research from McKinsey & Company and the German Ministry of Education and Research (BMBF), grant 01UN1204E, is gratefully acknowledged.

The thesis is organized as follows. An introductory chapter provides the necessary context and background, summarizes the Articles' main claims and explains their interrelationship. The five Articles are identified with the Roman numerals I to V and follow in this order. Thorough investigation is devoted to some of the most pressing challenges against sufficientarianism in the theoretical sphere (I and II) and concerning its application to environmental topics (III, IV and V).

This thesis is a cumulative dissertation in accordance with current university examination guidelines. Three Articles (I, III and IV) have been published or been accepted for publication by international English-language peer-reviewed journals:

I. Kanschik, Philipp (2015), "Why sufficientarianism is not indifferent to progressive taxation", in: *Kriterion – Journal of Philosophy*, Vol. 29 (2), 81-102.

III. Kanschik, Philipp (forthcoming), "Eco-sufficiency and Distributive Sufficientarianism – Friends or Foes?", in: *Environmental Values*. Accepted February 12, 2016. Preview available online at: http://www.whp-journals.co.uk/EV/papers/Kanschik.pdf

IV. Heindl, Peter und Philipp Kanschik (2016), Ecological Sufficiency, Individual Liberties, and Distributive Justice: Implications for Policy Making, in: *Ecological Economics*, Vol. 126, 42-50.

Article I and III are single-authored, while Article IV was written together with the economist Peter Heindl (Centre for European Economic Research).[1]

The remaining two Articles II and V are both single-authored and currently under peer-review consideration.[2] Further, parts of earlier drafts of Article V are forthcoming in German-language anthologies.[3]

In focusing on sufficientarianism in this thesis, I do not aim at providing an all-encompassing outline and defense of the theory. Despite being a relatively young theory, discussion on sufficientarianism has reached a depth that makes such a project too demanding to realize within the time and space constraints of a dissertation.

Instead, I have chosen a piecemeal, problem-oriented approach. Taken together, the Articles advance thinking about sufficientarianism as a theory of distributive justice at various different ends of the debate. They should be instrumental in providing a clearer understanding and more

---

[1] Article IV is an interdisciplinary philosophical and economic work. For the main section of the Article (section 3), Peter Heindl carried out the economic literature review, while I took care the philosophical literature. 3.1. is mainly philosophical, 3.5. is mainly economic, and the remaining section 3.2.-3.4. include literature from both fields. Sections 1., 2., 4. and 5., and the overall claims and structure of the Article, are a co-production of both authors.

[2] Article II is currently under peer-review at *Utilitas* (submitted November 26th, 2015); Article V is currently under peer-review at *Ethics, Policy & Environment* (submitted February 23rd, 2015).

[3] An early version of Article V is forthcoming as: 'Der Begriff der Energiearmut', in B. Emunds (ed.), *Soziale Ungleichheiten – Herausforderungen für die Umweltpolitik*. Marburg: Metropolis Verlag. The entire section "Energy poverty versus alternative concepts" is not included in this version, while the section "Towards a needs-based definition of energy poverty" has seen major changes, and the remaining sections minor changes.
Further, a collaborative paper with Peter Heindl and Rudolf Schüßler is forthcoming as: 'Anforderungen an Energiearmutsmaße, in: Großmann, K., Schaffrin, A., Smigiel, C. (eds.), *Energie und soziale Ungleichheit: Zur gesellschaftlichen Dimension der Energiewende in Deutschland und Europa*. Springer VS, Wiesbaden. The paper includes a shortened earlier version of the section "Justifying the concept of energy poverty" from Article V.

effective responses to some of the main objections against the theory, and contribute to its application to environmental topics. By this, I hope I have made a relevant and lasting contribution to the advancement of a theory of distributive justice that could shape how we think about the topic in years to come.

Philipp Kanschik

Berlin, August 3rd, 2016

CURRICULUM VITAE – PHILIPP KANSCHIK

Birthday	May 18th, 1986,
	Frankfurt am Main
Citizenship	German
Civil status	Single

Education

01/2014 – 07/2016	**University of Bayreuth** (Germany)
	PhD in Philosophy, summa cum laude
	Title: Sufficientarianism in theory and practice
	Supervisors: R. Schüßler (Bayreuth) und K. Meyer (Berlin)
10/2015 – 04/2016	**Fundação Getúlio Vargas, Rio de Janeiro** (Brazil)
	PhD exchange student
10/2008 – 09/2011	**Humboldt University Berlin** (Germany)
	Philosophy, Master of Arts
	GPA equivalent 3.7, 3rd in class of 50
03/2010	**Pushkin-Institute Moscow** (Russia)
	Study trip
07 – 11/2007	**University of Stellenbosch** (South Africa)
	University exchange student
10/2005 – 09/2008	**University of Bayreuth** (Germany)
	Philosophy & Economics, Bachelor of Arts
	GPA equivalent 3.7, 2nd in class of 40
2002 – 2003	**Westville High School, Indiana** (USA)
	High School exchange student
1996 – 2005	**Anna-Schmidt-School Frankfurt** (Germany)
	High school
	GPA equivalent 3.8, 3rd in class of 60

Work Experience

02/2014 – 01/2016	**University of Bayreuth, Department of Philosophy**
	Scientific Researcher

10/2011 – 11/2013	**McKinsey & Company (Berlin)**
	Management Consultant
10/2010 – 05/2011	**Decision Institute (Berlin)**
	Public Sector Consultant
12/2009 – 05/2011	**Humboldt University Berlin, Chair for Practical Philosophy**
	Student assistant of Prof. K. Meyer
04 – 07/2008	**University of Bayreuth**, **Department of Philosophy**
	Student Tutor for academic writing and presenting
02 – 04/2007	**Federal Foreign Office (Berlin)**
	Public Relations, Internship

Languages

English	fluent
Portuguese	fluent
French	basics
Russian	basics
Spanish	basics

Dissertation contents

1 Introduction

Distributive justice: from Rawls to Sufficientarianism

Theories of distributive justice analyze the normative foundations of the economic framework that determines the distribution of benefits and burdens in a society.[4] This undertaking remains urgent in the 21st century. There is considerable public disagreement with respect to the norms that should guide our choices on issues such as the organization of the welfare state, the educational system, principles of taxation, measures against climate change and the fight against poverty—just to mention a few.

Theories of distributive justice aim at providing and clarifying the general principles and concepts to deal with such issues. Their approach is typically conceptual and abstract, referring to stylized examples stripped from the complexities of real world issues. Critics argue that such an approach is futile in the complex imperfect and pluralist world we live in.[5] Indeed, it might not be realistic that theorists of justice will provide a universally accepted set of principles of justice any time soon.

This, however, does not entail that abstract theorizing about justice is worthless. Key concepts from distributive justice continue to play a pivotal role in public discourse

[4] Lamont and Favor 2014.
[5] Sen 2010.

(e.g. liberty, equality, discrimination, utility, priority, redistribution, merit or basic minimum). Public disagreement is often rooted in a deeper, more fundamental disagreement about the importance of—or trade-offs between—such values. By outlining their meaning, implications and interrelations, theories of justice help us to better understand what is at stake in these controversies and inspire potential alternatives.

The most influential recent theory of distributive justice is John Rawls' theory of justice, which he first comprehensively outlined in the 1970's.[6] The theory reanimated discussion on how a just society ought to be arranged. This issue had been more or less dormant in post-World War Two analytic philosophy.[7] At this time consensus converged towards utilitarian views identifying justice with whatever maximizes the sum of utility throughout society. Rawls replaces utilitarianism with a theory that aims at marrying liberty and equality. He proposes the following two principles of justice:[8]

> (a) Each person has the same indefeasible claim to a fully adequate scheme of equal basic liberties, which scheme is compatible with the same scheme of liberties for all; and
>
> (b) Social and economic inequalities are to satisfy two conditions: first, they are to be attached to offices and positions open to all under conditions of fair

---

[6] Rawls 1971.

[7] This thesis is situated within the analytic tradition in philosophy. In general, analytic philosophy emphasizes logical argumentation, conceptual analysis, plain and comprehensive language and frequent appeal to common sense intuitions. The origins of analytic philosophy go back to philosophers such as Frege, Russell, Wittgenstein and the Vienna Circle (see Soames 2003).

Analytic philosophy is typically contrasted with 'continental' philosophy, even though this distinction is often disputed. In any case, the term 'continental' is an unfortunate choice, as there analytic philosophers from continental Europe and 'continental' philosophers from the UK and USA.

[8] Rawls 2001, pp. 42–43. The principles were originally introduced in Rawls 1971 and further elaborated in Rawls 1993. The principles are in lexical order, i.e. (a) is prior to (b), and the first clause of (b) is prior to the second clause.

> equality of opportunity; and, second, they are to be to the greatest benefit of the least-advantaged members of society (the difference principle).

The first principle entails that there are limits to maximizing overall utility, i.e. liberties cannot be cut in order to increase utility. The second principle entails that it matters who benefits. Inequalities need to be justified by showing that they are in line with equality of opportunity and benefit the least-advantaged members of a society. This contrasts with traditional utilitarian views, which are distribution-insensitive. For utilitarians, it only matters that total sum of utility in a society is maximized but not which strata of the population receive these benefits. Thus, even very unequal distributions of benefits are just as long as they maximize the sum of all utilities. Rawls' theory can thus be read as sweeping egalitarian rejection of utilitarianism.[9] Despite receiving much critique, Rawlsian liberal egalitarianism has been the most discussed approach in the field in recent decades and by now appears to be the most recognized theory of distributive justice in the public discourse.[10]

Discussions on trade-offs between equality, liberty and utility remain at the center of distributive justice. Recently, utilitarian ideas have been resurrected through prioritarianism, which can be understood as a response to pressing egalitarian criticism on utilitarianism. The theory has been introduced by Derek Parfit in 1991 and has quickly

---

[9] See Kymlicka 2002 for a discussion of the relevance of Rawls' work for political philosophy in general and distributive justice in particular.

[10] Some common criticisms are that the principles do not demand sufficient equality, that they demand too much equality, that they are insufficiently justified as universal principles of justice, that they ignore merit and that they involve unacceptable infringements on liberty. See Lamont and Favor 2014 and Hirose 2015 for some of these criticism and further developments of Rawls' views in response to them.

advanced to become an established theory in distributive justice.[11] The core intuition behind prioritarianism is that those with greater social disadvantages should receive greater benefits. Much of recent discussions on prioritarianism understand the theory as a doctrine that maximizes weighted overall utility.[12] Prioritarians thus claim that greater weight should be put on the utility of the worse off within a maximization calculus. Thereby, prioritarianism softens the tendency in classical utilitarianism to assess outcomes as good, which involve very low absolute utility levels for the worst off. While still being committed to utility maximization, prioritarianism *ceteris paribus* leads to less inequality than utilitarianism.[13]

A common criticism of prioritarianism states that giving priority is absurd if everyone is sufficiently well off. For example, it is counterintuitive to prioritize benefits of the rich versus benefits for the even richer. At a certain level of wealth, considerations of justice cease to matter. This critique of prioritarianism is the nucleus of another theory that has been gaining popularity recently and is the focus of this thesis: *sufficientarianism*.[14]

Frankfurt's introduction of sufficientarianism

Harry Frankfurt's 'Ethics' Article from 1987 marks the birth of sufficientarianism. In this

---

[11] Parfit 2000. Parfit introduced the theory in 1991 during his Lindley Lectures at the University of Kansas.

[12] See for example Otsuka and Voorhoeve 2009, or McCarthy 2008.

[13] Note that some have interpreted prioritarianism as a combination of maximization and equalization views rather than a modified maximization calculus (see Fleurbaey 2015).

[14] This critique of prioritarianism also applies to egalitarianism and, historically, was first used in this context. Note that current thinking of distributive justice is not exhausted by egalitarianism, prioritarianism and sufficientarianism. While these are currently the most discussed theories, there is a variety of other views (Lamont and Favor 2014).

article, Frankfurt introduces the "doctrine of sufficiency" as an alternative to egalitarianism:[15]

> With respect to the distribution of economic assets, what is important from the point of view of morality is not that everyone should have the same but that each should have enough. If everyone had enough, it would be of no moral consequence whether some had more than others. I shall refer to this alternative to egalitarianism—namely, that what is morally important with respect to money is for everyone to have enough—as "the doctrine of sufficiency".

Frankfurt argues that the norm of sufficiency (rather than equality, priority, or utility maximization) determines the justness of a distribution. Sufficiency demands that everyone should have enough, i.e., be above some kind of threshold of justice. This is what should be aimed at by rearranging the economic framework of society.

Frankfurt's main aim is to dismiss the intrinsic value of an equal distribution of economic benefits. This dismissal is in tension with strong egalitarian common sense intuitions, recently exemplified by the public success of Thomas Piketty's *Capital in the 21st century*.[16] Yet, Frankfurt holds that what truly bothers us is not so much that society is unequal. Rather, it bothers us that many people have too little. These aspects, Frankfurt argues, can be easily confused.[17] When we see that some people are significantly worse off than others, we are first and foremost touched by the fact that they are poor

---

[15] Frankfurt 1987, pp. 21–22.

[16] Piketty 2014. Piketty himself does not associate himself with philosophical egalitarianism but the public appreciation of his work illustrates egalitarian intuitions. See also Nagel 1979, p. 106 who holds that equality is so deeply engrained in our thinking that "[i]t is difficult to argue for the intrinsic social value of equality without begging the question."

[17] Frankfurt 1987, p. 32.

and do not have enough to make ends meet. Yet, poverty is best characterized as a condition of unmet needs rather than a lack of equality. Hence, poverty is typically conceptualized through thresholds—once someone has surpassed a certain threshold, she is not poor any longer, irrespective of how much others have.[18] Similarly, welfare states typically embrace the idea of a threshold that marks the amount of wealth that is sufficient for a decent life. Beyond this level, a citizen is not entitled to income support, even if others are much better off.

One of sufficientarianism's most attractive features is thus that it can explain and justify a concern for the worst-off without becoming implausibly demanding. Most sufficientarians avoid any explicit association with a particular political ideology, but the theory can generally be understood as pluralist. Economic redistribution should ensure that everyone reaches the sufficiency level but, beyond that, interfere as little as possible with individual liberties and choices.[19] Egalitarianism, utilitarianism and prioritarianism typically seem to mandate much more extensive redistributions, while libertarianism and some merit-based theories demand much less redistribution.

Defining sufficientarianism: the positive and the negative thesis

Various authors have adopted Frankfurt's main idea.[20] Most of these have used the label "sufficientarianism", even though Frankfurt did not use this term and rather referred to the theory as the "doctrine of sufficiency". Today, sufficientarianism has emerged as a

---

[18] Of course, given a relative poverty threshold, the threshold depends on how much others have. Nevertheless, even under such a conception, whether or not a given individual is poor depends on whether this person is above the threshold or not.

[19] Other interpretations are possible. The crucial determinant is where the highest sufficiency threshold is located. A very low threshold positions sufficientarianism as a libertarian doctrine demanding almost no redistributions. A very high threshold positions it on par with the most demanding variants of egalitarianism. However, most adherents of the theory (including Shields, Huseby, Axelsen, and Nielsen) defend an in-between variant.

[20] Huseby 2010; Shields 2012; Axelsen and Nielsen 2014; Crisp 2003.

serious contestant in distributive justice, typically contrasted with egalitarianism, prioritarianism and traditional utilitarianism. Following Paula Casal, sufficientarianism is defined by a positive and a negative thesis:[21]

> The *positive thesis* stresses the importance of people living above a certain threshold, free from deprivation. The *negative thesis* denies the relevance of certain additional distributive requirements.

Casal introduces these theses in order to criticize them. Nevertheless, they have become widely accepted among defendants of the theory, even though diverging formulations have been suggested. Liam Shields, for instance, notes that sufficientarian thresholds may be more demanding than just stating that people should be free from deprivation (as Casal claims).[22] Consequently, Shields modifies the positive thesis:[23]

> *The Positive Thesis*: We have weighty non-instrumental reasons to secure at least enough of some good(s).

"At least enough of some good(s)" may refer to mere survival, being free from deprivation or something more demanding (e.g. the average material standard of living in a developed country). According to Shields, weighty reasons should back up any specification of the clause, and explain why sufficiency is important in itself and not only in order to achieve some other good (non-instrumentality).[24] Friends and foes of sufficientarianism agree that there is some truth in the positive thesis.[25] For instance, most theories of justice agree with the claim that we have weighty, non-instrumental reasons to provide everyone with

---

[21] Casal 2007, pp. 297–298, her italics.
[22] Shields 2012, p. 105.
[23] Shields 2012, p. 106, his italics.
[24] A more demanding interpretation of the positive thesis is defended by Axelsen and Nielsen 2014, p. 7.
[25] See for example Casal 2007, p. 299, Temkin 2003, p. 65 or Axelsen and Nielsen 2014, p. 2.

a standard of living beyond extreme poverty.

The negative thesis is much more controversial. It states that other principles of justice beyond the positive thesis do not matter: [26]

> *The Negative Thesis:* once everyone has secured enough, no distributive criteria apply to benefits […].

That is, above a certain threshold, inequality becomes irrelevant and redistributive activity ends. Thus, claims of justice are bound and the highest sufficientarian threshold specifies the point at which considerations of justice cease to matter. The plausibility of the negative thesis is often illustrated by scenarios, which involve inequalities amongst the super-affluent. As argued by Yitzhak Benbaji, most of us see little reason to give priority to helping Warren Buffett versus Bill Gates.[27] Neither equality nor priority seem to matter much if we deal with very well off people or communities.

The negative thesis has seen a lot of criticism, of which the *indifference objection*, the *excessive upwards transfers objection*, and the *arbitrariness objection* are the most relevant here. In one way or another, these three objections all charge the negative thesis' claim that thresholds have a preeminent importance in distributive justice. In what follows, the three objections are outlined. Further, it is explained how the five Articles of this dissertation help to address them.

Objections to sufficientarianism (1): Indifference

For most critics of sufficientarianism, there remains the nagging doubt that there has to be more to distributive justice than sufficiency.[28] Shields dubs this concern *indifference*

---

[26] Shields 2012, p. 103.
[27] Benbaji 2005, p. 319. Crisp makes a similar argument (2003, p. 755).
[28] Casal 2007; Shields 2012; Temkin 2003.

objection and systematizes it as follows:[29]

> Sufficiency principles are implausible because they are objectionably indifferent to inequality once everyone has secured enough.

However, outlining the indifference objection with reference to inequality is on the one hand too broad, and on the other hand, too narrow. It is too broad it is not specified which inequalities are problematic. Yet, it is also too narrow, since plausible indifference objections could also be formulated without any reference to inequality (e.g. indifference to the priority of the worst-off).

Article I suggests that we should actually distinguish between three variants of the objection: indifference to (i) the distribution of benefits, (ii) the distribution of burdens or (iii) other values aside from these two. Concerning (i), consider the case of a hospital, which receives a major donation including spare rooms for visitors, gourmet meals and a world-class cinema.[30] Critics of sufficientarianism argue that it would be unfair if the hospital's administration offered all these luxuries to a few arbitrarily selected beneficiaries. Thus, the distribution of benefits continues to matter even though everyone has enough.

Concerning (ii), it has been pointed out that even if everyone had enough, we would still consider it unfair for a billionaire to pay more taxes than someone who has just enough.[31] Yet, the negative thesis entails that sufficientarians are indifferent between any burdening schemes once everyone has enough (as long no one is pushed below the threshold). Such indifference runs counter to intuitions toward a progressive tax system—and even critics of such a system reject indifference to burdening schemes.

---

[29] Shields 2012, p. 104.
[30] Casal 2007, p. 307 discusses this case.
[31] See Shields 2012, p. 104.

Finally, the broad and generalist formulation of the negative thesis opens the door for indifference objections related to values aside from benefits and burdens (iii). For instance, it seems unfair to discriminate against a person based on her religion or race, even if everyone has enough.[32] Sufficientarianism would thus be objectionably indifferent to discrimination against those that lie above the threshold. Similar arguments could be construed for values such as theft, disenfranchisement or violations against human dignity.

Yet, in responding to this objection, sufficientarians can appeal to the fact that they are proposing a theory of distributive justice, but not a theory of justice or morality *tout court*. Distributive justice is typically characterized in terms of the distribution of benefits and burdens among the members of society.[33] Hence, for values aside from benefits and burdens, the negative thesis does not apply. This means that sufficientarians are not committed to be indifferent to discrimination, or other values.[34]

Responding to the variants (i) and (ii) of the objection is more difficult, as they relate to the core of sufficientarianism as a theory of distributive justice. Article I focuses on the second variant of the objection, i.e. the critique that sufficientarianism is objectionably indifferent to the distribution of burdens. The key notion for responding to this objection is the notion of risk. Changing life circumstances threaten even those who lie above the sufficiency threshold(s). How high this risk is depends *ceteris paribus* on someone's distance to the sufficiency threshold, i.e., risk decreases once someone is better off.

---

[32] See Temkin 2003, pp. 65–66 for this objection.
[33] Rawls 1971; Lamont and Favor 2014.
[34] Obviously, there may be trade-offs between sufficiency and discrimination, but this is not a specific problem for sufficientarianism, as there may also be trade-offs between discrimination and priority or equality.

In acknowledging these risk differences, sufficientarians need not be indifferent to distributions of burdens among those above the threshold. For instance, to prevent individuals from falling below the sufficiency level in the future, sufficientarians may argue for progressive taxation. In addition, this line of reasoning can be the nucleus of a promising response to the indifference objection to benefits as well. If the argument is successful, it rebuts one of the main objections to sufficientarianism.

Objections to sufficientarianism (2): Excessive upward transfers

One alternative response to the indifference objection is to understand sufficientarianism as non-uniform prioritarianism—essentially a conception that assumes a prioritarian maximization calculus that includes a discontinuity at threshold level.[35] Under such a conception, prioritarianism would be applied once everyone had enough. Elsewhere, prioritarianism has also been instrumental to address the *excessive upward transfers objection* to sufficientarianism.

Harry Frankfurt initially suggested that the sum of people in sufficiency ought to be maximized.[36] Various authors have observed that this has counterintuitive implications.[37] Shields summarizes these concerns as follows:[38]

> *The Excessive Upward Transfers Objection*: sufficiency principles are implausible because, amongst those below the threshold, they require benefiting

[35] Shields 2012, pp. 109–110. Note that Shields only outlines but not explicitly endorses this understanding of sufficientarianism.
[36] Frankfurt 1987, p. 31.
[37] See Casal 2007, p. 298; Arneson 2000, pp. 56–57 and, for a like-minded objection in the ethics of education, Brighouse and Swift 2009, pp. 125–126.
[38] Shields 2012, p. 103.

> the better-off by tiny amounts at the expense of large benefits to the worse-off.

To illustrate the problem, consider a scenario with a sufficiency threshold of 100 units. According to critics of sufficientarianism, the doctrine demands to benefit someone with 99 units by 1 unit rather than benefitting another person with 1 unit to 99 units. Further, even if we could benefit a million people to move from 1 unit to 99 units, sufficientarianism still demands to rather benefit one person to pass the threshold of 100 units, because this leads to a larger sum of those living in sufficiency. Yet, it seems absurd to forgo huge benefits for a large number of individuals in order to provide a small benefit to just one individual.

Consequently, most sufficientarians by now refrain from defending a "head-count" view. A popular alternative is to combine sufficientarianism with prioritarianism below the threshold. As Crisp puts it:[39]

> Below the threshold, benefiting people matters more the worse off those people are, the more of those people there are, and the greater the size of the benefit in question.

Being supplemented by prioritarianism, sufficientarianism is able to cope with counter-intuitive scenarios as above in a more plausible manner. Yet, sufficientarianism and prioritarianism are typically represented as antagonists in the literature.[40] Consequently, a more thorough investigation of prioritarianism's theoretical underpinnings is provided in Article II in order to better understand its potential as a supplement to sufficientarianism.

---

[39] Crisp 2003, p. 758. See also Shields 2012, pp. 108–111 and Huseby 2010, p. 184.
[40] E.g. Meyer and Roser 2006, Roemer 2004 or Benbaji 2006.

Article II's main finding is that there are two very different understandings of prioritarianism in the literature, which are not distinguished: narrow prioritarianism (NP) and broad prioritarianism (BP). NP demands to maximize the sum of weighted utility, giving greater weight to the utility of the worst off. BP only entails that greater weight should be put on the well-being of the worse-off under at least some circumstances, but never on the well-being of the better off. Thus, BP is committed neither to a maximization calculus nor to a utilitarian 'currency'.

The distinction between NP and BP helps to explain why some regard prioritarianism as a supplement to sufficientarianism, while others regard them as adverse doctrines. Sufficientarianism is indeed adverse to narrow prioritarianism. The reason is that NP is incompatible with the negative thesis, as the thesis demands a cut-off point in the utilitarian calculus at threshold level.[41]

Nevertheless, the characterization of sufficientarianism and prioritarianism as opponents is challenged. Various sufficientarian variants are compatible with broad prioritarianism, including those that prioritize the worse off below the threshold. However, BP is not compatible with Frankfurt's view that the sum of people in sufficiency ought to be maximized. The reason is that such a view implies that benefits to the better off are sometimes given greater weight (as in the example above).

Objections to sufficientarianism (3): Arbitrariness

Another common critique of sufficientarianism is the *arbitrariness objection*.[42] Note that both the positive and the negative thesis rely on the notion of a threshold. It is the idea of

---

[41] This incompatibility mirrors the distinction between maximizing and satisficing (see Byron 2004). NP is committed to maximizing, the negative thesis to satisficing.

[42] Casal 2007, pp. 312–313; Goodin 1987, p. 49.

a threshold that demarcates sufficientarianism from other moral and political philosophies—and, hence, its justification is crucially important for the doctrine. Yet, up until now, there is no consensus on sufficientarian thresholds. Sufficientarians have suggested various thresholds, which only have in common that the highest threshold(s) is located above a level of mere survival.[43]

The arbitrariness objection states that thresholds are either unspecific or arbitrary, and hence cannot have the great importance in distributive justice that sufficientarians attach to them. Crisp's specification of his sufficientarian welfare threshold demonstrates the difficulty well:

> Then, of course, the obvious question is: How much is enough? […] It is hard to know how to answer such questions, but, on reflection, my own intuition is that, say, eighty years of high-quality life on this planet is enough, and plausibly more than enough, for any being.

Critics and friends alike consider Crisp's intuition arbitrary.[44] It is indeed difficult to see what makes eighty years of high-quality life a significant threshold, as opposed to seventy or ninety years. The example illustrates the difficulty of sufficientarians to define, as Paula Casal puts it, a threshold in a "principled manner that provides determinate and plausible guidance for distributive decision makers".[45]

Thus, it seems that if a sufficientarian threshold is specific, it becomes arbitrary; yet, if it is not specific, it provides little guidance. The Articles III, IV and V address

---

[43] Axelsen and Nielsen 2014; Page 2007; Huseby 2010; Frankfurt 1987; Crisp 2003; Benbaji 2005.
[44] See Huseby 2010, pp. 180–181; Casal 2007, pp. 313–314.
[45] Casal 2007, p. 313.

this objection by discussing applications of sufficientarianism in the environmental context. Thereby, they operate under the assumption that practical application will reduce the theory's apparent arbitrariness and vagueness. Application to environmental topics seems promising for two reasons. First, there have been numerous applications of moral and political philosophy to environmental issues in recent decades.[46] In particular, theories of distributive justice have been applied in this area.[47] Second, the concept of sufficiency is already firmly established in the environmental discourse under the label of 'eco-sufficiency'. However, no reference to sufficientarianism is made in this context.

Consequently, it is a natural starting point for Article III to compare sufficientarianism and eco-sufficiency. Advocates of eco-sufficiency call on individuals, states and humanity as a whole to adopt a lifestyle of material simplicity that reduces resource consumption to a level that respects the Earth's ecological boundaries.[48] The incompatibility of eco-sufficiency with sufficientarianism is the main finding of Article III. The Article interprets eco-sufficiency in *perfectionist* terms.[49] Eco-sufficiency is perfectionist in the sense that it entails that it is in the nature of human beings (in a normatively relevant sense) to work and consume no more than enough. Anyone who fails to conform to an eco-sufficient lifestyle of material sufficiently thus fails to adhere to the

---

[46] Some of these applications relate to climate change (Gardiner 2004), overpopulation (Kates 2004), environmental virtues (Sandler and Cafaro 2005), weighting the value of human beings versus nature (McShane 2007), energy politics (Sovacool *et al.* 2014), and the legitimacy of economic growth and consumption (Demaria *et al.* 2013).

[47] See for instance Shue 1993; Meyer and Roser 2010; Page 2013; Huseby 2012; Schuppert 2011; Meyer and Roser 2009.

[48] Sachs 2009; Alcott 2008; Schneidewind *et al.* 2013; Salleh 2009.

[49] Perfectionism is the theory in philosophy of the good life, which argues that some human states, activities and relationships are intrinsically good independently from the welfare they bring (Hurka 1993).

norms of a good life. Contrary to this, sufficientarianism is committed to a pluralism that is incompatible with this type of perfectionism.[50]

Further, a different understanding of the concept of sufficiency leads to the endorsement of two diverging types of thresholds. For sufficientarians, having 'enough' means that a sufficiency *minimum* should be provided to all. Advocates of eco-sufficiency, however, conceptualize having 'enough' in terms of a *limit* that people should not exceed. Beyond incompatibility in terms of theories of the good life, both theories hence draw from different meanings of the term 'sufficient'. This conceptual ambiguity should be kept in mind for future specifications of sufficientarian thresholds.[51]

Alternative interpretations of eco-sufficiency are discussed in Article III but rejected because they have implications that advocates of eco-sufficiency are unlikely to endorse. However, alternative understandings of the normative foundations of eco-sufficiency could be compatible with sufficientarianism. Article IV examines one such alternative understanding. Eco-sufficiency is regarded as entirely neutral to theories of the good life, considering it an entirely individual and voluntary decision to choose to adhere to a lifestyle of material simplicity. Such an interpretation turns out to be in line with political liberalism, traditional economic approaches and further does not conflict with sufficientarian pluralism.

Still, voluntary eco-sufficiency also entails a *limit* understanding of thresholds that can be contrasted to sufficientarian *minimum* thresholds. This difference translates into a political dilemma in environmental policy where a desired social minimum may

---

[50] In order to argue for pluralism as a central element of sufficientarianism, a framework to categorize the main variants of the theory is used (contentment, welfare, capabilities and needs sufficientarianism).

[51] For instance, this is of particular relevance when discussing the relationship of sufficientarianism and limitarianism, as proposed by Ingrid Robeyns (forthcoming).

turn out to be incompatible with an indispensable environmental limit. Article IV hence confirms and expands a major finding from Article III.[52] However, this dilemma does not challenge sufficientarianism as a theory of distributive justice. As stated above, the negative thesis does not entails that sufficientarians necessarily have to negate the importance of other values outside of distributive justice (such as environmental conservation or sustainability).

Article V examines another threshold in the context of environmental policy: energy poverty. Unlike eco-sufficiency, energy poverty can be understood as a sufficientarian threshold. It specifies the level of energy services to which everyone should have affordable access.[53] As highlighted by the arbitrariness objection, such thresholds face the criticism of lacking a thorough justification and specification.

Not surprisingly, the concept of energy poverty has been challenged in a very similar way.[54] The main goal of Article V is to defend the concept against this critique. It does so by outlining conditions under which thresholds like energy poverty can be defended and by assessing problems of how they should be measured and specified. It is argued that, first, thresholds like energy poverty should refer non-postponable basic needs or to non-substitutable means that satisfy such needs. Second, they should not be reducible to other thresholds (e.g. an income poverty thresholds). Third, they should refer to a problem of great urgency given (contingent) social and political circumstances.

---

[52] Additionally, it identifies a number of policy-relevant issues that relate to the interaction of eco-sufficiency with other environmental policies, the measurement of welfare and inequality and standard economic preference-based frameworks.

[53] Boardman 2010; Heindl 2013; Nussbaumer *et al.* 2011; Hills 2012; Schuessler 2014; Healy 2003; Guruswamy 2011. Rather than 'energy poverty', the term 'fuel poverty' is often used to refer to energy-related deprivation, in particular in the UK.

[54] Healy 2003, p. 2; Bouzarovski *et al.* 2012, pp. 78–79.

Beyond justificatory issues, it is shown that there are three types of definitions of energy poverty in the literature. The first understanding applies energy poverty to income-poor people that face unreasonable or excessive energy expenditures, while the second group of definitions associates energy poverty with the lack of access to modern energy services. The third type of definition identifies a person as energy poor if her energy-related basic needs are not met.

This latter type of definition is endorsed in the Article. Thus, individual needs and deprivation should be central for the specification of an energy poverty threshold—as opposed to a pure materialist understanding or relational approaches. In addition to this, the Article's discussion of energy poverty shows how sufficientarians should respond to the arbitrariness objection. In formulating, defining and operationalizing specific sufficiency thresholds, the theory gains the necessary depth to respond to critics that consider it arbitrary and unspecific.

References

Alcott, B., 2008. The sufficiency strategy: Would rich-world frugality lower environmental impact? *Ecological Economics*, 64 (4), 770–786.

Arneson, R.J., 2000. Perfectionism and Politics. *Ethics*, 111 (1), 37–63.

Axelsen, D.V., and Nielsen, L., 2014. Sufficiency as Freedom from Duress. *Journal of Political Philosophy*. *Available from:* http://onlinelibrary.wiley.com/doi/10.1111/jopp.12048/abstract.

Benbaji, Y., 2005. The Doctrine of Sufficiency: A Defence. *Utilitas*, 17 (3), 310–332.

Benbaji, Y., 2006. Sufficiency or Priority? *European Journal of Philosophy*, 14 (3), 327–348.

Boardman, B., 2010. *Fixing fuel poverty. Challenges and solutions*. London, Sterling, VA: Earthscan.

Bouzarovski, S., Petrova, S., and Sarlamanov, R., 2012. Energy poverty policies in the EU: A critical perspective. *Energy Policy*, 49, 76–82.

Brighouse, H., and Swift, A., 2009. Educational Equality versus Educational Adequacy: A Critique of Anderson and Satz. *Journal of Applied Philosophy*, 26 (2), 117–128.

Byron, M., ed., 2004. *Satisficing and maximizing. Moral theorists on practical reason*. Cambridge, New York: Cambridge University Press.

Casal, P., 2007. Why Sufficiency Is Not Enough. *Ethics*, 117 (2), 296–326.

Crisp, R., 2003. Equality, Priority, and Compassion. *Ethics*, 113 (4), 745–763.

Demaria, F., *et al.*, 2013. What is Degrowth? From an Activist Slogan to a Social Movement. *Environmental Values*, 22 (2), 191–215.

Fleurbaey, M., 2015. Equality versus Priority: How relevant is the distinction? *Economics and Philosophy*, 31 (02), 203–217.

Frankfurt, H., 1987. Equality as a Moral Ideal. *Ethics*, 98 (1), 21–43.

Gardiner, S.M., 2004. Ethics and Global Climate Change. *Ethics*, 114 (3), 555–600.

Goodin, R.E., 1987. Egalitarianism, Fetishistic and Otherwise. *Ethics*, 98 (1), 44–49.

Guruswamy, L., 2011. Energy poverty. *Annual review of environment and resources (*36), 139–161.

Healy, J., 2003. *Fuel poverty and policy in Ireland and the European Union*. Dublin: Policy Institute, Trinity College Dublin in association with Combat Poverty Agency.

Heindl, P., 2013. Measuring fuel poverty. General considerations and application to German household data. *ZEW Discussion Paper (*No. 14-037).

Hills, J., 2012. *Final report of the Hills Independent Fuel Poverty review: getting the measure of fuel poverty*: Centre for Analysis of Social Exclusion, London School of Economics and Political Science.

Hirose, I., 2015. *Egalitarianism*. New York: Routledge.

Hurka, T., 1993. *Perfectionism*. New York: Oxford University Press.

Huseby, R., 2010. Sufficiency: Restated and Defended. *Journal of Political Philosophy,* 18 (2), 178–197.

Huseby, R., 2012. Sufficiency and Population Ethics. *Ethical perspectives,* 19 (2), 287-206.

Kates, C.A., 2004. Reproductive Liberty and Overpopulation. *Environmental Values,* 13 (1), 51–79.

Kymlicka, W., 2002. *Contemporary political philosophy. An introduction*. 2nd ed. Oxford / New York: Oxford University Press.

Lamont, J., and Favor, C., 2014. Distributive Justice. *In:* E.N. Zalta, ed. *The Stanford Encyclopedia of Philosophy.* Fall 2014 edition. URL = http://plato.stanford.edu/entries/justice-distributive/.

McCarthy, D., 2008. Utilitarianism and Prioritarianism II. *Economics and Philosophy,* 24 (1).

McShane, K., 2007. Anthropocentrism vs. Nonanthropocentrism. Why Should We Care? *Environmental Values,* 16 (2), 169–186.

Meyer, L.H., and Roser, D., 2006. Distributive Justice and Climate Change. The Allocation of Emission Rights. *Analyse & Kritik (*28), 223–249.

Meyer, L.H., and Roser, D., 2009. Enough for the Future. *In:* A. Gosseries and L.H. Meyer, eds. *Intergenerational justice.* Oxford, New York: Oxford University Press, 219–248.

Meyer, L.H., and Roser, D., 2010. Climate justice and historical emissions. *Critical Review of International Social and Political Philosophy,* 13 (1), 229–253.

Nagel, T., 1979. *Mortal questions*. Cambridge / New York: Cambridge University Press.

Nussbaumer, P., *et al.*, 2011. *Measuring energy poverty. Focusing on what matters*. Oxford: Oxford Poverty & Human Development Initiative.

Otsuka, M., and Voorhoeve, A., 2009. Why It Matters That Some Are Worse Off Than Others: An Argument against the Priority View. *Philosophy & Public Affairs,* 37 (2), 171–199.

Page, E.A., 2007. Justice Between Generations: Investigating a Sufficientarian Approach. *Journal of Global Ethics,* 3 (1), 3–20.

Page, E.A., 2013. Climate Change Justice. *In:* R. Falkner, ed. *The handbook of global climate and environment policy.* Chichester: Wiley-Blackwell, 231–248.

Parfit, D., 2000. Equality or priority? *In:* M. Clayton and A. Williams, eds. *The Ideal of Equality.* Basingstoke, 81–125.

Piketty, T., 2014. *Capital in the twenty-first century*. Cambridge, MA: Belknap Press.

Rawls, J., 1971. *A theory of justice*. Cambridge, MA: Belknap Press.

Rawls, J., 1993. *Political liberalism*. New York: Columbia University Press.

Rawls, J., 2001. *Justice as fairness. A restatement*. Cambridge, MA / London: Belknap Press.

Robeyns, I., forthcoming. Having too much. *In:* J. Knight and M. Schwartzberg, eds. *NOMOS LVI: Wealth. Yearbook of the American Society for Political and Legal Philosophy.* New York: New York University Press.

Roemer, J.E., 2004. Eclectic distributional ethics. *Politics, Philosophy & Economics (*3), 267–281.

Sachs, W., 2009. Fair Wealth: Pathways into Post-Development. *In:* E. Palosuo, ed. *Rethinking development in a carbon-constrained world. Development cooperation and climate change.* Finland: Ministry for Foreign Affairs, 196–206.

Salleh, A., 2009. *Eco-sufficiency & global justice. Women write political ecology*. London, New York NY, North Melbourne Vic, New York NY: Pluto Press; Spinifex Press; Distributed in the United States of America exclusively by Palgrave Macmillan.

Sandler, R.L., and Cafaro, P., 2005. *Environmental virtue ethics*. Lanham, Md.: Rowman & Littlefield Publishers.

Schneidewind, U., Santarius, T., and Humburg, A., eds., 2013. *Economy of sufficiency. Essays on wealth in diversity, enjoyable limits and creating commons*. Wuppertal: Wuppertal Institut für Klima, Umwelt, Energie.

Schuessler, R., 2014. Energy Poverty Indicators: Conceptual Issues. Part I: The Ten-Percent-Rule and Double Median/Mean Indicators. *ZEW Discussion Paper (*No. 14-037).

Schuppert, F., 2011. Climate change mitigation and intergenerational justice. *Environmental Politics,* 20 (3), 303–321.

Sen, A., 2010. *The idea of justice*. London: Penguin.

Shields, L., 2012. The Prospects for Sufficientarianism. *Utilitas,* 24 (1), 101–117.

Shue, H., 1993. Subsistence Emissions and Luxury Emissions. *Law & Policy,* 15 (1), 39–59.

Soames, S., 2003. *Philosophical analysis in the twentieth century*. Princeton: Princeton University Press.

Sovacool, B.K., Sidortsov, R.V., and Jones, B.R., 2014. *Energy security, equality and justice*. New York: Routledge.

Temkin, L.S., 2003. Equality, Priority or what? *Economics and Philosophy,* 19 (1), 61–87.

Article I

Why Sufficientarianism is not Indifferent to Taxation

Published in:

Kriterion – Journal of Philosophy (2015), Vol. 29 (2), 81-102.

Why Sufficientarianism is not Indifferent to Taxation

Philipp Kanschik

Abstract

The indifference objection is one of the most powerful objections to sufficientarianism. Critics argue that sufficientarianism is objectionably indifferent to the distribution of benefits and burdens. This article focuses on the criticism of the latter, particularly the claim that sufficientarianism is indifferent to taxation. Contrary to this allegation, it is argued that sufficientarianism warrants progressive taxation, the reason being that even those who are sufficiently well off face the risk of being pushed below sufficiency. This risk decreases the better off someone is as it is easier for those who are better off to deal with sufficiency-threatening circumstances. It is argued that the risk of insufficiency understood as a function of distance to the threshold justifies progressive taxation. The proposed line of reasoning corresponds to the sufficientarian belief that there should be no redistribution between the rich, as the differences in risk of insufficiency eventually become marginal among those who are very well off. Moreover, the proposed rationale for progressive taxation does not depend on prioritarian or egalitarian reasoning. Rather, it transpires that sufficientarianism is well-suited to justify the progressive redistributive system of the modern welfare state.

Keywords: *sufficientarianism, distributive justice, indifference objection, ethics of taxation*

The doctrine of sufficientarianism has recently gained some momentum in distributive justice as a rival to prioritarianism and egalitarianism. However, the indifference objection arguably remains one of the most powerful objections to the doctrine. It alleges that sufficientarianism is objectionably indifferent to distributions of benefits and burdens once everyone has secured enough. Specifically, critics maintain that sufficientarians are indifferent between progressive and regressive tax systems. Such indifference runs counter to intuitions toward a progressive tax

Kriterion – Journal of Philosophy, 2015, 29(2): 81–102.
http://www.kriterion-journal-of-philosophy.org

system—and even critics of such a system would reject sufficientarian indifference.

In this article, I present a sufficientarian account in favor of progressive taxation. In a nutshell, I argue that even those who lie above the sufficiency threshold(s) face a risk of insufficiency due to changing life circumstances. The risk of insufficiency should ceteris paribus be understood as a function of distance to the sufficiency threshold: it decreases the better off someone is. This effect eventually subsides, as the differences in risk between the rich and the super-rich become insignificant. Hence, this line of reasoning justifies progressive taxation while maintaining the core sufficientarian intuition that it is absurd to demand redistribution between the rich.

This argument relates to all types of burdens that are distributed within a society, although this article primarily focuses on the burden of taxation. If my argument succeeds, it rebuts one of the main objections to sufficientarianism and marks a step toward establishing sufficientarianism as a suitable theory of justice to validate the modern welfare state which taxes progressively. Furthermore, unlike a number of alternative sufficientarian responses to the indifference objection, the argument presented here is distinctively sufficientarian, i.e. it does not build on any egalitarian or prioritarian reasoning. The purpose of this paper is not to justify progressive taxation in general; consequently, I do not attempt to provide a general discussion of taxation here. Rather, I examine whether sufficientarianism can justify a progressive tax regime.

The article is arranged as follows. The first section distinguishes between three types of indifference objections to sufficientarianism and explains why indifference against burdens appears to be the most powerful objection. Section 2 demonstrates that current sufficientarian accounts of the distribution of burdens fail to provide a convincing and distinctively sufficientarian line of reasoning. In Section 3, the main argument of article, i.e. the claim that the risk of insufficiency validates progressive taxation, is elaborated. Four objections to this approach are discussed and rebutted in Section 4. Section 5 concludes.

1 The indifference objection to sufficientarianism

Sufficientarianism was introduced into the theory of distributive justice by Harry Frankfurt in the 1980s and has emerged as a serious rival to prevailing theories such as egalitarianism and prioritarianism. Most sufficientarians agree with Frankfurt that sufficientarianism is fundamen-

tally anti-egalitarian in rejecting equality as a distributive ideal.[1] What matters instead is for everyone to secure enough.

Sufficientarianism typically entails a positive and a negative thesis.[2] The positive thesis states that there are weighty reasons to secure at least enough of some good(s) for everyone. A specific threshold determines the level of sufficiency.[3] The negative thesis, on the other hand, asserts that redistributive activity ends once everyone surpasses the threshold. In that case, no further issues of justice arise. This implies that those that lie above the threshold have no entitlements to benefit from redistributions.

The negative thesis specifically has sparked much controversy. The indifference objection is arguably one of the most powerful objections in this context.[4] Liam Shields generalizes it as follows:[5]

> Sufficiency principles are implausible because they are objectionably indifferent to inequality once everyone has secured enough.

However, spelling out the indifference objection in terms of inequality is on the one hand too broad, and on the other, too narrow. It is too broad because it does not specify which inequalities in particular are problematic. Indifference may not be problematic with regard to *all* inequalities—but which ones are problematic? Furthermore, it is too narrow as plausible indifference objections could also be formulated without any reference to inequality (e.g. objectionable indifference to the priority of the worst off). Here, I outline the objection in terms of three basic elements that can be inserted in the above formulation in place of inequality: distribution of benefits, distribution of burdens or other values aside from these two.

With reference to benefits, the negative thesis maintains that we should be indifferent to their distribution if everyone is sufficiently well off, e.g. in a Beverly Hills-like community or with the redistribution of benefits among the super-rich.[6] However, some arguments have been brought forward against this intuition. Paula Casal, for instance, discusses the case of a hospital that provides sufficient care to all patients in all relevant respects.[7] Then, the hospital receives a major donation including spare rooms for visitors, gourmet meals and a world-class cinema. Critics of sufficientarianism argue that it would be unfair if the hospital's administration offered all these luxuries to a few arbitrarily selected beneficiaries. In this case, issues of justice continue to arise even though everyone has enough.

The second type of objection relates to the distribution of burdens. One example of this type of objection follows:[8]

> Imagine that there are only supercontented millionaires and much poorer persons who are content in our society. Even assuming that the tax burden will not push members of either group below the contented threshold, it seems that we should not be indifferent about who should bear the greater costs in this situation. The super-contented billionaires should bear the costs and indifference is implausible in such cases.

Sufficientarians might argue that those below the threshold should generally be burdened less heavily (if at all) than more affluent members of society. However, the indifference objection presented in Shields' example suggests that sufficientarianism has no theoretical resources to prefer one burdening scheme over another when it comes to those who have enough. Such indifference, however, seems counterintuitive.

Finally, the indifference objection can refer to other values aside from benefits and burdens. For instance, even if an individual is sufficiently well off in all relevant aspects and is perfectly content, it would be unfair to discriminate against her based on her religion or race.[9] Sufficientarianism would thus be objectionably indifferent to discrimination against those that lie above the threshold. The broad and generalist formulation of the negative thesis opens the door for a number of other indifference objections aside from benefits and burdens. Similar arguments could be construed for other x's, such as theft, disenfranchisement or violations against human dignity.

In this article, I focus on the second type of objection, i.e. the claim that sufficientarianism is objectionably indifferent to the distribution of burdens once everyone has secured enough. The claim that sufficientarianism is indifferent to taxation burdens is particularly powerful, given that taxation is a key component of distributive justice and is often subject to intense public debate.[10] It would be odd if sufficientarians held that there is little to be debated from a justice perspective when it comes to taxation. That, for instance, would imply that sufficientarians are indifferent to whether those who have enough are taxed progressively or regressively. Yet, progressive taxation is a widely accepted tenet of the modern welfare state—and even libertarian critics who favor a radically different taxation system would not agree with sufficientarian indifference.

Moreover, it is questionable whether the other two types of objection contest sufficientarianism as compellingly as the second type, at least

as formulated above. The reason for this is that sufficientarianism is a theory of distributive justice, not one of justice *tout court*—and hence should be discussed accordingly. Distributive justice has often been characterized in terms of the distribution of benefits and burdens among the members of society.[11] Consequently, for values aside from benefits and burdens, it is unclear whether they relate to distributive justice at all. For example, it seems strange to argue that discrimination is a burden that should be distributed fairly within a society. In other words, any x beyond distributive concerns does not challenge sufficientarianism as a theory of distributive justice.

The benefits objection also does not necessarily relate to sufficientarianism as a theory of distributive justice. Drawing on Rawls, distributive justice can be contrasted with allocative justice.[12] While distributive justice is concerned with the production and distribution of goods, allocative justice deals with the question of how a given good is to be distributed among given individuals, irrespective of any cooperative relations between the individuals involved in the production of these goods. Indifference to benefits as in the hospital example above would be a question of allocative justice. It is unclear whether sufficientarianism applies to allocative justice.[13] The objection as put forward in the hospital example might then miss the target.

Before moving on, let me stress that my intention is not to claim that these two aspects of distributive justice, i.e. indifference to benefits and to burdens, are analytically separate. Nagel and Murphy correctly point out that one cannot assess the justness of burdening in isolation, but that such an assessment must always take the overall scheme of benefits and burdens into account.[14] Yet, there are two reasons for making this distinction here, one being pragmatic and the other conceptual.

First, I classify indifference objections into benefits, burdens and other values because these reflect the prevalent indifference objections found in the literature. What is labeled as "indifference objection" in the literature actually covers a number of very different objections; hence, a classification is inevitable. I do not contend that other indifference objections (in particular those related to benefits) are not worthwhile discussing. Take, for instance, the following objection by Paula Casal:[15]

> Even when everyone has enough, it still seems deeply unfair that merely in virtue of being born into a wealthy family some should have at their disposal all sorts of advantages, contacts, and opportunities, while others inherit little more than a name.

This is clearly not a case of allocative justice, but relates to distributive justice. It would be beyond the scope of this article to address such cases in detail here. Nevertheless, we shall see that the argument presented here provides sufficientarianism with promising theoretical resources to deal with such cases as well.

Secondly, and more importantly, while the moral assessment of a distribution of burdens is not analytically independent from that of the distribution of benefits, it nonetheless poses some independent questions. As Henry Shue puts it, benefits and burdens relate to two different core questions in distributive justice: the former addresses "to whom" goods are to be distributed while the latter investigates "from whom" these goods are to be taken.[16] We may know to whom and to what extent we want to distribute benefits—but that does not mean that we know who should carry the burden. There is also no clear-cut answer when we pose the question the other way around: by deciding whom to tax and to what extent, we do not know who the benefits should be distributed to. It thus makes sense to make the distribution of burdens a topic in its own right.[17]

2 The indifference objection toward burdens

Sufficientarianism's main rivals, prioritarianism and egalitarianism, can justify progressive taxation. For instance, leveling inequalities of whatever type can be achieved in two ways: either by benefitting the worst off or by burdening the better off. That is, egalitarian concern for the worst-off and progressive taxation are two sides of the same coin. The link between benefitting the worst off and progressive burdening comes just as natural to prioritarianism. The priority view knows no stopgate, i.e. it advocates benefitting the worse off rather than the better off and burdening the better off more than the worse off. Hence, both prioritarianism and egalitarianism are in favor of progressive taxation.

As already discussed in the last section, sufficientarianism appears to be objectionably indifferent to the distribution of burdens. With reference to benefits, sufficientarians believe that the objective of redistribution should be raising the quality of life of those who are worst off to a level of sufficiency. This begs the question who should be burdened to what extent. The sufficientarian view on benefits appears to have no entailments whatsoever about how those who lie above the threshold should be burdened, let alone whether this should be done progressively. What is certain, however, is that burdens for those who lie beneath the

threshold should be avoided.

Little has been said to defend sufficientarianism against this objection. A notable exception is Robert Huseby's argument to justify a sufficientarian preference for progressive over regressive taxation.[18] Huseby asserts that the highest sufficiency threshold is relative to the overall welfare in society. The reason for this is that the welfare of others has a real psychological impact on individual contentedness beyond envious reactions. In other words, relative deprivation in part determines the sufficiency threshold. Now, if there is an improvement in the welfare of the relatively well off, the sufficiency threshold increases for all. In such cases, more inequality leads to more insufficiency if the welfare of those who lie only slightly above the threshold does not increase. Consequently, inequality-increasing distributions of burdens (e.g. regressive taxation) work counter to the goal of sufficiency, even though the inequalities as such are supposedly not problematic.

It seems plausible that the level of welfare of those around us affects our assessment of the adequacy of our own level of welfare. But Huseby's argument is fraught with a number of difficulties. It is unclear how a distinction between normatively relevant and irrelevant psychological reactions (with envy as an example for the latter) can be justified. It is difficult to define a generally acceptable level of psychological reaction, given that some people rarely compare themselves to others while others do so frequently. Therefore, psychology seems to be a questionable and ambiguous means to define thresholds.

Moreover, the relationship between equality and sufficiency is unclear, and to some extent problematic. The relationship between these two concepts can either be understood empirically or conceptually. An empirical relationship between inequality and insufficiency means that, under certain circumstances, inequalities and insufficiency come hand in hand. Beyond references to psychological reactions, Huseby says little about the circumstances and causes of this relationship—hence, a more thorough investigation is needed here.

Such an investigation, however, may unearth a *conceptual* link between sufficiency and equality. This means that regardless of circumstances, inequality leads to insufficiency and consequently, inequality must be avoided by means such as progressive taxation. However, a conceptual relationship between equality and sufficiency seems dubious given that sufficiency was introduced as a rival to egalitarianism.[19] Beyond that, reducing sufficiency to equality would make sufficientarianism a potential target to Occam's razor. In any case, it seems that propo-

nents of progressive taxation have good reasons to stick to egalitarianism as the more clear-cut approach to justifying their position.

Another sufficientarian response to the indifference objection toward burdens takes recourse to a reference to prioritarianism and to diffusing the negative thesis. In the past, the underlying objective of sufficientarianism was sometimes understood as maximizing the number of people who live in sufficiency (headcount sufficientarianism).[20] Yet, maximizing headcount sufficiency does not lead to a progressive system, not even for those who lie below the threshold. The reason is that it may require benefitting those who are slightly below the threshold by smaller amounts (to raise them above the threshold) rather than benefitting the even less well off by larger amounts (which do not raise them above the threshold). This may be plausible in triage scenarios but not as a general doctrine of justice to guide the distribution of benefits and burdens within a society. Hence, many sufficientarians now reject headcount sufficiency and subscribe to prioritarianism below the threshold(s).[21] This implies progressive burdening below the threshold: the farther someone lies below the threshold, the less he or she should be burdened in general.

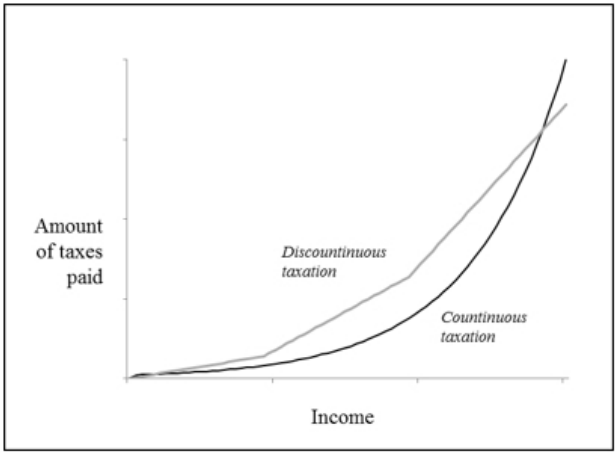
Yet what about those who are above the threshold? Sufficientarians could diffuse the negative thesis and repudiate that there are any further relevant considerations of justice once everyone has enough. Liam Shields, for instance, argues that there is a discontinuity in the marginal weight of someone's demands of justice once a person moves beyond a given threshold.[22] That is to say, sufficiency thresholds mark a shift in the nature of our reasons to provide for further benefits for people—but not necessarily as a cut-off point for distributive demands. A person who lies above the threshold may still have entitlements to justice in terms of both burdens and benefits alike.

To spell out what that might imply, Shields discusses the possibility of understanding sufficientarianism as non-uniform prioritarianism (or vice versa), which basically extends prioritarianism to those who lie above the threshold.[23] What distinguishes non-uniform from uniform types of prioritarianism is the discontinuity at the level of threshold(s).

To illustrate the implication this has for taxation, consider the below chart. In a discontinuous taxation system, there are certain points at which the tax rate changes—as advocated by non-uniform prioritarianism. By contrast, uniform prioritarianism calls for a gradually increasing tax rate.

Sufficientarianism as non-uniform prioritarianism can account for progressive taxation, albeit at the cost of several disadvantages. First,

Figure 1: Continuous versus discontinuous taxation



it is very closely tied to prioritarianism, as it justifies progressive taxation all the way up based entirely on prioritarian grounds. Discontinuity remains the only distinctively sufficientarian element in this view. One may doubt that this suffices to justify sufficientarianism's status as a rival to prioritarianism and egalitarianism. Additionally, discontinuity itself is controversial. It is not at all clear whether we should prefer continuous or discontinuous tax rates, and sufficientarians have thus far not made tangible contributions to this relatively technical issue that takes us far away from the original claims that motivate sufficiency.

Secondly, such a view cannot account for a fundamental sufficientarian intuition. Non-uniform prioritarianism applies to benefits as well. This means that sufficientarianism warrants benefitting a super-rich person versus an ultra-rich person. Yet, one of sufficientarianism's major arguments has always been that it would be absurd to demand redistribution among the very rich.[24] Hence, the notion that there can be 'enough' in distributive justice is contradicted by sufficiency understood as non-uniform prioritarianism.

3 A sufficientarian argument for progressive taxation

The indifference objection toward burdens accuses sufficientarianism of being objectionably indifferent to the distribution of burdens above the

given threshold. This indifference applies in particular to the issue of progressive versus regressive taxation. The previous section revealed that sufficientarianism has come under fire on this issue. Unlike its main rivals, egalitarianism and prioritarianism, sufficientarianism does not provide a straightforward justification for progressive taxation. Furthermore, current sufficientarian responses have failed to provide a convincing, distinctively sufficientarian approach to a fair distribution of burdens that does not need to borrow from its two main rivals. However, in what follows, I argue that sufficientarianism does actually entail progressive burdening—not only below, but also above the threshold. My argument neither depends on prioritarian nor egalitarian reasoning, nor does it require abandoning the claim that justice should not demand redistributions among the rich.

The positive thesis of sufficientarianism asserts that everyone ought to have enough. This, from a normative point of view, means that insufficiency is considered to be negative. Consequently, we should not only help those who are below the threshold, but reduce the risk of people ending up in a state of insufficiency.

Let me stress that facing the risk of falling below the threshold is not of intrinsic relevance here. That is, sufficientarianism does not need to be modified by a risk-related normative premise beyond the positive and negative thesis. Rather, reducing the risk of insufficiency is instrumental in reducing insufficiency as such in the future. Thus, reducing the risk of insufficiency directly derives from the positive thesis that there are weighty reasons to secure enough for everyone.

Consider a society in which everyone has enough. One group of people S has just slightly more than enough, while another group of people R has far more than enough. There is intuitive plausibility to assume that individuals in S face a higher risk of falling below the threshold than those in R. Under real world conditions, everyone faces the risk of being pushed below sufficiency, e.g. as a consequence of health problems or unemployment. However, these risks are less serious for the very well off. To illustrate this, imagine that an individual from group S and one from group R lose both legs in an accident. Consequently, both need to undertake expensive housing adaptations, experience a reduction in their income and rely on external service providers to support them in their everyday life. These circumstances reduce the quality of life of the individual from group S to a level below sufficiency. The individual from group R, however, can easily afford all necessary changes to continue living a sufficiently good life without legs.

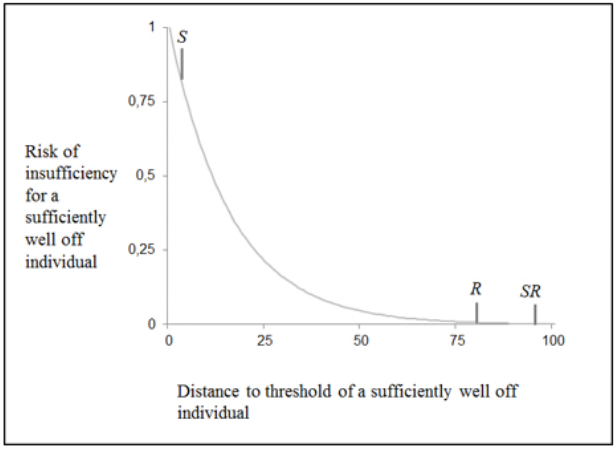
In short, burdens increase the risk of insufficiency by making individuals less capable of dealing with sufficiency-threating circumstances. As a result, sufficientarians should favor placing heavier burdens on R compared to S, given that the sufficiency of individuals in group S is more jeopardized. Both S and R carry net burdens as long as someone lies below the threshold. Yet these burdens should be distributed progressively depending on the individual's distance to the threshold, i.e. her risk of insufficiency.

It would seem reasonable to expect that additional benefits reduce the risk of insufficiency considerably, eventually becoming marginally small. Consider a scenario in which there are two groups, one consisting of rich individuals (group R) and one of super-rich individuals (group SR). The risk of experiencing insufficiency is only marginally different for either group because they both have almost equally sufficient means to protect themselves against various potential causes of insufficiency. That is, at some point, a greater distance to the threshold ceases to significantly decrease the risk of insufficiency—thus, progressive burdening (or benefitting) would not apply under such circumstances. The sufficientarian belief that justice does not warrant redistributions among the rich remains unchanged because there is no difference in the risk of insufficiency between the rich and super-rich. This is an appealing facet of the argument, given that one of sufficientarianism's core beliefs is that there can be 'enough' in justice, i.e. that a state in which everyone is so well off that no further redistribution is necessary.

Conceptualizing the risk of insufficiency as a function of distance to the threshold allows for progressive taxation within sufficientarianism. This function has two properties. First, it has a positively decreasing slope, i.e. the better off someone is, the less risk she faces. Secondly, the slope of the curve eventually becomes marginally small, i.e. there is no significant difference in risk between the rich and the super-rich. The above graph is an example of a curve with such characteristics.[25]

The idea of diminishing risk may appear prioritarian because it de facto prioritizes the interests of the worst off as opposed to the interests of those who lie above the threshold. However, reference to the risk of insufficiency is a distinctively sufficientarian rationale for progressive taxation above the threshold. Those slightly above the threshold should not be taxed less because they are worse off than those who are well above the threshold. Instead, they should be taxed less because they face the risk of insufficiency. This justification neither depends on prioritarian,[26] nor on egalitarian reasoning, because redistribution is not

Figure 2: Risk of insufficiency as a function of distance to the threshold



justified with an appeal to equality. Rather, the (sufficientarian) rationale for progressive taxation is the prevention of insufficiency of those who are above the threshold to the furthest possible extent.

Further, the risk argument does not depend on discontinuity. All described scenarios are compatible with continuous progressive taxation in relation to risk, while those below the threshold receive benefits based on continuous progression. The threshold marks the demarcation line between net benefits and net burdens, but not a discontinuity within a moral calculus. There could, of course, be discontinuities in risk among those above the threshold, which then translate into discontinuous progressive taxation. There may or may not be good reasons for such a viewpoint. Yet, the validity of sufficientarianism as a doctrine of distributive justice neither depends on it nor can it be reduced to it.

The argument applies to taxation and to the distribution of burdens in general. Note that this line of reasoning could be the nucleus of a promising response to the indifference objection to benefits. Reconsider Casal's claim that it seems unfair that some inherit luxury items while others inherit little more than a name—even if everyone has enough.[27] If those who inherit nothing lie only slightly above the threshold and the wealthy heirs find themselves a lot further above the threshold, redistribution to the former could be defended analogously to the argument presented here, i.e. by reference to their risk of insufficiency. However, if those who inherit little more than a name are very well off and the rich

heirs are even better off, there would no justification for redistribution.[28]

4 Objections and further considerations

In the previous section, I claim that sufficientarians can justify progressive burdening by referring to the risk of insufficiency. In this section, I discuss a number of objections against this argument.

Excessive, not progressive

Some critics doubt that sufficientarianism can justify progressive taxation under the empirical conditions of the modern welfare state. It has been argued that sufficientarianism would, in practice, call for a much more demanding system than that established in the modern welfare state. Their argument is based on what is sometimes called the 'lexical priority objection' to sufficientarianism.[29] Sufficientarianism gives no weight to benefits that individuals who lie above the sufficiency threshold enjoy, but places emphasis on benefits provided to those who are below the threshold. This is intuitively plausible in many cases, something even critics of sufficientarianism admit.[30] Yet there seems to be no limit to burdening those who lie above the threshold in order to generate means for redistribution to those who are worst off. In many cases, it will be very challenging and costly to raise a person above sufficiency. Ultimately, this could mean that a marginal tax rate of 100% for those above the threshold is justified to raise particularly challenging cases above sufficiency level. Progressive taxation would then only apply under hypothetical circumstances—in practice, sufficientarianism would require confiscating all benefits enjoyed by those who lie above the threshold.

However, lexical priority of those below the threshold does not necessarily imply excessive burdening. After all, sufficientarianism is committed to choosing efficient approaches to taxation. Some tax schemes ought to be avoided because they decrease economic incentives and thereby reduce the means available for distribution. A 100% marginal tax for those above the threshold greatly reduces incentives to work and thus also reduces the means available to fight insufficiency.[31] This on the whole worsens the situation for those below the threshold; hence, such a taxation scheme will not find acceptance among sufficientarians. Accordingly, sufficientarianism allows balancing efficiency and progressivity for the well-being of those below sufficiency.[32] In practice, this may well

lead to something like a progressive tax scheme in contemporary welfare states.

Let me stress that sufficientarianism would not insist on a progressive tax scheme under *all* circumstances.[33] For instance, regressive taxation could, all things considered, also have beneficial effects for those below the threshold.[34] In that case, it may then be warranted. One may question whether there should not be stronger, conceptual reasons to favor progressive taxation, which do not depend on empirical circumstances. Yet why does there have to be something inherently just about progressive taxation? As Nagel and Murphy note, we should not ask ourselves whether a given taxation rate is just, but asses the justice of the overall package of market outcomes, government taxation and expenditure policies.[35]

The perfect welfare state

Scenarios in which no one faces a significant risk of insufficiency could be considered. In such scenarios, sufficientarianism would not call for progressive taxation. For instance, imagine a perfect welfare state that is able to raise everyone above the sufficiency threshold (at least whenever this can be achieved by redistributing resources). Moreover, as soon as anyone falls below the threshold, the welfare state effectively and quickly lifts this individual above the sufficiency threshold. Under such circumstances, ordinary as well as super-rich individuals face the same risk of insufficiency. Hence, progressive taxation would not be justified.

I shall first note that it is difficult to see how a non-progressive tax system could be capable of generating enough tax revenue for a perfect welfare state to materialize. After all, we should expect regressive schemes to generate less tax revenue (even though, as stated above, some disagree with this). Random tax schemes will perform even worse, e.g. a system that determines taxes on the basis of of a lottery. The insecurity and unpredictability such a tax scheme generates would be extremely costly. To attain a perfect welfare state or something close to it, progressive taxation or at least some kind well-defined system is needed.

But let us, for sake of argument, consider an ideal welfare state that can be realized on the basis of either a progressive or regressive tax scheme alike. Note that sufficientarians would still not necessarily be indifferent to taxation in this case. Since everyone who lies above the threshold faces an equal risk of insufficiency in this scenario, a sufficientarian would instead argue that everyone should be taxed equally. It is

not entirely clear what this precisely implies: it could mean that everyone pays an equal absolute amount of tax (regressive), an equal percentage of income (proportional) or makes an equal sacrifice (progressive).[36] I cannot delve deeper here into the issue of equality in taxation. What is important though is that sufficientarians would again not be indifferent to which tax scheme is chosen.

Now, this may sound suspiciously egalitarian, since in an ideal welfare state, everyone's risk is effectively equalized. Is this then simply a re-introduction of egalitarian ideals through the back door? I do not think so. The argument put forward does not depend on ascribing moral value to equality. The ideal welfare state does not strive to make all persons equal, but to keeping everyone above sufficiency. This is its only normative justification within a sufficiency framework, while equalizing risk is merely a side product that emerges under very specific and highly stylized circumstances—and it might be wise to not rely too much on our intuitions in such examples. It is clear that the ideal welfare state is far from real-world implementation. Realistically, there will always be people below the threshold, and the goal of redistribution should be to improve their situation. Progressive taxation will very likely be instrumental in moving toward this goal in the world we live in.

Individual risk factors

Another objection to the argument presented here is that equal distance to the threshold does not always correspond with equal risk. Certainly, a person who is better off is usually better placed to deal with sufficiency-threatening situations. But that person's overall risk of insufficiency depends on his or her individual circumstances, not just on his or her distance to the threshold. Individuals who are equally well off may have very different risk profiles. Consider two individuals above the threshold, who are equally well off. One is in frail health through no fault of his own and consequently has high medical expenses. The other individual is healthy and does not face such problems and costs. It seems that the risk of insufficiency is very different for these two individuals, although their distance to the threshold is identical. This indicates that the risk of insufficiency is not a function of distance to the threshold. However, this very claim is supposed to provide a sufficientarian justification for a progressive tax system.

Obviously, our example reveals that individual factors can increase or decrease the risk of insufficiency, irrespective of distance to the thresh-

old. However, what seems plausible, nonetheless, is that distance to the threshold is the starting point and a key indicator to determine the risk someone faces to fall below the threshold. The reason is that an individual who is better off is also better equipped to deal with sufficiency-threatening circumstances. In the absence of additional relevant information about a person's risk profile, we should burden such an individual to a lesser extent than someone who is better off.

Sufficientarians should concede that the risk of insufficiency is not determined entirely by distance to the threshold alone, and, consequently, individual risk factors should play a part in how we tax individuals. Needless to say, it is difficult to determine which factors shall be taken into account here and to what extent. What seems important, among other factors, is whether a risk results from voluntary action and whether it is related to central areas of human life. Some people may face larger risks of insufficiency due to voluntary choices, e.g. because they engage in an extremely dangerous sport or because they enjoy the thrill of travelling to countries waging war. It does not seem plausible to argue for lesser burdens for such persons. Having children, however, is also (usually) a voluntary choice that increases the risk of insufficiency by creating additional responsibilities and costs for an individual. Yet one may argue that such a risk should be acknowledged in taxation because it relates to a central area of human life.[37]

More could be said about this, but it goes beyond the scope of this article to provide a full discussion here. What is important at this point is that distance to the threshold *ceteris paribus* determines risk of insufficiency, but additional relevant circumstances affect individual risk profiles. Some of these individual risks should be taken into account in taxation rates (e.g. someone with high health-related costs should be able to deduct these expenditures from his taxable income). This is much in line with existing progressive tax schemes, which, ceteris paribus, tax equal wealth to an equal extent but acknowledge certain tax deductions.

Money and sufficiency currencies

A final objection to my main argument is that it implicitly assumes a material understanding of sufficiency, which is neither plausible nor shared by most advocates of sufficientarianism. This relates to the question of what it is that there ought to be enough of or, put differently, what the appropriate currency for sufficiency is. Introducing the doctrine of sufficiency, Harry Frankfurt explicitly refers to money as a currency:[38]

> I shall refer to this alternative to egalitarianism—namely, that what is morally important with respect to money is for everyone to have enough—as "the doctrine of sufficiency."

In the same article, Frankfurt introduces the idea that it is *contentment* with one's material resources that matters for sufficiency, thereby introducing another currency for sufficiency beyond a mere material understanding.[39] As subsequent sufficientarians have added *capabilities*, *welfare* and *needs* to the list of potential sufficiency currencies, this ambiguity continues to persist.[40] There is no consensus on what the appropriate sufficientarian currency is.

Understanding the risk of insufficiency as a function of distance to the threshold implicitly assumes a monetary understanding of this distance. But welfarist sufficientarianism, for example, does not necessarily assume that those who lie far beyond the threshold are rich. Imagine two individuals for whom a successful romantic relationship is the most important determinant of welfare. One of the two has a medium income and is happily married. Hence, she enjoys a high level of welfare that is well above the sufficiency level. The other individual is a billionaire who is caught up in the midst of a lengthy and emotionally draining divorce. Her welfare level, on the other hand, is only slightly above the sufficiency level. If welfare sufficientarianism determined the risk of insufficiency based on distance to the threshold, it would in this case have to burden the individual earning a medium income more than the billionaire because she lies farther above the sufficiency threshold.

This, of course, is extremely counterintuitive. However, let me note that a welfarist sufficientarian does not need to draw such a conclusion. Taxing the unhappy billionaire does not increase her risk of sufficiency, because her risk of insufficiency does not relate to resources. Taxation by definition is concerned with material aspects, and higher taxation only increases resource-related risks. With respect to that risk, the unhappy billionaire is still in a much better position than a happy person with an average income. There is nothing contradictory for a welfarist to accept such reasoning, given that welfarists will not deny that resources play an important role for reaching a certain level of welfare.

5 Conclusion

Sufficientarianism has been criticized for being objectionably indifferent to how burdens are distributed in society. A particularly powerful variant of the objection states that sufficientarianism is indifferent to how

taxation schemes are set up. This article has shown that this is not the case. It argues that the risk of future insufficiency ceteris paribus decreases if someone lies farther above the threshold. Consequently, to prevent individuals from falling below the sufficiency level in the future, even those who are above the threshold should be taxed progressively.

This rationale for progressive taxation does not depend on prioritarian or egalitarian reasoning. Furthermore, it does not hold under all but only under realistic empirical circumstances and maintains the sufficientarian belief that there should be no redistribution among the rich and super-rich. Finally, there is a potential to extend this argument to other types of the indifference objection. The arguments presented here should be instrumental in defending sufficientarianism against one of the major objections the theory currently faces.

Acknowledgements

I would like to thank Rudolf Schüßler, Kirsten Meyer and an anonymous reviewer for helpful suggestions, which have significantly improved the article. I would also like to express my gratitude to audiences at Humboldt University of Berlin (22 June 2015), participants of the Summer Meeting of Young Philosophers and Economists (Nürnberg, 11 July 2015) and the Salzburg Conference for Young Analytic Philosophy (3 September 2015). Financial support from the German Ministry of Education and Research (BMBF), grant 01UN1204E, is gratefully acknowledged.

Notes

1 [8]; [21, p.114]; [2, p.2].
2 [2]; [5]; [21].
3 Note that there could be more than one threshold, as in [2]; [3].
4 [5]; [21]; [23].
5 [21, p.104].
6 [6]; [3].
7 [5, p.307].
8 [21, p.104].
9 See [23, pp.65f] for this objection.
10 [16].
11 [20]; [14].

12 [20, pp.64;88]. The following argument goes back to Christopher Freiman who mentions a number of additional cases that refer to allocative justice scenarios by friends and foes of sufficientarianism alike ([10, pp.35f]).

13 Indeed, one may argue that Harry Frankfurt is a prima facie egalitarian in allocative justice. Frankfurt claims that we should give everyone an equal share in the absence of any specific knowledge about the present people ([9, p.151]).

14 [16, pp.25–30].

15 [5, p.311].

16 [22, p.50].

17 Rawls' "A Theory of Justice", for instance, devotes only four pages to taxation, arguably the most important burden in well-ordered societies ([20, pp.277–280]). A notable exception of this tendency to neglect burdens is [16].

18 [13, p.189].

19 [8].

20 [21, pp.102f].

21 See, for example, [6, pp.758–760]; [21, pp.108–111]; [10, p.33].

22 [21, pp.108–111].

23 [21, pp.109f].

24 [6]; [8].

25 Other curves could satisfy these properties, e.g. curves with an initially proportional decrease or a convergence value $y > 0$.

26 Here, it differs from non-uniform prioritarianism which holds that those who are worse off but lie above the threshold receive more weight within a maximization calculus because their level of well-being is lower.

27 [5, p.311].

28 Of course, a sufficientarian who endorses progressive taxation based on the risk argument may reject extending this reasoning to benefits scenarios. My point here is merely that sufficientarians could, in principle, extend this argument to respond to the indifference objection to benefits.

29 This critique states that sufficientarianism objectionably allows small gains below the threshold to outweigh large gains above the threshold. See [1, pp.26–33]; [11]; [25]; [10].

30 For example, it seems plausible to relieve the burden of a small group of poor people (thereby raising them to sufficiency) rather than providing a piece of chocolate to a very large group of rich people who are well above sufficiency ([25, p.475]; [4]; [6]). Such cases are occasionally used as a "tyranny of aggregation" objection to prioritarianism. Sufficientarianism escapes the tyranny of aggregation, thereby becoming vulnerable to the "tyranny of disaggregation" ([1, p.30]).

31 [10, p.36].

32 Here sufficientarianism is much in line with the economics of taxation, which generally recognizes the importance of tax efficiency ([12]) and the need to balance efficiency with other normative considerations ([7]; [24]).

33 This is where sufficientarianism parts from telic egalitarian conceptions that intrinsically value equality and therefore object regressive taxation in principle

because it increases inequality. Things are not as straightforward for deontic egalitarianism. See [19] for a discussion of telic versus deontic egalitarianism.

34 McGee argues that such empirical conditions are actually true for the world we live in ([15]). Other authors emphasize that progressive taxation is more effective in bringing about overall social welfare ([17]).

35 [16, pp.25–30].

36 [16, pp.12–39].

37 See [2, pp.4–8] on the relevance of central areas of human life for sufficiency.

38 [8, pp.21f].

39 [8, pp.37–39]. In what follows, I use the notion of monetary and material resources interchangeably. Thereby, I refer to means to provide an affordable access to things such as food, consumer goods, shelter, educational institutions, mobility, energy services and health care.

40 See [2] for capabilities, [6] for welfare, and [18] for needs. Some sufficientarians mix these approaches (e.g. [3]; [13]) or remain neutral to questions of value ([21]).

Philipp Kanschik
University of Bayreuth
Institut für Philosophie
95440 Bayreuth, Germany
<p_kanschik@hotmail.com>

References

[1] Arneson, R. (2006). Distributive Justice and Basic Capability Equality: 'Good Enough' Is Not Good Enough. In A. Kaufman (Ed.), *Capabilities equality. Basic issues and problems* (Vol. 18, pp. 17–43). New York, London: Routledge.

[2] Axelsen, D. V., & Nielsen, L. (2014). Sufficiency as Freedom from Duress. *Journal of Political Philosophy*.

[3] Benbaji, Y. (2005). The Doctrine of Sufficiency: A Defence. *Utilitas*, *17*(03), 310–332.

[4] Benbaji, Y. (2006). Sufficiency or Priority? *European Journal of Philosophy*, *14*(3), 327–348.

[5] Casal, P. (2007). Why Sufficiency Is Not Enough. *Ethics*, *117*, 296–326.

[6] Crisp, R. (2003). Equality, Priority, and Compassion. *Ethics*, *113*, 745–763.

[7] Feldstein, M. (1976). On the Theory of Tax Reform. *Journal of Public Economics*, (6), 77–104.

[8] Frankfurt, H. (1987). Equality as a Moral Ideal. *Ethics*, *98*, 21–43.

[9] Frankfurt, H. G. (1999). *Necessity, volition, and love*. Cambridge: Cambridge University Press.

[10] Freiman, C. (2012). Why Poverty Matters Most: Towards a Humanitarian Theory of Social Justice. *Utilitas*, *24*(01), 26–40.

[11] Gosseries, A. (2011). Sufficientarianism. In E. Craig (Ed.), *Routledge Encyclopdia of Philosophy* . London: Routledge. Retrieved from https://www.rep.routledge.com/articles/sufficientarianism (Sep, 13th, 2015)

[12] Hamlin, A. (2014). *What Political Philosophy should learn from Economics about Taxation*. Retrieved from http://www.socialsciences.manchester.ac.uk/

[13] Huseby, R. (2010). Sufficiency: Restated and Defended. *Journal of Political Philosophy*, *18*(2), 178–197.

[14] Lamont, J., & Favor, C. (2012). Distributive Justice. In E. N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* . Retrieved from http://plato.stanford.edu/archives/spr2013/entries/justice-distributive/ (Sep, 13th, 2015)

[15] McGee, R. W. (1998). Is the Ability to Pay Principle Ethically Bankrupt? *Journal of Accounting, Ethics & Public Policy*, *1*(3), 503–511.

[16] Murphy, L. B., & Nagel, T. (2002). *The myth of ownership: Taxes and justice*. Oxford, New York: Oxford University Press.

[17] Oishi, S., Schimmack, U., & Diener, E. (2012). Progressive taxation and the subjective well-being of nations. *Psychological science*, *23*(1), 86–92.

[18] Page, E. A. (2007). Justice Between Generations: Investigating a Sufficientarian Approach. *Journal of Global Ethics*, *3*(1), 3–20.

[19] Parfit, D., 2000. Equality or priority? *In*: M. Clayton and A. Williams, eds. *The Ideal of Equality*. Basingstoke, 81–125.

[20] Rawls, J. (1971). *A theory of justice* (Original edition). Cambridge, Mass: Belknap Press.

[21] Shields, L. (2012). The Prospects for Sufficientarianism. *Utilitas*, *24*(01), 101–117.

[22] Shue, H. (1993). Subsistence Emissions and Luxury Emissions. *Law & Policy*, *15*(1), 39–59.

[23] Temkin, L. S. (2003). Equality, Priority or what? *Economics and Philosophy*, *19*(1), 61–87.

[24] Weinzierl, M. (2014). The promise of positive optimal taxation: normative diversity and a role for equal sacrifice. *Journal of Public Economics*, *118*, 128–142.

[25] Widerquist, K. (2010). How the Sufficiency Minimum Becomes a Social Maximum. *Utilitas*, *22*(04), 474-480.

II

Article II

Two kinds of priority

Submitted to:

Utilitas (November 26th, 2015)

Attached here is the submitted draft.

Two kinds of priority

Prioritarianism has become an established theory in distributive justice. However, it is difficult to spell out its core idea and its relation to other views in the field. This article addresses this ambiguity by arguing that we should distinguish between two types of prioritarianism. Narrow prioritarianism (NP) holds that we should maximize overall utility adjusted by diminishing marginal moral weight. Broad prioritarianism (BP) includes any view that complies with the intuition that benefitting people matters more the worse off these people are. NP dominates recent debates but is neither from a conceptual, systematic nor exegetical point of view the only option to spell out BP. Introducing the distinction has the implication that prioritarianism needs not necessarily be an antagonist to other views in distributive justice such as egalitarianism and sufficientarianism.

With Derek Parfit's *Lindley Lectures* in 1991, the idea of priority began to gain center stage in distributive justice.[1] As Parfit put it, the core intuition behind the priority view is that benefitting people matters more, the worse off these people are. From this starting point, an extensive discussion has departed. Beyond Parfit's original intuition, there have been diverging suggestions and distinctions on how to spell out this view, typically emphasizing different aspects.[2] It is thus not entirely clear what demarcates prioritarian and non-prioritarian views. Further, it remains unclear how prioritarianism relates to its key competitors utilitarianism, sufficientarianism and egalitarianism. For all these views, some argue that prioritarianism conflicts with the respective view, while others hold that it could be seen as a variant of it.[3]

---

[1] Parfit 2000. Parfit held the lecture in 1991.

[2] E.g., there is a distinction between prioritarian views which are ex ante and ex post (McCarthy 2008), technical and primitivist (Greaves 2015), absolute and weighted (Crisp 2003), telic and deontic (Williams 2012). Some think that the idea of (concavely) diminishing marginal moral value is the core of prioritarianism (Hirose 2015, pp. 86–111), while others see the non-comparative approach as the core of the view (Otsuka and Voorhoeve 2009), or simply understand prioritarianism as a 'weighted' form of utilitarianism (Benbaji 2006).

[3] For the relation between prioritarianism and utilitarianism, see Hirose 2015, pp. 90–92, McCarthy 2006; Pakaslahti 2014. For prioritarianism and egalitarianism, see Parfit 2000, p. 104; Broome 2015; Fleurbaey 2015. For prioritarianism and sufficientarianism, see Crisp 2003. Benbaji 2006; Shields 2012, pp. 109–110.

I shall introduce the distinction between narrow and broad prioritarianism to resolve these ambiguities. Most recent discussion on prioritarianism assumes a narrow reading of the view:

> *Narrow Prioritarianism (NP)*: A distribution is just iff it maximizes weighted overall utility. The worse off a person is, the greater weighs her utility.

Re-examining Parfit's introduction of the view, however, I claim that there is a broader understanding of prioritarianism as the family of views that derives from the original prioritarian intuition:

> *Broad Prioritarianism (BP)*: A distribution is just if it (a) puts greater weight on the well-being of the worse off under some circumstances and (b) puts greater weight on the well-being of the better off under no circumstances.

While NP is a complete view of justice (i.e. providing necessary and sufficient conditions of justice), BP only specifies a necessary condition of justice which may be combined with other views. NP fulfils this condition but we shall see that BP includes other non-utility based, non-maximizing and non-weighting variants. Thus, NP is not the only reasonable option to spell out BP—neither from a systematic, conceptual nor exegetical point of view.

This has a number of important implications for prioritarianism as a theory in distributive justice. Prioritarianism does not necessarily conflict with other well-known theories; for instance, I shall present sufficientarian views that are broadly prioritarian. Further, prioritarianism is not defeated by the arguments brought forward against NP.[4] Finally, while a recent, often technical body of research has shed much light on NP, the

[4] E.g. Otsuka and Voorhoeve 2009.

core prioritarian idea as spelled out in BP remains under-theorized and deserves more attention.

The articles is arranged as follows. Section I introduces NP, which is the currently prevalent understanding of prioritarianism. An introduction of BP follows (Section II). Next, Section III examines the relationship between NP and BP. Finally, I situate both types of prioritarianism in the broader landscape of distributive justice (Section IV). The final section concludes.

I. Narrow prioritarianism

Since Parfit's introduction of the view, prioritarianism has become a well-known contestant in distributive justice.[5] Parfit's starting point is the claim that benefitting people matters more, the worse off these people are.[6] This claim can be understood in the sense that we should put greater weight on the utility of the worse off within a maximization calculus. Thereby, prioritarianism softens a tendency in classical utilitarianism to assess outcomes as good, which involve very low absolute utility levels for the worst off.[7] Prioritarians go beyond the claim that marginal utility diminishes, i.e. that the generated extra utility of having additional resources decreases with each additional unit someone gains. Most utilitarians accept this, thereby ensuring some tendency towards equal distributions in utilitarianism. Prioritarians, however, hold that even taking diminishing marginal utility into account, additional moral weight should be given to the utility to the worse off.[8]

[5] Before Parfit's *Lindley Lectures*, the priority view was already discussed in public economics, even though the term had not been invented yet (Broome 2015, p. 6).
[6] Parfit 2000, p. 101.
[7] Consider Rawls' claim that the institution of slavery may be justified by utilitarianism (1971, p. 167).
[8] Greaves 2015, pp. 3–4; Hirose 2015, p. 88.

In a nutshell, this is what friends and foes alike typically have come to refer to as prioritarianism in distributive justice in a by now extensive literature.[9] I shall refer to this as *narrow prioritarianism* (NP) here, for reasons that will become more obvious later. For the time being, let us dig deeper into what NP entails. Parfit introduces prioritarianism as a 'complete' view that can replace utilitarianism and egalitarianism:[10]

> The Priority View[...] can be held as a complete moral view. […] Unlike the Principle of Equality, which might be combined with the Principle of Utility, the Priority View can replace that principle. It can be regarded as the only principle we need.

Parfit does not mention what he means by complete but let me make some brief remarks about four characteristics that we should expect from such a view: scope, currency, mode, and weighting.

First, the idea of completeness entails that a theory is situated within some kind of *scope*, against which completeness is judged. It seems too far-flung to argue that the scope in question here is morality in general, even though this is what Parfit literally states. After all, prioritarianism as it stands tells us little about meta-ethics, the philosophy of the good life, or the moral acceptability of abortion. However, it seems fair to interpret Parfit as saying that prioritarianism is a complete view in *distributive justice*. Distributive justice is concerned with the institutional framework that structures the distribution of benefits and burdens to individuals in a society.[11] Theories of distributive justice outline principles that can be used to evaluate distributive scenarios. Most will

[9] Main issues within this body of research relate to the technical apparatus of prioritarianism in light of cases involving risk and uncertainty, e.g. Otsuka and Voorhoeve 2009; McCarthy 2008; Broome 2015; Fleurbaey 2015; Williams 2012; Bovens 2015.
[10] Parfit 2000, pp. 103–104.
[11] Lamont and Favor 2012.

agree that narrow prioritarianism does this to the same extent as, for example, elaborated sufficientarian and egalitarian views and thus fits with this scope.

Next, there is the issue of *currency*. Complete theories of distributive justice spell out their principles in terms of a currency in which benefits and burdens are understood.[12] Candidates are abundant, e.g. utility, capabilities, needs, and resources. The current debate on prioritarianism typically assumes utility as the prioritarian currency.[13] It is not entirely clear, which conception of utility is favored (e.g. preference- or desire-satisfaction, cardinal or ordinal utility functions, …). For the time being, it suffices to conclude that NP appears to be committed to utilitarian currencies in a broader sense.

Then, there is the question of how it is assessed if benefits and burdens (measured in terms of some currency *x*) have been distributed justly; I shall refer to this as the *mode* of justice. Again, there is a larger set of options, but I shall restrict discussion here, and in the entire article, to consequentialist modes.[14] Three well-known modes are maximization, equalization, and satisficing. Maximization means that the total amount of some *x* is maximized. [15] Equalizing entails that the overall distribution of some *x* is

[12] See Sen 1980; Arneson 2000b; Cohen 1990 on the relevance of the currency problem and an outline of potential answers.

[13] See, e.g., Benbaji 2006; Broome 2015; Greaves 2015; McCarthy 2006; McCarthy 2008; Otsuka 2015; Porter 2011; Otsuka and Voorhoeve 2009.

[14] That is, I will not discuss the possibility of deontic prioritarianism in this article, a possibility to which Parfit himself points (Parfit 2000, p. 101) and which has recently been explored by Andrew Williams (2012). Most deontological accounts in distributive justice accept that consequences are relevant, even though they are not the only aspect that matters; so even these accounts recognize the importance of a consequentialist discussion as provided here. Only very few will reject the very idea of consequentialism in distributive justice (e.g. Nozick 1974; Gauthier 1986). Note that such views also reject a 'currency' approach (Arneson 2000b, p. 499).

[15] Let me stress that all these modes involve the concept of maximization. Equalization could be understood as maximizing equality; satisficing as maximizing the number of those above the threshold. Nevertheless, they are usually seen as distinct modes. It is for conventional rather than substantial reasons that I reserve the term 'maximization' for the maximization of the sum of all individuals' values of some currency *x* rather than for the other modes.

made as equal as possible.[16] Satisficing means that people should have at least a particular amount of some *x*.[17] Note that these modes are often combined; for instance, pluralist egalitarians combine maximization and equalization.[18]

It is a bit trickier to situate NP in this panorama. Parfit emphasizes that prioritarianism is an 'absolute' view (which he uses to contrast priority to 'relative' egalitarian views).[19] One may follow Broome's interpretation of this remark as implying that NP can be represented by an additive separable function, which should be maximized.[20] This means that moral goodness only depends on the absolute utility of a person but not on how well-off a person is compared to others; these absolute utilities are only adjusted according to diminishing moral weights before their sum is maximized.

Utilitarian value functions are also additively separable,[21] but do not assign a greater value to benefits to the worse off in the maximization calculus. Yet, additive separability allegedly does not hold for equalization-based views, which take into account how well-off a person is compared to others.[22] That is, the goodness of a person's well-being depends on its relation to others. This is explicitly rejected by Parfit and

[16] This is what John Broome refers to as communal egalitarianism, i.e. the view that the general good can be increased by distributing it more equally without increasing the total amount of the good (Broome 1991, p. 178). Making a distribution more equal is then in itself considered a positive effect of a redistribution.

[17] On the distinction between maximizing and satisficing, see Byron 2004. See also the more recent literature on sufficientarianism (Shields 2012; Huseby 2010; Casal 2007).

[18] See Dorsey 2014; Vallentyne 2000.

[19] Parfit 2000, p. 104.

[20] See Broome 2015 and also Jensen 2003, pp. 98–99.

[21] See Sen 1979, pp. 468–471.

[22] Broome 2015.

most other prioritarians.[23] Thus, NP resembles utilitarianism in assuming a non-comparative approach maximizing an additive separable function adjusted by moral weight; it is thus committed to a maximization mode.[24]

Finally, there is the issue of *weighting*. Here, NP is distinct from utilitarianism. Independently from currency and mode, any theory of justice must take a stance on how individuals' well-being is weighted in a consequentialist calculus. There are three options. Everyone's well-being is treated exactly equal. An example for this is utilitarianism, which assigns everyone the same weight in the maximization calculus. Next, one may give absolute priority to some. That is, the well-being of some has strict priority over the well-being of others and there can be no trade-offs between these groups. An example for this would be Rawls' view.

Finally, one may give different weight to individuals. This is the type of weighting that NP implies. Weights are distributed according to the level of well-being of a person—the lower it is, the larger is a person's weight. Now, there are various functions that satisfy this property. It seems that NP is understood in terms of continuously reducing weights, i.e. the moral importance to benefit a person is reduced with every additional unit of well-being which this person enjoys.[25] Thus, for any equally sized utility benefit, it is better from a justice point of view to distribute this benefit to a worse off

[23] Otsuka and Voorhoeve even argue that this rejection is what makes prioritarianism a distinctive view in distributive justice (2009, p. 177).

[24] Against this interpretation, Fleurbaey has been held that a narrow prioritarian view is always congruent with some pluralist egalitarian view that combines maximization *and* equalization. It seems that Broome's response to this argument has been accepted in the literature. See Fleurbaey 2015 and Broome 2015 (these papers were commissioned by the WHO in 2000 but only published 15 years later in a special issue of 'Economics and Philosophy').

[25] See, e.g., Hirose 2015, pp. 88–89.

person.[26] However, it is always possible for a benefit for a better off person to outweigh a benefit for a worse-off person if this benefit is sufficiently great.

It follows that narrow prioritarianism is well positioned on all relevant aspects of completeness:

> *Scope*: theory of distributive justice
>
> *Currency*: utility
>
> *Mode*: maximization
>
> *Weighting*: greater weight for the worse-off

These points may be summarized in the following definition:

> *Narrow Prioritarianism (NP)*: A distribution is just iff it maximizes weighted overall utility. The worse off a person is, the greater weighs her utility.

II. Broad prioritarianism

We have seen that narrow prioritarianism is a complete view in distributive justice. However, it needs not necessarily be understood as prioritarianism *per se*. For other views in distributive justice, it is common to find that there is a core idea that can be spelled-out in multiple ways. For instance there are various options to spell out the idea of maximizing utility (utilitarianism), acknowledge the importance of thresholds (sufficientarianism), or promote an equal distribution of something (the core of egalitarianism).[27] For prioritarianism, it seems much harder to pin down the core idea.

[26] The claim in this categorical formulation assumes infinitely divisible goods. For finitely divisible goods, there may be cases in which NP calls to distribute equal benefits to differently well-off individuals.

[27] See Hirose 2015 on the core idea of egalitarianism; Shields 2012 for sufficientarianism, and Driver 2014 for utilitarianism.

To start with, it may be helpful to go back to Parfit's original *Lindley Lectures*, where the view was introduced to distributive justice. Parfit's initial idea is that benefitting people matters more, the worse off these people are. Parfit uses a case brought up by Thomas Nagel to illustrate the basic idea.[28] Imagine a family with two children. The first child is healthy and happy, while the second child suffers from a painful handicap. Now, the family faces the choice between moving to the city or a suburb. This has different effects on the overall well-being of the family's two children. In the city, the second child receives better medical treatment. In the suburb, the first child flourishes more. The children's overall well-being may thus be illustrated as follows.[29]

	The first child	The second child
Move to the city:	20	10
Move to the suburb:	25	9

Both Nagel and Parfit emphasize that we have the intuition that the second child should have priority under these circumstance, even though this may not maximize total well-being. To determine the moral value of benefits or burdens, we should not only look at their size. The overall well-being of a person also matters in a sense that those with lower well-being matter more.

With the help of some considerations from the last section, it may thus be possible to pin down the core idea more precisely. Prioritarianism in a broader sense (BP) takes a stance on the *weighting* aspect in distributive justice. It rejects the claim that benefits to everyone weigh the same. Rather, whatever the currency and whatever the

[28] Nagel 1979, pp. 123–124.
[29] Parfit 2000, p. 83. Nagel does not use any figures but makes the same point narratively.

mode is, BP argues that those who are worse off need have some kind of priority vis-à-vis the better off.

> *Broad Prioritarianism (BP)*: A distribution is just only if it benefits people more the worse off these people are.

As Parfit himself observes, this is by itself not a complete view of justice, but explicates an intuition.[30] As argued by Roger Crisp and much in line with the discussion in the previous section, the intuition may be either spelled out in weighted or absolute priority:[31]

> The Absolute Priority View: when benefiting others, the worst-off individual (or individuals) is (or are) to be given absolute priority over the better off. […] The Weighted Priority View: benefiting people matters more the worse off those people are, the more of those people there are, and the greater the benefits in question.

On absolute priority, the second child has priority simply because it is worse off. Even if the benefits at stake for the first child were much higher, the second child would continue to enjoy priority, as long as it remains worse off. Under weighted priority benefitting the worse off child need not be decisive—rather, it is a question of weighting. The burdens of the worse off child are given larger weight but this weight may not be great enough to outweigh the greater benefits by the better off child. It depends on the numbers at stake.

The prioritarian intuition does not commit BP to either the weighted or absolute understanding. What BP must be minimally saying, however, is that there are some circumstances in which a worse-off person receives greater weight than a better off person. If there is a view that does not give greater weight to a worse-off individual under any

[30] Parfit 2000, pp. 86;101.
[31] Crisp 2003, p. 752.

circumstances, this view should not be called prioritarian. Further, benefits to a better-off person should never receive larger weights than benefits to worse off a person. For instance, it would be strange to call a view prioritarian which allows for such judgment in a case like the two children case (even if, under different circumstances, it gave priority to the worse off). Note, however, that this does not mean that benefits for the better off can never outweigh benefits for the worse off—under weighted priority, this is possible, under absolute priority not.

Thus, we may more precisely characterize *broad prioritarianism* (BP) as follows:

> *Broad Prioritarianism (BP)*: A distribution is just if it (a) puts greater weight on the well-being of the worse off under some circumstances and (b) puts greater weight on the well-being of the better off under no circumstances.

BP is not a complete view because it only concerns weighting. Unlike NP, it thus only specifies a necessary, but not a sufficient condition for just distributions.

III. From broad to narrow priority?

In the literature on prioritarianism, BP and NP are not distinguished.[32] Narrow prioritarians simply take their views to be *the* exemplification of the prioritarian intuition as introduced by Parfit. This move is neither obvious nor self-explanatory. At least the following

[32] Greaves 2015 is a notable exception. Greaves dubs narrow prioritarian views specified in terms of von Neumann-Morgenstern utiliy as 'technical prioritarianism' (2015, p. 22). He then distinguishes between the prioritarian intuition and technical prioritarianism and argues that the former provides the latter with no motivation or justification (2015, pp. 22–24). I agree with Greaves insofar as NP cannot be inferred from the prioritarian intuition. I believe, however, that NP can point to the prioritarian intuition as speaking in its favor. It is beyond scope here to discuss if this is also the case for technical prioritarianism as a variant of NP.

three claims are needed to establish an inference from BP to NP. First, one needs to dismiss non-utilitarian currencies as inadequate interpretation of BP. Second, it needs to be shown that weighted priority is the only plausible understanding of priority (which means dismissing absolute priority). Third, one needs to show that giving priority to the worse off implies maximization (rather than any of the other modes).

Any of these claim can be justified on conceptual, systematic or exegetical grounds. That is, it could be argued that the respective claim is entailed by the very idea of giving priority to the worse off (conceptual) or is the most attractive way to spell out this idea (systematic). Alternatively, it may be that the understanding of prioritarianism in distributive justice has simply been introduced and established in terms of this claim, even though not necessarily for a deeper conceptual or systematic reason (exegetical). To make this type of argument, Parfit's *Lindley Lectures* are the most natural reference.[33] Independently from the argumentative strategy, justifying the three claims puts all ingredients of NP in place: a scope (distributive justice), a currency (utility), a mode (maximization) and an approach to weighting (weighted priority). Yet, in what follows, I shall demonstrate why each of these steps from intuition to doctrine is problematic. It is unclear why BP should lead to a commitment to a utilitarian currency, to weighting or to maximizing.

Let me start with the question of currency. As stated above, NP assumes a utilitarian currency without further explanation—and so do even critics of the view.[34] Parfit himself, however, explicitly refers to the neutral 'benefits' rather than utility throughout

[33] Virtually all discussion on prioritarianism refers to Parfit's lectures. Note that Parfit also has written elsewhere on prioritarianism (Parfit 2012) but I shall focus on the Lindley Lectures here.

[34] E.g. Otsuka and Voorhoeve 2009.

his *Lindley Lectures*.[35] Further, he explicitly holds that benefits are *not* to be understood in terms of utility:[36]

> [T]hese benefits need not be thought of in narrowly Utilitarian terms: as involving only happiness and the relief of suffering, or the fulfilment of desire. These benefits might include improvements in health, or length of life, or education, or other substantive goods.

So, the utilitarian characterization of prioritarianism might have been a misunderstanding from the start. There may be an explanation for this, though admittedly speculative. Parfit makes a seemingly harmless alteration to Nagel's city / suburb case. While Nagel describes the situation narratively, Parfit uses numbers to illustrate the overall well-being of the children. Now, this does not imply a commitment to a utilitarian currency, but utilitarians are certainly more prone to use number-based examples than, say, capability theorists.[37] Naturally, most prioritarians may then have interpreted these numbers as referring to utility.

Besides such exegetical remarks, there seems to be no conceptual connection between the prioritarian intuition and utilitarian currencies. Consider very poor people who lack adequate shelter and educational opportunities but do well in terms of (hedonic) utility and live overall entirely happy lives. It seems that many of us still continue to have prioritarian intuitions in this case, i.e. continue to believe that it is more

[35] There is only one passage in which he (implicitly) identifies a telic prioritarian view with utility: "On the telic version of the Priority View, we appeal to a similar claim. We believe that, if benefits go to people who are better off, these benefits matter less. Just as *resources* have diminishing marginal *utility*, so *utility* has diminishing marginal *moral importance*." (Parfit 2000, p. 105, his italics)

[36] Parfit 2000, p. 83. Another currency that Parfit explicitly mentions in an attached footnote are capabilities (2000, p. 122).

[37] Some capability theories do not even allow for trade-offs between different capabilities (Dorsey 2008; Axelsen and Nielsen 2014). Parfit's representation of the two children case would then not be intelligible for such capabilitarian currencies.

important to improve the life circumstance of these poor people vis-à-vis the materially better off with the same overall utility level. Without further conceptual or systematic arguments, it thus remains unclear why narrow prioritarians believe that utility is the only reasonable currency. Utility is one possible currency to spell out BP, but capabilities, needs, resources or opportunities may as well make meaningful alternative prioritarian currencies.

What about the claim that prioritarianism should be understood in terms of weighted priority? Why should prioritarians choose weighed priority over absolute priority? Again, this move cannot be justified by Parfit's original presentation of the view. Parfit holds that benefits to the worse off "should be given more weight",[38] but this is compatible with both the absolute and weighted maximization interpretation (in the former, they have absolutely more weight, in the latter relatively more weight). This becomes obvious when Parfit discusses Rawls' view. The difference principles states that social and economic inequalities need to be arranged in a way that maximizes the benefit of the least-advantaged members of society.[39] Parfit explicitly affirms that this principle is prioritarian for the reason that it demands making the worst off group as well off as possible. This, according to Parfit, is in line with the core idea of priority.[40]

The only (systematic) hint in favor of weighted priority in Parfit's lectures is the remark that absolute priority as in Rawls' theory of justice is "implausibly extreme", because benefits to the worst off count *infinitely* more than benefits to everyone else.[41] And indeed, many find it unappealing that absolute priority does not allow benefits for

[38] Parfit 2000, p. 101.
[39] Rawls 1971, p. 83.
[40] Parfit 2000, pp. 120–121.
[41] Parfit 2000, p. 121.

the better off to outweigh benefits for the worse off.[42] If we raised the second child's well-being infinitely in the scenario above, should this not outweigh the other child's burden at some point? And what if we add more better off children to the case? It seems hard to believe that a small difference for the worst off child should ace out huge gains to a great number of other children.[43]

Now, I cannot provide a full argument in defense of absolute priority here but at least its dismissal seems premature. Absolute and weighted priority are on par in terms of counterintuitive implications. Consider that weighted priority faces the *'tyranny of aggregation'* objection.[44] Providing pieces of chocolate to a very large group of rich people may outweigh relieving severe pain of a small number of people, because the sum of benefits at stake for the rich is greater (despite putting less weight on benefitting them).[45] This strikes as intuitively implausible. Absolute priority views can account for such intuitions. They give no weight to benefitting individuals who lie above some threshold, that is, benefitting those below the threshold has absolute priority over benefitting those above the threshold. This fits with our intuitions in some cases.

In other cases, tiny gains among the worst off (if they are below the threshold) should intuitively not always outweigh huge gains above the priority threshold—Christopher Freiman has referred to these cases as the *'tyranny of disaggregation'* objection.[46] It thus seems that our intuitions in some cases point to weighted priority (or aggregation respectively), while in others to absolute priority (disaggregation). It is by no means obvious which of two 'tyrannies' is worse. Further, there may be a mixed view between

[42] This critique can be found in Arneson 2006, pp. 26–33, Widerquist 2010, Gosseries 2011, and Crisp 2003, p. 752.
[43] Even Nagel, who appears to argue for a absolute priority view, admits that strikes him as implausible that numbers never count (1979, p. 125).
[44] Arneson 2006, p. 30; Freiman 2012, p. 28.
[45] Crisp 2003, p. 754.
[46] Freiman 2012, pp. 34–35.

both types of priority to incorporate both intuitions.[47] It thus seems premature to dismiss *any* absolute account of priority.

Finally, let us examine maximization. Is BP committed to the idea that the total sum of everyone's *x* is maximized (given some adjustment in terms of diminishing moral weights)? It is not. Obviously, absolute priority (conceptually) calls for non-maximization priority views, because benefits beyond some threshold do not count any longer within the maximization calculus and are thus committed to satisficing rather than maximizing modes. But even weighted priority does not entail maximization and may be spelled out in terms of satisficing. Satisficing calls for lifting people above some threshold *T*. In doing so, the worse off may be given weighted priority. As Crisp puts it:[48]

> Below the threshold, benefiting people matters more the worse off those people are, the more of those people there are, and the greater the size of the benefit in question.

Thus, there exists an interpretation of weighted priority that does not call for a maximization mode, i.e. the maximization of the sum of all individuals' *x*'s. It is another question whether this is the most adequate understanding of weighted priority.[49] But it is again hard to see how the prioritarian intuition leads to a narrow prioritarian understanding.

---

[47] E.g. a sufficiency view that involves weighted maximization among those below some threshold and absolute priority between those below and above of some threshold softens both of these tyrannies to some extent (I discuss such a view more extensively in the next section).

A comparable move can be found in discussions on aggregation, where intuitions sometime point in favor to aggregation (i.e. weighting), and in others to non-aggregation (i.e. absolute priority). A mix of weighted and lexical priority may also seem most promising here (see also Voorhoeve 2014).

[48] Crisp 2003, p. 758.

[49] In favor of this claim, some have argued that prioritarian intuitions cease to be valid for super well-off communities (Crisp 2003; Benbaji 2005).

IV. Prioritarian views in distributive justice

Let us take stock at this point and return to the question on how to situate prioritarianism in distributive justice. What distinguishes the two types of prioritarianism from other views in distributive justice? A few examples may help to illustrate this:

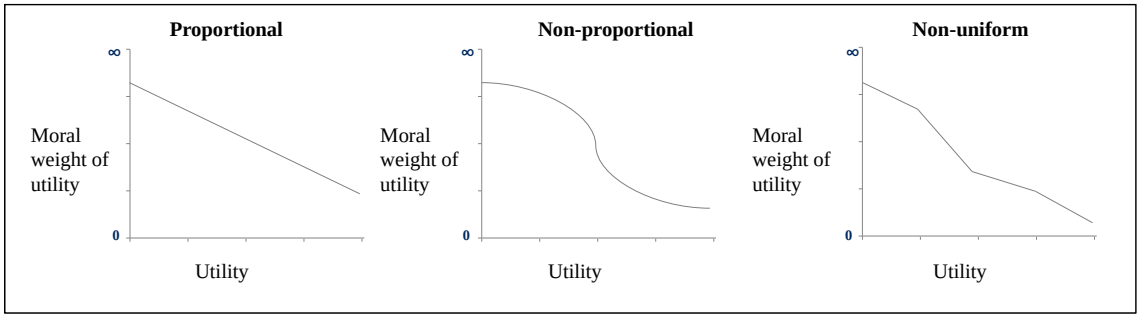


Figure 1. Broadly and narrowly prioritarian views

All of the above views are prioritarian in both the narrow and broad sense. Between any two points, these functions are decreasing, either proportionally, non-proportionally or non-uniformly.[50] That is, between any two different levels of well-being, a worse off individual has a larger weight than a better off person. Still, trade-offs between individuals remain possible, so there is no absolute priority involved. Based on the weights assigned by the function, a maximization calculus may be construed in which all individual values are additively separable. Given that these views are narrowly prioritarian in terms of mode, currency and weighting, it follows that they also belong the family of broadly prioritarian views.

Now, let us consider three views which are prioritarian in neither the narrow nor the broad sense.

[50] Concerning the latter, I use the terminology of Liam Shields here who has referred to non-uniform prioritarianism (2012, pp. 109–110).

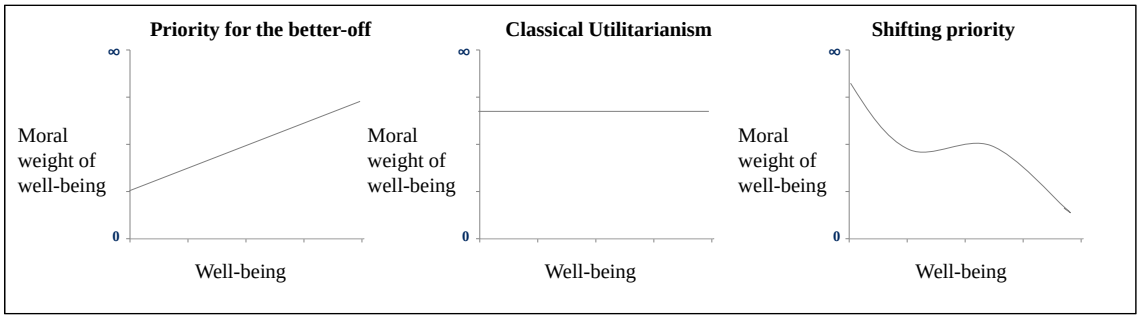


Figure 2. Neither narrowly nor broadly prioritarian views

Priority for the better-off is non-prioritarian for obvious reasons: the weight of well-being increases rather than decreases with additional well-being. This is not compatible with BP, since BP does not imply to simply give priority to anyone; rather priority must be given to the worse off.[51] *Classical utilitarianism*, the second example, gives no priority whatsoever to anyone—everyone has the same weight, no matter how well-off they are. Classical utilitarianism understood as such is thus not a variant of BP. *Shifting priority* is also not prioritarian in either sense. Shifting priority satisfies the condition that the worse off are given priority in some cases. However, at some levels of well-being, the weight of the better off increases—thus, the second condition of BP is violated. Further, note that any of these views could only be narrowly prioritarian, if well-being is understood in terms of utility.

Finally, let us consider some examples of approaches that satisfy BP but not NP.

[51] It would be too broad to understand any position in justice that assigns some kind of priority as prioritarianism. As Hirose noted, this would then include Nozick's theory that individual rights have priority over aggregate well-being (2015, p. 86).

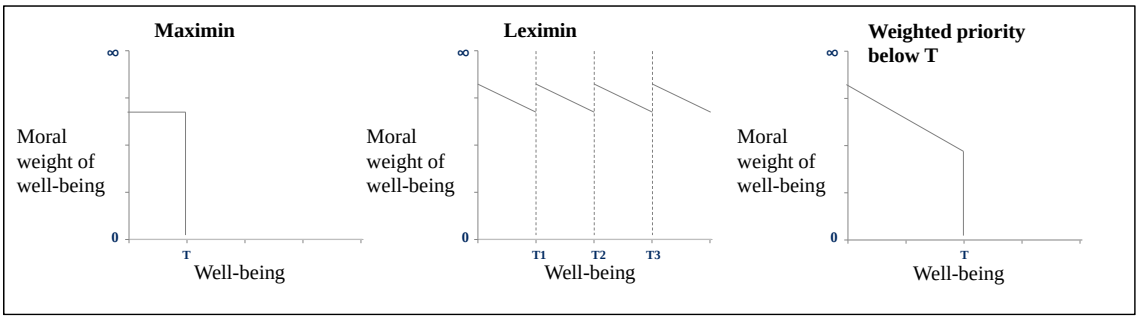


Figure 3. Broadly but not narrowly prioritarian views

Maximin is not narrowly prioritarian because it does not involve maximization but only takes the worst-off person or group into account. It is broadly prioritarian because it gives greater weight to worse off. Further, it never gives greater weight to the better off--amongst those who do not belong to the worst-off, it is indifferent to whom receives benefits.

Leximin, unlike *Maximin*, takes everyone into account, but thresholds demarcate absolute priority between different groups. However, it allows no trade-offs between these groups (of course this also holds for the maximin) and is thus not narrowly priortarian. Both these views, however, satisfy the conditions to be classified as broadly prioritarian views.

Weighted priority below T is favored by some sufficientarians.[52] On this view, only those below some threshold T are taken into account in the consequentialist calcu-

[52] Sufficientarianism was introduced to distributive justice in Frankfurt 1987. Sufficientarianism typically entails a positive and a negative thesis (Axelsen and Nielsen 2014; Shields 2012; Casal 2007). The positive thesis states that there are weighty reasons to secure at least enough of some good(s) for everyone. The negative thesis, on the other hand, asserts that redistributive activity ends once everyone surpasses the threshold. Sufficientarians may hold that weighted priority applies below the threshold (Huseby 2010, p. 184; Crisp 2003, p. 758). Note that there may be more than one threshold (e.g. Benbaji 2005); a possibility which I do not discuss here for reasons of simplicity.

lus. Their well-being receives larger weight the worse off they are. It is NP's commitment to maximization, as opposed to satisficing, which makes these views incompatible.

This sheds some light about the relationship between NP, BP and other views in distributive justice. As noted above, some argue that prioritarianism conflicts with views such as egalitarianism, sufficientarianism and utilitarianism, while others argue that it could be seen as a variant of it. The example of *Weighted priority above T* shows that there need not be any conflict between sufficientarianism and BP. *Weighted priority below T* mixes sufficientarian and prioritarian intuitions by referring to a threshold and prioritizing the worse off below the threshold. And even sufficientarian views that do not give weighted priority below the threshold are variants of BP, as long as they give some kind of priority to those below the threshold.

However, there are also sufficientarian views incompatible with prioritarianism. Consider a headcount sufficiency view which proposes that the number of those reaching the sufficiency threshold should be maximized. In a scenario with a threshold of 100 units, it implies that we would rather want to benefit someone who has 99 units by 1 unit than benefitting someone who has 1 unit by 98 units. Most people, including committed sufficientarians, regard this as implausible (except for triage scenarios).[53] But more importantly here, this view is incompatible with prioritarianism, because it implies giving greater weight to benefitting the better off in some cases.

So, BP does not necessarily need to be contrasted with other views in distributive justice. The prioritarian family of views in distributive justice are those views that

[53] Liam Shields has labelled this the 'excessive upward transfers objection' (2012, p. 103). See also Arneson 2000a, pp. 56–57 and Brighouse and Swift 2009, pp. 125–126.

take the idea serious that benefitting people matters more the worse off they are.[54] Just like some sufficientarian views are prioritarian while other are not, and this also holds for utilitarianism and egalitarianism. For instance, we may describe NP as a mixture of the core ideas of utilitarianism (maximizing utility) and BP (benefitting the worse off matters more), since it combines maximization with giving greater weight to the worst-off. Similarly, an egalitarian conception may be broadly prioritarian but collide with NP. For instance, Rawlsian egalitarianism may be considered as a mixture of prioritarianism (lexical priority) and egalitarianism (fair equality of opportunity).[55] The relation between prioritarianism and other views of justice may thus be illustrated as follows:

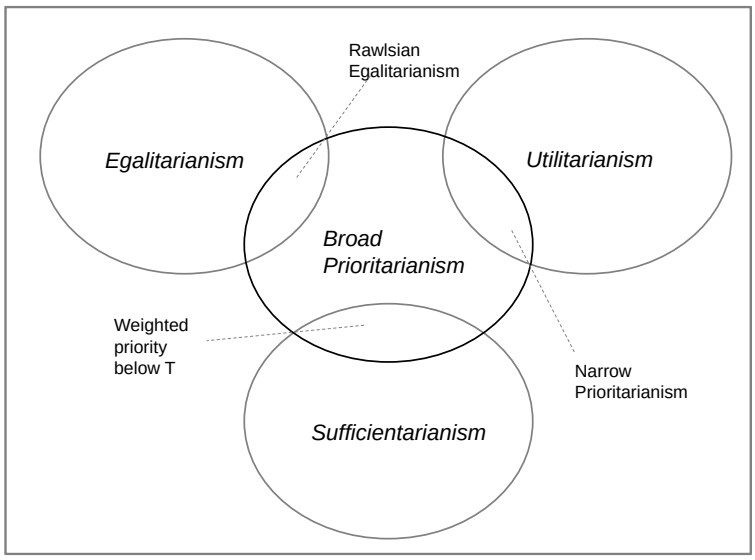


Figure 4. Broad and narrow prioritarianism in distributive justice[56]

[54] I do not discuss this here, there may also be deontological variants—Parfit himself again points to this possibility (Parfit 2000, p. 101). See also Williams 2012 for a defense of deontic prioritarianism.

[55] Even though admittedly the relation between these two strains in Rawls' position is not entirely clear (Daniels 2003).

[56] Note that I do not want to claim here that could be no mixed views between the other views (e.g. egalitarianism and utilitarianism) in distributive justice, even though this is what the graph seems to suggest. It is beyond scope to discuss this here. Further, note that the size of the circles and their overlap does not entail anything about the quantity of views affected—that is, I do not want to claim that there more prioritarian variants of sufficientarian than non-prioritarian variants.

Thus, NP and BP are situated in distributive justice as follows: narrow prioritarianism is a mixture of utilitarianism and BP. It is a broadly utilitarian view but clashes with classical utilitarianism on weighting; and it can be contrasted to egalitarianism and sufficientarianism by its dismissal of the respective mode (equalizing and satisficing). BP, however, is compatible with some variants of sufficientarianism, utilitarianism and egalitarianism but clashes with others.

The idea of priority is thus considerably broader than often thought. To defeat BP, it does not suffice to defeat a particular variant of it (NP). Thus, it needs to be examined if arguments leveled at NP apply to BP as well.[57] In general, one needs to argue against the very plausibility of the prioritarian intuition to defeat BP, namely that the idea that the worst off have greater weight under some circumstances. This intuition should receive more attention, both in clarifying and defending it.

Conclusion

This article has outlined an alternative understanding of prioritarianism. In the recent literature, (narrow) prioritarianism is understood as the view in distributive justice that calls for maximizing overall utility adjusted by diminishing marginal moral weight. In contrast, I suggest to understand prioritarianism more broadly as referring to views that are developed in light of the prioritarian intuition that benefitting people matters more the worse off these people is. The minimal condition for broad prioritarianism is that benefits to the worse off are given greater weight in some cases, while benefits to the better off never receive greater weight.

[57] As, e.g., the argument in Otsuka and Voorhoeve 2009 that NP cannot account for an intuitively plausible differentiation between intra- and interpersonal cases that are structurally analogous.

I have argued that one cannot infer the narrow from the broad prioritarian view on conceptual, systematic or exegetical grounds. This has the implication that arguments launched at narrow prioritarianism do not necessarily defeat the view as such. Further, the contrast to other views in distributive justice becomes weaker, as there exist sufficientarian, utilitarian and egalitarian views that are broadly prioritarian. As a matter of fact, narrow prioritarianism itself is a mixture of utilitarianism and broad prioritarianism.

Finally, the prioritarian intuition as captured by broad prioritarianism deserves more attention. It seems clear that the intuition has strong force but it is by no means universally accepted. Various views within distributive justice violate the intuition and, maybe surprisingly, little has been said to explicate and defend it. This article, then, will hopefully be instrumental in triggering a broader discussion on this matter.

References

Arneson, R.J., 2000a. Perfectionism and Politics. *Ethics,* 111 (1), 37–63.

Arneson, R.J., 2000b. Welfare Should Be the Currency of Justice. *Canadian Journal of Philosophy,* 30 (4), 497–524.

Arneson, R.J., 2006. Distributive Justice and Basic Capability Equality: 'Good Enough' Is Not Good Enough. *In:* A. Kaufman, ed. *Capabilities equality. Basic issues and problems.* New York, London: Routledge, 17–43.

Axelsen, D.V., and Nielsen, L., 2014. Sufficiency as Freedom from Duress. *Journal of Political Philosophy. Available from:* http://onlinelibrary.wiley.com/doi/10.1111/jopp.12048/abstract.

Benbaji, Y., 2005. The Doctrine of Sufficiency: A Defence. *Utilitas,* 17 (03), 310–332.

Benbaji, Y., 2006. Sufficiency or Priority? *European Journal of Philosophy,* 14 (3), 327–348.

Bovens, L., 2015. Concerns for the poorly off in ordering risky prospects. *Economics and Philosophy,* 31 (03), 397–429.

Brighouse, H., and Swift, A., 2009. Educational Equality versus Educational Adequacy: A Critique of Anderson and Satz. *Journal of Applied Philosophy,* 26 (2), 117–128.

Broome, J., 1991. *Weighing goods. Equality, uncertainty and time*. Oxford: Blackwell.

Broome, J., 2015. Equality versus priority: a useful distinction. *Economics and Philosophy,* 31 (2), 219–228. Available from: http://users.ox.ac.uk/~sfop0060/pdf/equality%20versus%20priority.pdf.

Byron, M., ed., 2004. *Satisficing and maximizing. Moral theorists on practical reason*. Cambridge, New York: Cambridge University Press.

Casal, P., 2007. Why Sufficiency Is Not Enough. *Ethics (*117), 296–326.

Cohen, G.A., 1990. Equality of what? On welfare, goods, and capabilities. *Recherches Économiques de Louvain / Louvain Economic Review,* 56 (3/4), 357–382.

Crisp, R., 2003. Equality, Priority, and Compassion. *Ethics,* 113 (4), 745–763.

Daniels, N., 2003. Democratic Equality: Rawls's Complex Egalitarianism. *In:* S. Freeman, ed. *The Cambridge Companion to Rawls.* Cambridge: Cambridge University Press, 241–277.

Dorsey, D., 2008. Toward a theory of the basic minimum. *Politics, Philosophy & Economics,* 7 (4), 423–445.

Dorsey, D., 2014. Equality-tempered prioritarianism. *Politics, Philosophy & Economics,* 13 (1), 45–61.

Driver, J., 2014. The History of Utilitarianism. *In:* E.N. Zalta, ed. *The Stanford Encyclopedia of philosophy*.

Fleurbaey, M., 2015. Equality versus Priority: How relevant is the distinction? *Economics and Philosophy,* 31 (02), 203–217.

Frankfurt, H., 1987. Equality as a Moral Ideal. *Ethics (*98), 21–43.

Freiman, C., 2012. Why Poverty Matters Most: Towards a Humanitarian Theory of Social Justice. *Utilitas,* 24 (01), 26–40.

Gauthier, D.P., 1986. *Morals by agreement*. Oxford: Clarendon.

Gosseries, A., 2011. Sufficientarianism. *In:* E. Craig, ed. *Routledge Encyclopdia of Philosophy.* London: Routledge.

Greaves, H., 2015. Antiprioritarianism. *Utilitas,* 27 (01), 1–42.

Hirose, I., 2015. *Egalitarianism*. New York: Routledge.

Huseby, R., 2010. Sufficiency: Restated and Defended. *Journal of Political Philosophy,* 18 (2), 178–197.

Jensen, K., 2003. What is the difference between (moderate) egalitarianism and prioritarianism? *Economics and Philosophy,* 19 (1), 89–109.

Lamont, J., and Favor, C., 2012. Distributive Justice. *In:* E.N. Zalta, ed. *The Stanford Encyclopedia of Philosophy*.

McCarthy, D., 2006. Utilitarianism and Prioritarianism I. *Economics and Philosophy,* 22 (03), 335.

McCarthy, D., 2008. Utilitarianism and Prioritarianism II. *Economics and Philosophy,* 24 (01).

Nagel, T., 1979. *Mortal questions*. Cambridge / New York: Cambridge University Press.

Nozick, R., 1974. *Anarchy, state, and utopia*. New York: Basic Books.

Otsuka, M., 2015. Prioritarianism and the Measure of Utility. *Journal of Political Philosophy,* 23 (1), 1–22.

Otsuka, M., and Voorhoeve, A., 2009. Why It Matters That Some Are Worse Off Than Others: An Argument against the Priority View. *Philosophy & Public Affairs,* 37 (2), 171–199.

Pakaslahti, A., 2014. *The rejection of priortarianism*. Turku: Juvenes Print.

Parfit, D., 2000. Equality or priority? *In:* M. Clayton and A. Williams, eds. *The Ideal of Equality.* Basingstoke, 81–125.

Parfit, D., 2012. Another Defence of the Priority View. *Utilitas,* 24 (03), 399–440.

Porter, T., 2011. Prioritarianism and the Levelling Down Objection. *Ethical Theory and Moral Practice,* 14 (2), 197–206.

Rawls, J., 1971. *A theory of justice*. Cambridge, Mass: Belknap Press.

Sen, A., 1979. Utilitarianism and Welfarism. *The Journal of Philosophy,* 76 (9), 463.

Sen, A.K., 1980. Equality of what? *In:* S. McMurrin, ed. *Tanner Lectures on Human Values.* Cambridge: Cambridge University Press.

Shields, L., 2012. The Prospects for Sufficientarianism. *Utilitas,* 24 (01), 101–117.

Vallentyne, P., 2000. Equality, efficiency, and the priority of the worse-off. *Economics and Philosophy,* 16 (1), 1–19.

Voorhoeve, A., 2014. How Should We Aggregate Competing Claims? *. *Ethics,* 125 (1), 64–87.

Widerquist, K., 2010. How the Sufficiency Minimum Becomes a Social Maximum. *Utilitas,* 22 (04), 474–480.

Williams, A., 2012. The Priority View Bites the Dust? *Utilitas,* 24 (03), 315–331.

III

Article III

Eco-Sufficiency and Distributive Sufficientarianism – Friends of Foes?

Forthcoming in:

Environmental Values (accepted February 12th, 2016).

Attached here is the online preview version of the Article. This version is available at:

http://www.whp-journals.co.uk/EV/papers/Kanschik.pdf

An earlier draft of the Article was presented at *Societas Ethica's* 52nd annual conference in Linköping (Sweden), 20th-23rd August 2015. The paper was awarded as the best paper presented by a young scholar during the conference.

Forthcoming in *Environmental Values* ©The White Horse Press http://www.whpress.co.uk

Eco-sufficiency and Distributive Sufficientarianism – Friends or Foes?

PHILIPP KANSCHIK

The notion of sufficiency has recently seen some momentum in separate discourses in distributive justice ('sufficientarianism') and environmental discourse ('eco-sufficiency'). The examination of their relationship is due, as their scope is overlapping in areas such as environmental justice and socio-economic policy. This paper argues that the two understandings of sufficiency are incompatible because eco-sufficiency takes an extreme perfectionist view on the good life while sufficientarianism is committed to pluralism. A plausible explanation for this incompatibility relates to two different meanings of the term sufficiency as a limit (eco-sufficiency) and a minimum requirement (sufficientarianism).

Key words: eco-sufficiency, distributive sufficientarianism, environmental justice, good life

Introduction

Since the 1990s, the concept of eco-sufficiency is discussed in the ecological sphere, e.g. by ecological economists, climate activists, sustainability scientists and green think tanks.[1] In a nutshell, advocates of eco-sufficiency and related views (e.g., degrowth, steady-state economics, environmental virtue ethics) demand that individuals, states and humanity as a whole adopt a lifestyle of material simplicity that reduces resource consumption to a level that respects the earth's ecological boundaries.

However, environmental discourse is not the only field where discussion on sufficiency has intensified. Introduced by Harry Frankfurt in the 1980s, a number of authors in distributive justice have recently endorsed the doctrine of sufficientarianism.[2] In a nutshell, sufficientarianism holds that securing enough of some good(s) for every-

[1] See, for example, Daly, 1996; Princen, 2005; Schneidewind et al, 2013; Salleh, 2009; Lamberton, 2005; Sachs, 2009.

[2] See, for example, Axelsen and Nielsen, 2014; Shields, 2012; Huseby, 2010; Page, 2007. For criticism, see Casal, 2007. The notion of sufficiency was introduced to distributive justice in Frankfurt, 1987.

one is of special importance. Once everyone has secured enough, no (or at least weaker) distributive criteria apply to additional benefits.

Both of these views are based on the notion of sufficiency and are relatively young. However, the two discourses have been entirely separated so far and their relationship remains unexamined. Now, one may wonder why such an examination would be worthwhile. It may seem that the two doctrines are unrelated. That is, they may seem to be about entirely different issues despite (more or less coincidentally) using the term 'sufficiency'. Such multiple usage of philosophical terms is not uncommon; consider for example 'constructivism' in political science, epistemology or art, or 'relativity' in physics and metaethics. There is typically little interest in comparing these usages, as there are no overlapping issues.

However, distributive sufficientarianism and eco-sufficiency relate to a substantial set of common issues. We shall see that eco-sufficiency makes a number of normative claims, in particular related to environmental, climate and economic justice (section I). That is, the doctrine relates to questions of applied distributive justice. On the other hand, sufficientarianism's plausibility as a theory of distributive justice hinges in part on such applied issues, since a plausible theory should not only be good in theory but also in practice.[3] Yet, sufficientarianism has been mainly discussed on a theoretical level so far.[4] Consequently, both doctrines overlap when it comes to environmental and economic applications of distributive justice.

Now, if this is the case, what is the relationship between the two views? *Prima facie*, there are some common elements. Both are thresholdist approaches, i.e. they claim that distributive justice is structured by thresholds with normative content. Other

[3] Lamont and Favor, 2013: 9.

views in distributive justice like egalitarianism or prioritarianism will ascribe instrumental value to thresholds at most. Further, adherents of both views refer to perfectionism, i.e. the idea that some human states, activities and relationships are intrinsically good independently from the welfare they may bring. Perfectionism is used to specify and justify the respective thresholds.[5] Additionally, one finds the idea of saturation in the literature on both views, namely the claim that having more material goods ceases to matter beyond some point.[6] Finally, there is a strong tendency to prioritise the worst-off. Many sufficientarians hold that benefitting those below the threshold always outweighs benefitting those above the threshold, irrespective of the quantity of benefits involved.[7] This is much in line with eco-sufficiency advocates arguing that the priority of poverty alleviation implies alleviating excess, resource-intense benefits for the rich.[8]

An example to make this apparently common set of beliefs more vivid is the distinction between subsistence and luxury emissions.[9] The distinction implies that there is a *threshold* that demarcates two kinds of emissions. This threshold is justified by reference to what is *intrinsically important* for human beings (subsistence needs), and by referring to the irrelevance of emissions beyond *saturation* (luxury emissions). Finally,

---

[4] Exceptions to this are discussion on 'emissions sufficientarianism' (Meyer and Roser, 2006; Grasso, 2012; and Page, 2013).

[5] E.g., Axelsen and Nielsen, 2014, Princen, 2005.

[6] Frankfurt writes (1987: 39): "A contented person regards having more money as inessential to his being satisfied with his life. […]He is simply not much interested in being better off, so far as money goes, than he is. His attention and interest are not vividly engaged by the benefits which would be available to him if he had more money. He is just not very responsive to their appeal."
In a similar vein, Princen writes (2005: 140): "Human beings do not always want more. Goods may be good but more goods may not be better. […]Human beings do not choose to consume more and more if the trade-off is between, on the one hand, unpleasant, meaningless, unrewarding yet monetarily compensated work and, on the other, pleasant, meaningful, and rewarding work, whether or not monetarily compensated."

[7] For example, sufficientarians have argued that we should relieve the pain of a small group of poor people (thereby bringing them to sufficiency) rather than providing a piece of chocolate to a very large group of rich people well above sufficiency (Widerquist, 2010: 475; Crisp, 2003; Benbaji, 2005).

subsistence emissions have *strict priority* over luxury emissions. On all this, most advocates of both eco-sufficiency and sufficientarianism agree.

Thus, there seem to be substantial similarities between both views. It could be helpful for both of these young and not much 'canonised' views to join forces. On the one hand, eco-sufficiency makes strong normative claims and could find a theoretical foundation in sufficientarianism. On the other hand, sufficientarianism has been accused for being ambiguous about its practical implications;[10] additionally, it receives little attention outside of academic philosophy. An association with eco-sufficiency could establish sufficientarianism in a wider, more practical context.

However, I shall argue in this article that the two sufficiency doctrines are incompatible due to their conflicting understanding of the good life. A three-step argument establishes this claim. First, the strong perfectionist base of eco-sufficiency is uncovered (section I). Next, it is demonstrated that sufficientarianism involves a commitment to pluralism (section II). Finally, I argue that it is impossible to reconcile these two positions as they stand, i.e. distributive sufficientarianism's pluralism cannot be reconciled with the extreme perfectionism entailed by eco-sufficiency (section III).

The argument applies to the understanding of eco-sufficiency and sufficientarianism as typically discussed in the respective literature and in theoretically interesting, although not necessarily all logically possible variants. Even more fundamentally, the incompatibility of sufficientarianism and eco-sufficiency is of a conceptual nature given that it can be traced back to two different meanings of 'sufficiency'.

If the argument proves successful, it establishes that distributive sufficientarianism and eco-sufficiency have to be carefully distinguished in discussions on envi-

---

[8] E.g., Sachs, 2009: 205.
[9] The distinction goes back to Shue, 1993.

ronmental justice, socio-economic policy and elsewhere. Besides that, this article should be of interest to anyone only concerned with the normative foundation of eco-sufficiency (section I) or the relation of sufficientarianism and theories of the good life (section II).

I. Eco-sufficiency and perfectionism

A diverse group of academics has been writing on eco-sufficiency, typically approaching the topic from various angles and fields. Since there is no widely shared definition of eco-sufficiency, I introduce the doctrine here in a systematic manner by briefly outlining its key claims concerning ecology, consumption and normative aspects that can be found throughout the literature.

Advocates of eco-sufficiency start from the conviction that the ecological capacity of the world to cater for human needs is limited. The current economic system overstresses and will, if there are no major changes, continue to overstress this capacity.[11] Undesirable mid- and long-term consequences of this will be climate change, pollution, reduction of fertile land and biodiversity, a declining amount of fresh water and an increase of natural catastrophes.

Most sustainability advocates subscribe to this view. However, what distinguishes eco-sufficiency from other sustainability doctrines is the claim that a modification and reduction of consumption is the only feasible strategy to realise ecological sustainability.[12] According to proponents of eco-sufficiency, alternative strategies only

---

[10] See Casal, 2007: 312 – 314.

[11] Sometimes, the idea of an ecological capacity of the planet is spelled out in terms of the concept of an 'ecological footprint' (Global Footprint Network, 2010). I shall have something like the footprint concept in mind when referring to the overconsumption of ecological capacities in what follows.

[12] In economics, related views are sometimes discussed under the label of 'steady-state economics' or 'de-growth', see, e.g., Kerschner, 2010 or Alexander, 2013. These views typically

involving *efficiency* measures (realising current consumption with fewer resources, e.g. introducing cars with lower fuel consumption) are doomed to fail, because they are unlikely to reduce the consumption of ecological resources sufficiently and / or quick enough. The same holds true for *consistency* measures (realising current consumption with environmentally non- or less harmful technologies, e.g. substituting fuel-powered cars with electric cars), or a mix of efficiency and consistency. According to sufficiency advocates, the problem with efficiency is that it is subject to the rebound effect: increased efficiency typically frees up monetary resources, which are used for other kinds of consumption. Hence, overall resource consumption is hardly or not at all reduced. Consistency measures, on the other hand, will not be available soon enough at large scale and further be resource-heavy in some cases (e.g., rare earth elements needed for renewable energy technologies, land consumption of solar panels).

Within the ecology and consumption dimensions as outlined above, advocates of eco-sufficiency mainly make empirical claims, which I shall not investigate here.[13] However, proponents of eco-sufficiency typically combine these claims with the normative claim that individuals, states and humanity as a whole need to adopt a lifestyle of material simplicity ('sufficiency') to reduce resource consumption to a level that respects the earth's ecological capacity. The rationale behind this is that reducing consumption—done in the right way—does not necessarily decrease but may rather increase quality of life. Understood as such, an eco-sufficient lifestyle is not a demand of justice. Instead, advocates of eco-sufficiency hold perfectionist views about the good life. Perfectionists argue that certain states or activities of human beings are good inde-

---

correspond to eco-sufficiency as presented here. Further, the idea of eco-sufficiency has much in common with environmental virtue ethics (Sandler and Cafaro, 2005). In particular, it resembles the virtue of simplicity (Gambrel and Cafaro, 2010).

pendently from the welfare they may bring, and we have reasons to promote the realisation of these states. Typically, such views are grounded in some kind of understanding of what is essential to human nature but can also be grounded in some other explanation why a certain good, state or activity is objectively good.[14]

Human nature perfectionism is readily detectable in writings on eco-sufficiency. Princen, for example, argues that it is the true nature of human beings to work and consume no more than enough and that the recognition of this true nature should guide our attempts to reform our economic system.[15] Eco-sufficient consumption involves less, different and more conscious consumption and a greater and more nuanced appreciation of non-material and material goods. Yet, it does not imply the rejection of technology and material goods or a self-inflicted life in poverty. A simplicity-based, self-restraining lifestyle should be aimed at for its own sake, but is prevented by the current organisation of the economy according to eco-sufficiency advocates. In this sense, human nature is suppressed by a 'more is better' thinking. In an ideal, unsuppressed environment, human being would work just enough and would live more fulfilling lives.

I shall not explore the validity of this view here but just note that it is quintessentially perfectionist in ascribing value to an essentialist ideal of human nature. Like most perfectionist accounts, it also includes the transition from a perfectionist ethics to a

---

[13] See Alcott, 2008; and Figge et al, 2014 for criticism of sufficiency, in particular the claim that sufficiency measures are also subject to the rebound effect.

[14] See Hurka, 1993: 3 – 5. Perfectionism can be distinguished from hedonism and desire theory, but also from other objective list theories (Wall, 2012). Going back to Derek Parfit, these categories have become standard to classify theories of the good life in ethics (Parfit, 1984, Crisp, 2013). Wall, 2012 further distinguishes between the 'human nature perfectionism' and 'objective goods perfectionism'. The latter does not refer to human nature, but provides some other explanation why a certain good, state or activity is intrinsically good.

[15] Princen, 2005: 140.

perfectionist politics, that is the claim that we should favour institutions and policies that promote what is central to human nature.[16]

Advocates of eco-sufficiency thus intertwine perfectionism with empirical convictions about ecology and consumption.[17] In other words: what is good in terms of essential human nature is also good for the ecology of the planet. However, eco-sufficientarian perfectionism is conceptually independent from ecological considerations. Imagine that 50 years from now, inexpensive renewable energies and advanced robotics made a life in material abundance possible for everyone without harming the planet's ecology at all. Even in such a scenario, perfectionist eco-sufficientarians would *prima facie* argue for limits of consumption and a life in modesty, simply because such a life would be better for everyone and society as a whole.

In spite of this conceptual independence, I shall argue that perfectionism is fundamental to the doctrine of eco-sufficiency. In what follows, I show why the doctrine should not be understood in empirical terms.

There are two ways in which one could interpret the doctrine of eco-sufficiency as primarily empirical, i.e. without reference to perfectionism or other normative frameworks. First, one could argue that eco-sufficiency mainly involves (empirical) claims about the impact of various sustainability measures, including the claim that efficiency and consistency measures do not suffice and the uncontroversial normative premise that the ecological capacity of the planet should be secured for future generations. Now, it is unclear which guidance such a view could offer to inform our policies

---

[16] For the connection between perfectionist value theory and perfectionist politics, see Wall, 2012 or Arneson, 2000.

[17] For example, see Sachs, 2009: 201: "Since it is necessary to change behaviour and the way people relate to goods and services, eco-sufficiency is closely connected with what has been known since antiquity as the 'due measure', the good life, the art of living. And it may well be that the reasons for eco-sufficiency also stem from that wise ancient maxim: 'Nothing in excess'."

to save the ecological capacity of the planet beyond the moral demand to just safe it *somehow* by reducing consumption. The tricky task is to determine *who* should take an action *to what extent* in this process—normative frameworks are needed to supplement empirical claims to offer specific guidance. Advocates of eco-sufficiency do take a stance on such issues and consequently need some supplementing normative framework.

Secondly, one could argue that eco-sufficiency advocates mainly make a statement about the relation between welfare and consumption, (empirically) arguing that less consumption has a positive impact on welfare at least for a substantial number of circumstances and people. Within welfare economics, the concept of welfare typically includes reference to preferences, utility and welfare maximisation. Such a framework is not free from normative premises. Yet, the normative judgment of a sufficiency lifestyle would still depend by large on empirical investigations, i.e. the truth of the claim that a simpler lifestyle with less consumption has a positive impact on welfare. And indeed, there is some evidence that this is the true to at least some extent.[18] In this case, individuals will be likely to voluntarily convert to eco-sufficiency, or with help of awareness campaigns.

However, this interpretation has unattractive implications for most advocates of eco-sufficiency. Within a welfarist framework, the claim that sufficiency increases welfare means that people (in a free society) actually choose sufficiency lifestyles voluntarily.[19] It is their actual choices which reflect that a sufficiency lifestyle increases welfare compared to materialist lifestyles. However, if individuals under free conditions choose materialist lifestyles, a welfare economist concludes that these lifestyles are bet-

[18] Princen, 2005: 125 – 155, Diener and Suh, 2000; Layard, 2005; Frey and Stutzer, 2002.

ter for their welfare. There is no sense in forcing sufficiency onto people. Rather, it would be perfectly reasonable to argue that those whose welfare increases with less consumption actually should be the first (and maybe only ones) to reduce consumption to protect the environment. Advocates of eco-sufficiency reject such reasoning. By advocating a lifestyle of sufficiency, they mean that such a lifestyle better suits human nature and hence would be good for all people, independently from choices that they actually make.[20] If people choose materialistic lifestyles, this reflects conditions of (hidden) oppression and duress, or plainly the inability to recognise the good.[21]

So, both examined empirical understandings of eco-sufficiency turn out to be inadequate. Further, the concept and idea of sufficiency would be redundant in both readings of eco-sufficiency, i.e. these hypotheses could be spelled without any references to sufficiency. Empirical claims about the effects of reduced consumption on the environment or welfare have no inherent relation to the notion of sufficiency. To illustrate this, let us look at Fischer and Grieshammer's understanding of eco-sufficiency as the 'modification of consumption patterns that help to respect the Earth's ecological boundaries while aspects of consumer benefit change'.[22] They hold that such a strategy involves measures that change consumption patterns and may potentially lead to welfare

---

[19] This includes a commitment to the concept of consumer sovereignty, which may in itself be incompatible with any sustainability theory (Menzel and Green, 2013).

[20] Of course, most environmentalists, including advocates of eco-sufficiency, acknowledge that many people are unlikely to voluntarily choose environmental lifestyles – without regarding this as an argument against their position (see, e.g. Claxton, 1994). My point here is simply that a welfarist, voluntarist conception of eco-sufficiency has no normative resources to criticise this.

[21] Now, there are welfarists who disagree with the view that *actual* preferences (or desires) should be the indicator for welfare. Such welfarists highlight the importance of *informed* preferences (Crisp, 2013). Materialists could then simply be uninformed in some sense. However, this would a severe restriction concerning the types of preferences or desires an agent may have or not, much stronger than rationality requirements. Clearly, such an understanding of informed preferences transcends empirical questions and traditional welfarist approaches.

[22] Fischer and Grieshammer, 2013: 10.

gains, even if consumption is reduced.[23] However, Fischer and Grieshammer explicitly want to refrain from any judgment whether this is better or worse in terms of a good life or overall welfare.[24] But what is it then, one may ask, that should guide this change of consumption patterns? Of all the possible ways to change consumption patterns, which one is to be preferred? And why would one call this a 'sufficiency' view, if this does not relate to any judgment about which level of consumption or welfare is *sufficient*?

So, it is hard to see how the doctrine of eco-sufficiency could be spelled out in empirical terms. There may be other potential normative foundations, but human nature perfectionism is the prevalent one in the current literature. It functions as the normative core of the doctrine from which justice-related and other normative claims are derived.[25] What advocates of eco-sufficiency thus propose is that the idea of a sufficiency lifestyle in terms of modesty and material simplicity should guide our policies towards removing threats and injustices related to the environment and economy.

II. Distributive sufficientarianism and pluralism

In this section, I investigate another understanding of sufficiency from distributive justice, namely the doctrine of sufficientarianism. Sufficientarianism was introduced to distributive justice by Harry Frankfurt in the 1980s. Most sufficientarians agree with Frankfurt that sufficientarianism is a fundamentally anti-egalitarian doctrine that denies any intrinsic, non-instrumental value of equality.[26] What matters instead is that everyone has enough—and we do not owe support to someone if they have enough of some good(s) x.

---

[23] See also Milbrath, 1993 for this claim.
[24] Fischer and Grieshammer, 2013: 10 – 11.
[25] E.g. in Sachs, 2009, Salleh, 2011, and Khosla, 2013.
[26] Frankfurt, 1987, Shields, 2012: 114, and Axelsen and Nielsen, 2014: 2.

This claim is often specified with a positive and negative thesis. The positive thesis states that there are weighty reasons to secure at least enough of some good(s) for everyone. In other words, some kind of threshold(s) specifies a certain level of some good(s) that should be provided to everyone. The negative thesis states that redistributive activity ends once this level of good(s) is provided to everyone. In that case, no further issues of justice arise.[27]

What is distinctive about all variants sufficientarianism compared to egalitarianism or utilitarianism is the claim that thresholds structure distributive justice and, consequently, that claims of justice are bounded. The highest sufficientarian threshold specifies the point at which considerations of justice cease to matter (as the negative thesis entails). The plausibility of this is often spelled out in 'Beverly Hills' or 'Buffett / Gates' scenarios where we would intuitively think that inequalities amongst the super-affluent should not matter at all from a justice point of view.[28]

Beyond these core claims, the doctrine of sufficientarianism requires a concretisation of the currency, level and number of sufficiency thresholds. I shall neither discuss these issues not criticism to the doctrine here.[29] Instead, I focus on how sufficientarianism relates to questions of the good life. This is, as we shall see later, where incompatibility with eco-sufficiency arises. I argue that all current variations of sufficientarianism im- or explicitly use some kind of reference to the good life in order to spell out and justify their thresholds. Further, I argue that they are committed to a specific kind of

---

[27] For different formulations of the theses, see Casal, 2007, and Axelsen and Nielsen, 2014. Shields, 2012 adopts a weaker version of the negative thesis.

[28] See Crisp, 2003 and Benbaji, 2005.

[29] See Shields, 2012, Axelsen and Nielsen, 2014, and Huseby, 2010. For a powerful critical stance, see Casal, 2007.

pluralism that is, or at least could be, combined with moderate, non-coercive perfectionism.[30]

Let me briefly illustrate this position with the case of Anna and Paul. Imagine that Anna wants to have a child and that Paul wants to achieve excellence in building houses of cards. Anna and Paul have identical overall welfare levels. Further, let us assume that satisfying their desires involves identical welfare gains. Intuitively, most of us would agree that Anna can claim that society should in some way support her plan, e.g. by providing child care infrastructure or some kind of financial support. Further, most of us would also agree that Paul cannot make such claims. Justice does not demand society to support Paul's plans to achieve excellence in building houses of cards. To be sure, this does not mean that we necessarily want to discourage him from his plans or coerce another path of life onto him. But supporting him does not seem to be within the scope of justice.

Such intuitions have been evoked elsewhere in literature on sufficientarianism and illustrate well what is attractive about the view.[31] As we shall see, virtually all sufficientarian approaches rely on some account of basic and commonly shared elements of a good life to demarcate the scope of justice. This helps to specify the scope of legitimate claims of justice (i.e. the threshold(s)) and prevents that demands of justice can be made based on expensive tastes or seemingly arbitrary individual conceptions of the good life (as in Paul's case).[32] In what follows, I shall investigate one example of each

---

[30] I borrow the notion of moderate perfectionism – as opposed to extreme perfectionism – from Chan, 2000.

[31] In particular, the Anna / Paul example has some aspects in common with the Succeedia / Squanderia example from Axelsen and Nielsen (2014: 5 – 7). However, their example defends a specific type of sufficientarianism, i.e. capabilities-based sufficientarianism, relates to societies rather than individuals, and concerns not only the scope of justice but also what is morally better.

[32] For a discussion of the problem of expensive tastes, see Kymlicka, 1989.

established variant of sufficientarianism (capabilities, needs, contentment and welfare) and their relationships to theories of the good life.[33]

Now, starting with capabilities sufficientarianism, it is fairly obvious that some kind of theory of good life functions as the doctrine's values base. Axelsen and Nielsen, proponents of this type of sufficientarianism, argue that there are various (horizontal, i.e. incommensurable) sufficientarian thresholds grounded in capabilities that represent central areas for human life.[34] Obviously, this involves some kind of idea about what is important for a good life and what is not. Additionally, such a position appears to be moderately perfectionist, in allegedly privileging some paths of life from a point of view of justice.

Yet, the kind of pluralism introduced above is also easily detectable. Axelsen and Nielsen explicitly affirm that a minimum threshold is to be provided in *several* central areas of life. The areas and the capabilities relating to them should always remain open to discursive refinement, based on whether they indeed enable people to choose and realise multiple, individualised life paths or not. Looking at the Anna / Paul case, capabilities-based sufficientarianism would imply that having a child is in some way related to something essential about human life. Yet, Paul's interest in building houses of cards is not connected to central areas of human life—hence, he cannot make a claim of justice.

The same combination of pluralism and perfectionism can be detected in needs sufficientarianism. Edward Page, a proponent of such an account, suggests to concretise

---

[33] I discuss one paradigmatic proponent of each camp: Axelsen and Nielsen, 2014 for capabilities; Crisp, 2003 for welfare; Frankfurt, 1987 for contentment; and Page, 2007 for needs. I neither systematically discuss these approaches here, nor do I claim that this is the only or most reasonable classification of sufficientarian positions beyond the questions addressed here. Some sufficientarians mix the approaches (e.g. Benbaji, 2005 or Huseby, 2010) or remain neutral to questions of value (Shields, 2012), but this shall not concern us here.

[34] Axelsen and Nielsen, 2014: 4 – 8.

sufficiency thresholds with reference to universal basic needs at all times and places, as fulfilling these needs avoids harm. Page identifies the absence of harm with the capacity to be an autonomous rational agent and fully functioning member of society.[35] His account remains sketchy; yet, Page has to specify universal needs in terms of a theory of the good life. Needs-based sufficientarianism is most naturally—and plausibly—spelled out by combining pluralism (given the emphasis on autonomy) and moderate perfectionism (given the emphasis on universal human needs).

Let us now examine contentment-based sufficientarianism, the type of sufficientarianism initially introduced by Harry Frankfurt. Is such a view based on the same combination of pluralism and moderate perfectionism? Frankfurt claims that a person has sufficient monetary resources if she is content with the money she has, or if it is reasonable for her to be content with this amount. A contented person, Frankfurt holds, regards having more money as inessential for being satisfied with her life.[36]

Axelsen and Nielsen have argued that contentment-based sufficientarianism cannot be pluralist given that it associates quality of life only with one aspect of human life, i.e. contentment.[37] However, note that contentment by large depends on individual assessments.[38] This leaves a wide open space for different conceptions of the good life, given that individuals assess the goodness of their lives by very different standards. So, this type of sufficientarianism clearly is pluralist in the sense relevant here.

Further, Axelsen and Nielsen criticise that contentment-based sufficientarianism cannot justify a different judgment in cases like the Anna / Paul case.[39] This undermines the sufficientarian conviction that justice is bounded (spelled out in the negative thesis).

---

[35] Page, 2007: 16 – 17.
[36] Frankfurt, 1987: 37 – 39.
[37] Axelsen and Nielsen, 2014: 12.
[38] See also Huseby, 2010: 181.

Ensuring a minimum contentment level for anyone, regardless of what generates this contentment, opens the door for arbitrary, expensive desires like Paul's. This would make sufficientarianism practically unbounded because even in Beverly Hills-like community, people could make claims of justice.[40]

However, contentment sufficientarians restrict the scope of justice in a similar way as capabilities sufficientarians—Frankfurt after all indeed speaks of being *reasonably* content. Some individual preconditions of contentment, like Paul's, can thus be unreasonable. The reasonability formulation allows to establish the boundaries of justice in much the same way as in the above varieties of sufficientarianism. Arguably, Frankfurt does not dig deeper into the questions of what might be or might not be (reasonably) important for people's lives.[41] Moderate perfectionism, however, would at least be one option here, given that perfectionists often consider the development of rationality a perfectionist good.[42]

Much the same holds for the last type of sufficientarianism that can be found in the literature: welfarist sufficientarianism. Welfarist thresholds specify a level of welfare at which distributive demands cease to matter. Now, what could be the reasons to privilege a particular welfare level? Roger Crisp, a welfare sufficientarian, holds that considerations of justice cease to matter at the level of welfare at which an impartial spectator lacks compassion.[43] This, according to Crisp, is the case if someone's life is sufficiently good based on assessments of her life as a whole or her situation at the time of assessment.

---

[39] Axelsen and Nielsen, 2014: 6.
[40] See also Widerquist, 2010.
[41] Frankfurt discusses this in other writings, but not with reference to sufficiency thresholds. See, for example, Frankfurt, 1988.
[42] Wall, 2012.
[43] Crisp, 2003: 758 – 760.

Looking at the Anna / Paul case again, welfarist sufficientarianism faces the same challenge as contentment sufficientarianism. Anna and Paul have identical welfare levels and the fulfilment of their desires involves identical welfare gains. This means that welfarists would not judge these cases differently.

However, the concept of compassion allows for a differentiating judgment in the same sense as the concept of reasonability does for contentment sufficientarianism. Most of us feel compassion for Anna if she were unable to have children due to some kind of external circumstances that are not her own fault. Depending on what these circumstances are, we acknowledge that this entitles her to claims of justice. However, few of us feel a similar level of compassion with Paul if he cannot realise his passion for achieving excellence in building houses of cards—even if this is due to circumstances that are not his own fault. So, despite identical welfare levels, the notion of compassion (or some other extra ingredient with a objectivist flavour) allows differentiating between the cases.[44] Such notions may be moderately perfectionist in a sense that they relate to what is central about human life.

Now, I cannot discuss here if welfarist (and contentment) sufficientarians *should* combine their views with such concepts.[45] But I want to point out here that these variants of sufficientarianism are not only pluralist but allow for a good-life-restricted pluralistic reading.

---

[44] An alternative to Crisp's compassion welfarism is Dale Dorsey's idea, according to which someone maintains the basic minimum threshold if she achieves or maintains a valued project (Dorsey, 2012: 53). Like Crisp, Dorsey adds another notion with an objectivist (and potentially perfectionist) flavour to filter out some sources of welfare as elements of the basic minimum.

[45] Crisp may be interpreted as rejecting this, given that he emphasizes that the impartial spectator feels compassion exactly in proportion to levels of overall welfare (Crisp, 2003: 761). But one may wonder why he then uses the concept of compassion at all—and in a sense that greatly differs from how we normally understand the term.

So, it turns out that all varieties of contemporary sufficientarianism spell out (or could at least plausibly spell out) the notion of sufficiency with a particular combination of pluralism and moderate perfectionism. That is, sufficientarianism aims at providing the basis for a decent life for everyone, but it is not 'maximising' in any sense. The fulfilment of the highest sufficientarian threshold should enable individuals to realise a broad bundle of conceptions of the good life. It leaves it to individuals what to do with this. In this sense, sufficientarianism is a distinctively pluralist doctrine.[46] Objectivist or perfectionist elements are not coercive, but define the boundaries of justice, i.e. what can be claimed in terms of justice and what cannot.

III. The incompatibility between distributive sufficientarianism and eco-sufficiency

In section I, I have argued that advocates of eco-sufficiency are committed to a perfectionist view about the good life spelled out in terms of material simplicity. Then, I have held that available distributive sufficientarian doctrines are pluralistic (section II). Now, despite the fact that both views draw on some kind of perfectionism (or are at least compatible with it), both doctrines are *theoretically* incompatible because sufficientarian pluralism cannot be reconciled with eco-sufficiency perfectionism.

We have seen that eco-sufficiency draws from human nature perfectionism. Like eco-sufficiency, some varieties of sufficientarianism relate to perfectionism, while others at least could be interpreted in that way.[47] However, following the terminology used by Joseph Chan, one could say that eco-sufficiency is founded on an *extreme* perfec-

[46] There has been some consensus that perfectionism and pluralism are not necessarily antagonists, see Wall, 2012 or Arneson, 2000.

[47] Let me note that, unlike for eco-sufficiency, this can but does not have to be human nature perfectionism. But this alone does not establish incompatibility, because human nature perfectionism *could* justify a sufficientarian threshold.

tionist conception of the good life.[48] Extreme perfectionism is coercive in ranking ways of life and state-centred in viewing the state as the primary agent promoting the good life. In case of eco-sufficiency, this means that modifications in consumption should be guided by the idea that a certain form of life is better than others and that coercive political action is derived from this.

This kind of perfectionism cannot be reconciled with sufficientarian pluralism. Distributive sufficientarianism holds that we owe each other from a justice point of view that everyone is able to choose from a variety of options for a good life. In particular, sufficientarianism does not involve a negative judgment on materialist conceptions of the good life. There is no reason to a priori discriminate against such accounts, i.e. to coerce people onto different paths of life. To put it differently: sufficientarians use their pluralist theory of the good life to define what ought to be provided to everyone but not how anyone should live. And where they refer to (moderate) perfectionism, this is to ensure the boundaries of justice but not to justify a political ideal.

This neither means that sufficientarians cannot take ecological considerations into account nor that sufficientarianism is incompatible with the *empirical* claims made by advocates of eco-sufficiency. The capacity of the planet's eco-system may in practice restrict the conceptions of a good life that can be attained within a sufficientarian regime. Further, sufficientarian thresholds should not be realised if this would have devastating consequences for the planet's ecological capacity.[49] In understanding ecological considerations as restrictions, sufficientarians need not be blind to such considerations without adopting the extreme perfectionism upheld by advocates of eco-sufficiency.

---

[48] Chan, 2000.
[49] Rendall, 2011: 246.

As they stand, eco-sufficiency and distributive sufficientarianism are incompatible. One objection against this claim is that one could modify the doctrines to make them compatible. For instance, sufficientarianism could be modified to include an ideal of material simplicity. Or, eco-sufficiency advocates could ascribe only instrumental value to the ideal of material simplicity. So, eco-sufficiency and sufficientarianism are only contingently incompatible but not incompatible in a more fundamental conceptual or even logical sense.

Now, I have argued above that some alternative understandings of sufficientarianism and eco-sufficiency are not plausible or run contrary to key premises of the respective doctrines. In this sense, the current readings of the doctrines are not contingent. Yet, indeed, I have not ruled out the possibility of finding other appropriate compatible interpretations of the doctrines. This leaves a theoretical incompatibility beyond current default variants of both doctrines unproven.

However, I believe that there is a conceptual reason why it is unlikely that compatibility can be established. The incompatibility between eco-sufficiency and sufficientarianism points to a deeper conceptual tension within the concept of sufficiency. Some readers may have wondered all along how two incompatible views based on the same core concept could have emerged. Does one of the two interpret the idea of sufficiency wrong? I do not believe that this is the case. Rather, a double meaning of the term sufficiency can explain the emergence of two incompatible sufficiency-related doctrines. These two different meanings were already recognised by Harry Frankfurt:[50]

> What does it mean, in the present context, for a person to have enough? One thing it might mean is that any more would be too much: a larger amount would make the person's life unpleasant, or it would be harmful or in some

> other way unwelcome. This is often what people have in mind when they say such things as "I've had enough!" or "Enough of that!" The idea conveyed by statements like these is that *a limit has been reached*, beyond which it is not desirable to proceed. On the other hand, the assertion that a person has enough may entail only that *a certain requirement or standard has been met*, with no implication that a larger quantity would be bad. This is often what a person intends when he says something like "That should be enough." Statements such as this one characterize the indicated amount as sufficient while leaving open the possibility that a larger amount might also be acceptable.

Frankfurt himself, like most other distributive sufficientarians, understands having enough in terms of meeting a *requirement* rather than a *limit*. For sufficientarians, having enough means that a sufficiency *minimum* should be provided to everyone. As long as this is the case, sufficientarians are indifferent about inequalities above the threshold (or think they only matter to a lesser degree). Advocates of eco-sufficiency, however, conceptualise sufficiency in terms of a *limit* that people should not exceed, which means that they are not indifferent to what happens above the threshold.

Thus, having enough can mean that no one should have more than 'x'— or that everyone should have at least 'x'. These two possible understandings of sufficiency explain how two incompatible doctrines under the same heading could have emerged. Note that Frankfurt's formulation is couched in a welfarist framework, which advocates of eco-sufficiency are unlikely to endorse (see section I). But a difference in currency does not matter from a conceptual point of view. A perfectionist advocate of eco-sufficiency is not committed to the claim that transgressing the threshold is bad for

---

[50] Frankfurt, 1987: 37, his italics.

someone's welfare. However, he would ultimately also hold that it is bad in some sense, e.g. because transgressing the threshold is an obstacle for achieving human excellence (in a sense of an excess of money corrupting human nature).[51]

Beyond this, the double meaning of sufficiency explains why the thresholds that both doctrines defend appear to be located at different levels (in terms of material resources). The limiting threshold of eco-sufficiency will hardly be demanding enough to satisfy a sufficiency minimum beyond which we should be indifferent to distributions. This, however, does not mean that both doctrines will always give incompatible recommendations. For scarce and finite goods like environmental resources, a limit view (eco-sufficiency) is compatible with a minimum understanding of thresholds (sufficientarianism) in some cases. For instance, if 20 per cent of the world population consume 80 per cent of global ecological resources, there may be too little left for the remainder of people (and future people) to reach the sufficiency minimum. Some kind of consumption limit is a potential means to secure (minimum) sufficiency to everyone and save the planet's ecological capacity. This also explains why both eco-sufficiency and sufficientarianism may endorse the distinction of subsistence and luxury emissions in practice.

However, theoretical incompatibility remains untouched by this example, because both doctrines have entirely different reasons for limiting consumption based on their different understanding of sufficiency. The limit only has instrumental value for distributive sufficientarians, i.e. its purpose ultimately is to make the realisation of the minimum threshold possible. A lower consumption by those above the limit is not valuable in itself and is only required if necessary to realise the sufficiency minimum for

[51] More generally, the conceptual difference holds under entirely different, non-normative circumstances. E.g. one could have *enough* gas to drive from A to B (minimum), or one

everyone. Yet, advocates of eco-sufficiency draw from a perfectionist theory of the good life that attaches intrinsic value to a lower consumption, irrespective of the consequences for those below the threshold. These views are not compatible.

IV. Conclusion

This article argues that the doctrines of distributive sufficientarianism and eco-sufficiency are theoretically incompatible, as they stand. The reason is that the two doctrines are based on incompatible views of the good life. On the one hand, eco-sufficiency advocates assume a perfectionist theory that emphasises material simplicity and defend the claim that it is in the nature of human beings (in a normatively relevant sense) to work and consume no more than enough. On the other hand, distributive sufficientarians believe that a sufficiency minimum should provide everyone with the opportunity to choose from a (pluralist) variety of conceptions of the good life.

The theories of good life behind these two views are theoretically incompatible; eco-sufficiency perfectionism and sufficientarian pluralism cannot be reconciled. Advocates of eco-sufficiency use a narrow ideal of human nature to demand and justify modifications in consumption. In contrast, sufficientarian pluralism refrains from any judgment about the goodness of lives beyond questions of justice and is not coercive. It draws from perfectionist considerations only in order to specify the boundaries and scope of justice. The deeper reason for the incompatibility can be traced back to two different meanings of the term 'sufficiency' which can either be understood in terms of a limit (eco-sufficiency) or in terms of a minimum (distributive sufficientarianism).

Given their theoretical incompatibility, both doctrines should be carefully separated when it comes to questions of environmental justice and socio-economic policy.

---

could have *too much* gas to fit in a car's gas tank (limit).

Advocates of eco-sufficiency have to seek theoretical foundation for their normative views elsewhere, not in sufficientarianism.[52] Additionally, the application of distributive sufficientarianism for practical economic and environmental questions needs to be handled in strict disassociation to eco-sufficiency.

---

[52] Ingrid Robeyns has recently introduced the doctrine of 'limitarianism' to distributive justice in a number of talks (unpublished as of now), which might provide a theoretical foundation of eco-sufficiency in the near future.

References

Alcott, B. 2008. 'The sufficiency strategy: Would rich-world frugality lower environmental impact?'. *Ecological Economics* **64**(4): 770–786.

Alexander, S. 2013. 'Voluntary Simplicity and the Social Reconstruction of Law: Degrowth from the Grassroots Up'. *Environmental Values* **22**(2): 287–308.

Arneson, R. J. 2000. 'Perfectionism and Politics'. *Ethics* **111**(1): 37–63.

Axelsen, D. V. and L. Nielsen. 2014. 'Sufficiency as Freedom from Duress'. *Journal of Political Philosophy*.

Benbaji, Y. 2005.'The Doctrine of Sufficiency: A Defence'. *Utilitas* **17**(03): 310–332.

Casal, P. 2007. 'Why Sufficiency Is Not Enough'. *Ethics* **117**: 296–326.

Chan, J. 2000. 'Legitimacy, Unanimity, and Perfectionism'. *Philosophy & Public Affairs* **29**(1): 5–42.

Claxton, G. 1994. 'Involuntary Simplicity: Changing Dysfunctional Habits of Consumption'. *Environmental Values* **3**(1): 71–78.

Crisp, R. 2003. 'Equality, Priority, and Compassion'. *Ethics* **113**(4): 745–763.

Crisp, R. 2013. 'Well-Being'. In Zalta, E. (ed.), *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/archives/spr2013/entries/well-being/ (accessed 21 October 2015).

Daly, H. E. 1996. *Beyond growth. The economics of sustainable development.* Boston: Beacon Press.

Diener, E. and E. M. Suh. 2000. *Culture and subjective well-being.* Cambridge (MA): MIT Press.

Dorsey, D. 2012. *The basic minimum. A welfarist approach.* Cambridge, New York: Cambridge University Press.

Figge F., Young W. and R. Barkemeyer. 2014. 'Sufficiency or efficiency to achieve lower resource consumption and emissions? The role of the rebound effect'. *Journal of Cleaner Production* **69**: 216–224.

Fischer, C. and R. Grieshammer. 2013. 'When less is more: Sufficiency: Terminology, rationale and potentials'. *Oeko-Institute Working papers* **2**.

Frankfurt, H. 1987. 'Equality as a Moral Ideal'. *Ethics* **98**: 21–43.

Frankfurt, H. 1988. *The importance of what we care about. Philosophical essays.* Cambridge, New York: Cambridge University Press.

Frey, B. S. and A. Stutzer. 2002. *Happiness and economics. How the economy and institutions affect well-being.* Princeton: Princeton University Press.

Gambrel, J. C., and P. Cafaro. 2010. 'The Virtue of Simplicity' *Journal of Agricultural and Environmental Ethics.* **23**(1-2): 85–108.

Global Footprint Network 2010. "Ecological Footprint Atlas 2010", http://www.footprintnetwork.org.

Grasso, M. 2012. 'Sharing the Emission Budget'. *Political Studies* **60**(3): 668–686.

Hurka, T. 1993. *Perfectionism.* Oxford, New York: Oxford University Press.

Huseby, R. 2010. 'Sufficiency: Restated and Defended'. *Journal of Political Philosophy* **18**(2): 178–197.

Kerschner, C. 2010. 'Economic de-growth vs. steady-state economy'. *Journal of Cleaner Production* **18**(6): 544–551.

Khosla, A. 2013. 'Beyond Rio: from green economy to green society'. In Schneidewind, U., Santarius T. and A. Humburg. (eds.), *Economy of sufficiency. Essays on wealth in diversity, enjoyable limits and creating commons,* pp. 14–24. Wuppertal: Wuppertal Institut für Klima, Umwelt, Energie.

Kymlicka, W. 1989. 'Liberal Individualism and Liberal Neutrality'. *Ethics* **99**(4): 883–905.

Lamberton, G. 2005. 'Sustainable sufficiency - an internally consistent version of sustainability'. *Sustainable Development* **13**(1): 53–68.

Lamont, J. and C. Favor. 2013. 'Distributive Justice'. In Zalta, E. (ed.), *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/archives/spr2013/entries/justice-distributive/ (accessed 21 October 2015).

Layard, P. R. G. 2005. *Happiness. Lessons from a new science.* New York: Penguin Press.

Menzel, S. and T. L. Green. 2013. 'Sovereign Citizens and Constrained Consumers: Why Sustainability Requires Limits on Choice'. *Environmental Values* **22**(1): 59–79.

Meyer, L. H. and D. Roser. 2006. 'Distributive Justice and Climate Change: The Allocation of Emission Rights'. *Analyse & Kritik* **28**: 223–249.

Milbrath, L. W. 1993. 'Redefining the Good Life in a Sustainable Society'. *Environmental Values* **2**(3): 261–269.

Page, E. A. 2007. 'Justice Between Generations: Investigating a Sufficientarian Approach'. *Journal of Global Ethics* **3**(1): 3–20.

Page, E. A. 2013. 'Climate Change Justice'. In R. Falkner (ed.), *The handbook of global climate and environment policy*, pp. 231–248. Chichester: Wiley-Blackwell

Parfit, D. 1984. *Reasons and persons.* Oxford: Clarendon Press.

Princen, T. 2005. *The logic of sufficiency.* Cambridge, MA: MIT Press.

Rendall, M. 2011. 'Non-identity, Sufficiency and Exploitation'. *Journal of Political Philosophy* **19**(2): 229–247.

Sachs, W. 2009. 'Fair Wealth: Pathways into Post-Development'. In E. Palosuo (ed.), *Rethinking development in a carbon-constrained world. Development cooperation and climate change*, pp. 196–206. Finland: Ministry for Foreign Affairs.

Salleh, A. 2009. *Eco-sufficiency & global justice. Women write political ecology.* London: Pluto Press.

Salleh, A. 2011. 'Climate Strategy: Making the choice between ecological modernisation or living well'. *Journal of Australian Political Economy* **66**: 124–149.

Sandler, R. L. and P. Cafaro. 2005. *Environmental virtue ethics.* Lanham, MD: Rowman & Littlefield Publishers.

Schneidewind, U., Santarius T. and A. Humburg. (eds.) 2013. *Economy of sufficiency. Essays on wealth in diversity, enjoyable limits and creating commons.* Wuppertal: Wuppertal Institut für Klima, Umwelt, Energie.

Shields, L. 2012. 'The Prospects for Sufficientarianism'. *Utilitas* **24**(01): 101–117.

Shue, H. 1993. 'Subsistence Emissions and Luxury Emissions'. *Law & Policy* **15**(1): 39–59.

Wall, S. 2012. 'Perfectionism in Moral and Political Philosophy'. In Zalta, E. (ed.), *Stanford Encyclopedia of Philosophy*, http://plato.stanford.edu/archives/spr2013/entries/perfectionism-moral/ (accessed 21 October 2015).

Widerquist, K. 2010. 'How the Sufficiency Minimum Becomes a Social Maximum'. *Utilitas* **22**(04): 474–480.

IV

Article IV

Ecological sufficiency, individual liberties, and distributive justice: Implications for policy making

Published in:

Ecological Economics (2016), Vol. 126, 42–50.

Doi: 10.1016/j.ecolecon.2016.03.019

Co-author: Peter Heindl, Centre for European Economic Research, Mannheim (ZEW)

Attached here is the accepted version.

Ecological Sufficiency, Individual Liberties, and Distributive Justice: Implications for Policy Making

- Abstract -

We investigate the prospects of voluntary ecological sufficiency for environmental and climate policy under the constraints implied by political liberalism. We find that freedom of choice restricts sufficiency to rather wealthy societies and that a sufficiency threshold cannot be derived by referring to the poor. Sufficiency can be in conflict with the demands of social justice, i.e. if the sufficiency threshold is below the social minimum implied by social justice. Benefits from sufficiency are highly related to individual perceptions. Such benefits cannot be expressed in a standard preference framework. Consequently, alternative measures of welfare and inequality are required if sufficiency is a significant phenomenon in society. 'Standard' environmental policies can have a pronounced interaction with voluntary sufficiency, i.e. if 'quantity regulation' is present. Overall, the voluntary notion of sufficiency causes a dilemma as sufficiency is largely a matter of civil society. However, voluntary sufficiency is expected to make important contributions to the preservation of ecological resources if properly balanced with social and environmental policies and framed by public discursive control.

Keywords: Ecological sufficiency; freedom; distributive justice; environmental policy; climate policy

***

1. Introduction

Ecological sufficiency (also abbreviated as 'sufficiency' in what follows) refers to a voluntary restriction of individual consumption motivated by ecological concerns. Behind the idea of sufficiency stands the compelling argument that the world's ecological resources are limited and that the current generation needs to assume responsibility for future generations and non-human species by preserving those resources. An eco-sufficient lifestyle implies assuming ecological responsibility on a personal basis and in everyday life.

Sufficiency explicitly considers an absolute decrease of consumption as part of an ecologically responsible way of living. The concept strongly contrasts with other approaches of environmental protection. These approaches usually focus on the preservation of ecological resources by means of technological progress and exogenous changes in incentives, such as carbon taxes, in order to cause changes in consumption behaviour. Technological aspects include increases in energy efficiency as well as the deployment of less resource-consuming technologies. However, a reduction of overall consumption is usually not the aim of 'standard' environmental and climate policies.

The focus of this paper is not to examine whether technology- and incentive-based environmental policies are sufficiently effective from an environmental perspective or whether a decrease in consumption or 'degrowth' is actually necessary. Given persisting global environmental problems, large uncertainty concerning the impact of environmental policies and increasing discussion on non-orthodox solutions (e.g. degrowth), we believe that eco-sufficiency could at least play some role for the protection of the environment and in combination with other measures and policies.

Assuming that eco-sufficiency is indeed considered a strategy to mitigate climate change, a number of theoretically and practically relevant issues emerge which we discuss in this article. In particular, these relate to the interaction of eco-sufficiency with other

environmental policies, the measurement of welfare and inequality, standard economic preference-based frameworks, and widely accepted normative views on distributive justice and individual liberties. These aspects have received little attention so far in the academic literature. Consequently, our article aims at clarifying the relevant issues and points to potential tensions and challenges.

Given the wide range of topics, it is impossible to address all related aspects here. We rather aim at relating the discussion on eco-sufficiency to important topics in the existing literature in philosophy and economics and at identifying some problems of the concept. Moreover, our objective is to provide a starting point for further research and possible applications of eco-sufficiency in practice as part of a 'climate policy mix'. The remainder of this article is organised as follows: Section 2 briefly discusses what eco-efficiency is. In Section 3, we discuss sufficiency in the light of the existing literature related to individual liberties and distributive justice, behavioural economics, social welfare and welfare measurement, and 'standard' environmental policies. We review and collect the most important arguments in Section 4. Section 5 concludes.

2. What is Ecological Sufficiency?

Sufficiency can be described as the reduction of consumption on an individual level in order to contribute to ecological sustainability (Alcott, 2008; Fischer and Grießhammer, 2013).[1] Sufficiency is understood as a change in consumption behaviour that augments other approaches of environmental and climate policy, for instance carbon taxation.

The prevailing view in economics is that a 'single price' on an environmental externality, such as greenhouse gas emissions, which is implemented by a central planning authority, is sufficient to fully internalise the externality (Baumol and Oates, 1971; Pigou, 1912). In a deterministic setup, regulation by prices (e.g. a carbon tax) and quantities (e.g. cap-and-trade) are equivalent (Montgomery, 1972), while the slope of marginal costs and benefits causes a comparative advantage of one instrument over the other in the presence of uncertainty (Weitzman, 1974). With respect to climate change, there is evidence that a (global) carbon price is preferable over cap-and-trade from the perspective of aggregated welfare (Hepburn, 2006; Hoel and Karp, 2002; Newell et al., 2003; Pizer, 2002). Targeted research and development (R&D) subsidies for the promotion of low-carbon technologies are discussed as an important additional element of carbon prices (Acemoglu et al., 2012; Fischer and Heutel, 2013; Fischer and Newell, 2008; Fischer and Preonas, 2010). Environmental regulation, possibly augmented by R&D subsidies, is expected to cause technological progress which will make goods and services less resource-intensive. From the perspective of neoclassical economic theory, there is no need for additional efforts by individuals for environmental protection, such as the reduction of consumption.

In contrast, advocates of sufficiency argue that rebound effects will (at least partly) offset ecological benefits from standard environmental policies, meaning that sufficiency is a

[1] Alternative definitions of sufficiency go even further and advocate a change in the overall style of living and the economic system, including a change in the perception of oneself, the social environment, and ecological resources (Princen, 2005; Sachs, 1993).

necessary (but not sufficient) condition for achieving long-term environmental objectives. Sufficiency, as an additional measure augmenting other environmental policies, demands a change in lifestyle and usually implies a reduction of consumption and a shift of resources towards non-market and non-polluting goods.[2] Overall, sufficiency is a behavioural change that goes beyond the change in economic activities which originates from environmental policies such as carbon taxes. The idea of sufficiency is consistent with the view that the transformation of a society towards ecological sustainability will require fundamental changes in the economy. Economic activities would have to take place under strict ecological constraints. This may include a shift in consumption towards non-market goods. However, the notion of an overall reduction in consumption is typically emphasised. Advocates of sufficiency further highlight that a less resource-intense lifestyle provides non-pecuniary benefits for individuals, which is an important argument in favour of sufficiency (Princen, 2005).

Eco-sufficiency (as discussed in this paper) is characterised by four aspects: It is motivated by an *ecological objective*; it is an *individual approach*; it is *consumption-based*; and it is *voluntary*. The voluntary nature of sufficiency is disputed. For instance, Sachs (2009) or Princen (2005) do not pay particular attention to voluntariness. However, we will discuss sufficiency as a voluntary concept in the following as it has two advantages. First, voluntary sufficiency allows for a "bottom-up" approach regarding environmental protection without the need for centrally planned action. Second, voluntary sufficiency is compatible with political liberalism, if understood, in very broad terms, as a guiding principle of modern democratic societies. This perspective on sufficiency is the starting point of our discussion in Section 3 below. Nevertheless, we also examine the consequences of relaxing the assumption of voluntariness towards the end of the paper.

Please note that we need to distinguish between the individual choice to subscribe to eco-sufficiency and the individual choice to define the concept (and demands) of eco-sufficiency. Voluntariness implies the former but not the latter. Thus, while voluntary sufficiency does not allow imposing a particular consumption level on individuals, it nevertheless implies a *non-arbitrary* specification of the 'sufficiency-threshold' (i.e. a consumption level which is adequate to meet some exogenously defined ecological objective) in order to provide guidance to individuals. People may still voluntarily commit to the sufficiency threshold, but sufficiency cannot be voluntary in the sense that people can define the concept in whatever way they want.

Based on this understanding of eco-sufficiency, we do not address the questions of how large a reduction in consumption needs to be to protect the planet's ecology, and how eco-sufficiency is related to individual well-being. These issues tend to be the focus of existing literature on eco-sufficiency (especially the rebound effect). Without taking a stance on the necessity of eco-sufficiency, we simply note that there are increasing doubts about the effectiveness of 'standard' policy measures as global carbon emissions continue to rise despite all efforts. Under such circumstances, it seems worthwhile to examine the feasibility

[2] This can be demonstrated on the basis of Kaya's Identity (Kaya and Yokobori, 1997). Alcott (2012) provides an interesting discussion on 'environmental structural change' with arguments in favour of a sufficiency strategy.

and implications of seemingly ‘unorthodox’ approaches like eco-sufficiency as part of a policy mix which is embedded in a broader political and economic framework.

Such approaches have received increased attention, especially the so-called 'degrowth' movement. Eco-sufficiency is akin to degrowth in calling for abandoning economic growth as a means to foster environmental sustainability, justice, and well-being (Demaria et al., 2013). On environmental matters, advocates of eco-sufficiency and degrowth agree that technological advancements cannot decouple current production and consumption patterns from ecological damage. Degrowth and eco-sufficiency also converge on the idea that consuming less can yield additional private benefits, in addition to ecological benefits.

However, degrowth activism has a broader scope and a more radical outlook than eco-sufficiency, as it relates to democratic theory, the concept of development, global justice, and the meaning of life (Demaria et al., 2013; Kallis, 2011). The scope of eco-sufficiency is narrower, focusing on ecology- and consumption-related issues. Thus, it seems prima facie possible to fit eco-sufficiency into existing liberal economic and policy frameworks rather than integrating it into a more radical degrowth approach, which is unlikely to leave the foundations of current frameworks intact (see e.g. Salleh, 2011).

Hence, we focus on voluntary sufficiency in relation to individual liberties, social justice, welfare, and ‘standard’ environmental policies. In particular, we examine possible tensions between sufficiency (understood as a guiding principle with direct implications for policy making) and political liberalism (understood in very broad terms as a guiding principle of modern democratic societies).

3. Problems Related to Ecological Sufficiency

3.1 Freedom, Poverty and Justice

Sufficiency, as understood here, is not defined by mandatory restrictions of consumption but rather by free choice, thought as a voluntary individual decision. Freedom of choice – to be a meaningful concept – requires the absence of hindrances or physical obstacles. In other words, a set of alternative choices must be actually available to a person (Berlin, 1969; Pettit, 2012). Otherwise, freedom of choice would be merely a formal ideal without implications for reality.

This has direct implications for the concept of voluntary sufficiency. To make a voluntary decision about whether to live sufficiently or not requires that both options are available. If a person lacks the ability to live above the consumption level implied by sufficiency, the person will be unable to choose *not* to live sufficiently. For instance, we could think about a person who involuntary lives in absolute poverty. Although his or her consumption is far below the global average, we cannot say that the person lives in accordance with sufficiency due to a lack of freedom of choice. Living according to sufficiency, therefore, can only refer to people who initially live in affluence.

This has another important implication. A person who lives in poverty cannot serve as a reference or benchmark for any definition of a sufficient life. This is essential because

sufficiency is sometimes motivated exactly by such a comparison, e.g. with reference to the carbon footprint of people living in least developed countries. Such a comparison is invalid in so far as it focusses predominantly on the ecological impact of the life of the poor. Yet, this partly omits other important aspects of well-being, and fully omits the economic, social, and psychological consequences of poverty. Stern (2015) considers poverty alleviation the key for a successful global climate policy: "If we fail on one, we will fail on the other" (p. 1).

Eco-sufficiency requires a meaningful specification of the 'sufficiency threshold' in order to explain how much consumption is conceived as 'enough' to avoid deprivation and, at the same time, is compatible with the ecological boundaries of the planet. Eco-sufficiency itself imposes restrictions on individual consumption that *'help to respect the earth's ecological boundaries'*, as phrased by Fischer and Grießhammer (2013, p. 10). This effectively translates into an upper bound of consumption, namely an ecologically sufficient consumption threshold which should not be exceeded.

Thresholds also happen to play a significant role in philosophical theories of justice and the ethics of distribution. However, social justice is often discussed in a way that implies a lower bound of consumption which is often conceptualised as a social minimum. The importance of a social minimum is recognised by many different scholars of social justice (Anderson, 1999; Dworkin, 2000; Nussbaum, 1999; Rawls, 1993), and it is an instrument of social politics in the modern welfare state.[3] Furthermore, a lower-bound threshold is an explicit part of the philosophic concept of *sufficientarianism* (Frankfurt, 1987; Huseby, 2010; Shields, 2012), which is not to be confused with eco-sufficiency.[4]

Any conception of a social minimum will imply a minimum level of consumption that corresponds to a life free of material deprivation. If we accept this idea and, at the same time, subscribe to the ideals of eco-sufficiency, we have two possible outcomes. The first is a situation in which the ecological sufficiency threshold is above the consumption threshold implied by a social minimum. In this case, the concept of eco-sufficiency does not interfere with the idea of a social minimum.

The second situation is one in which the (minimum) consumption threshold is above the eco-sufficiency threshold. In this case, eco-sufficiency would necessarily imply some sort of deprivation which is obviously in conflict with the idea that people should live free from deprivation, and thereby is in conflict with social justice. In this situation we face an ethical dilemma. Members of society will likely ascribe a different moral weight to the consumption thresholds implied by social justice and eco-sufficiency which can cause conflict and requires discourse.

[3] For instance, German minimum social security allowances are defined as the absolute minimum threshold, based on the average consumption of households in the lower two deciles of the income distribution.

[4] Sufficientarianism in philosophy can be summarised by the claims that i) it is important that people live free from deprivation, ii) that we have weighty reasons to secure at least enough of some goods, and iii) that once people have secured enough, our reasons to provide them with further benefits are weaker than before (see Shields, 2012, pp. 105-111). Kanschik (2016) argues that sufficientarianism and eco-sufficiency should be strictly distinguished because they are incompatible (Kanschik, 2016).

Furthermore, it is likely that the thresholds will be dependent on each other in the sense that social justice serves as a higher-order condition for the definition of an eco-sufficiency consumption threshold and vice versa. In other words, when defining the eco-sufficiency threshold, we need to make sure that it is above the social minimum (Stern, 2015). Voluntary eco-sufficiency is unlikely to be accepted, if it violates public common sense judgment on justice and poverty. It is impossible to pin these notions down in an objective way, but taking them into account is instrumental in establishing voluntary sufficiency. This aspect is largely underexposed in the public and academic debate so far and moreover, it has implications for the measurement of welfare and inequality, an issue to which we return below.

3.2 Individual Preferences and Volitions

Eco-sufficiency is highly related to the individual perception of benefits from living sufficiently. Thus, it is essential to ask from where these benefits originate. Usually two types of benefits are discussed in relation to sufficiency: First, ecological benefits which have the notion of a public good, i.e. the protection of ecological resources; and second, private non-pecuniary benefits which are related to the intrinsic value of 'good' behaviour in relation to ecological objectives.

There are some important methodological issues in relation to these benefits: Uncoordinated public good provision by individuals usually leads to underprovision of public goods because of free-riding incentives (Cornes and Sandler, 1996, p. 157). On the one hand, this implies that sufficiency alone will likely not yield adequate levels of environmental protection because of the underprovision problem. On the other hand, the problem could also corrupt the willingness of people to live sufficiently because of the expectation of underprovision. Thus, under standard preferences – assuming purely rational and self-interested agents – eco-sufficiency could be deemed irrational or ineffective.

Although the 'homo economicus' is the backbone of economic theory, economic activities motivated by other-regarding preferences, social norms, or personal identity have received attention under the label of 'behavioural economics' for decades. They can help to explain behaviour as implied by eco-sufficiency. Behaviour which is 'good', charitable or pro-social is not only motivated by pure altruism. It also serves an economic purpose through impure altruism which implies that private *and* public benefits occur from 'doing good' (Andreoni, 1990). Individuals also may behave pro-socially because they want to 'feel good' and reassure themselves of being a 'good person' (Bénabou and Tirole, 2011, 2006; Kahsay and Samahita, 2015).

In other words, doing 'good things' serves an economic purpose, for example through the channel of esteem which can be interpreted as a scarce resource (Brennan and Pettit, 2004). Other-regarding preferences are influenced by cultural identity and social distance (Buchan et al., 2006). Trust and fairness are important in the presence of weak economic governance (Dixit, 2004). This is of great importance with respect to climate change where fair mutual treatment is crucial for international negotiations (Lange and Vogt, 2003; Lange et al., 2010). These findings suggest that private benefits from sufficiency might be contingent on the personal perception of a good life but also on the social and cultural environment. Individual

incentives to live sufficiently, thus, depend on the perception of pro-environmental behaviour in society.

Building 'green clubs', bundling of public and private goods, or matching of contributions to a public good can significantly improve aggregated public good provision and reduce problems of free riding (Buchholz et al., 2012; Dixit and Olson, 2000; Guttman, 1978; Nordhaus, 2015; van't Veld and Kotchen, 2011). For instance, bundling of private and public goods (which yields an impure public good in aggregate) can be observed in relation to organic products or products which are produced under fair social conditions and/or which are particularly environmentally friendly. To the best of our knowledge, there is no direct application to the case of ecological sufficiency, but the literature in the field of behavioural economics suggests that voluntary and individual pro-environmental behaviour can generate significant private benefits, e.g. by 'signalling' of pro-environmental behaviour and a positive perception by others.[5]

A prerequisite for such behaviour is the existence of pro-environmental attitudes and values which motivate 'green' behaviour. Philosophy is explicitly concerned with the question of what motivates individual behaviour. According to Frankfurt (1971), the difference between persons and other beings lies in the structure of the will. The capacity of a person to reflect about his or her own identity – to form a will about a will – is central in this respect. Such 'higher-order volitions' are volitions about (lower level) volitions, typically guided by long-term convictions and reflective reasoning. Eco-sufficiency will typically (but not necessarily) include volitions of higher order, for instance the volition to act in a way that is compatible with the ecologic capacity of the planet.

Various philosophers regard higher-order volitions as central to freedom of self (Frankfurt, 1971; Pauen, 2007; Pettit, 2001a). Acting in a way others approve of may bring about a positive reputation or cause a 'good feeling' but it does not necessarily comply with freedom. Freedom of self requires *volitional control*. This implies that an agent is not merely a bystander or onlooker, but can fully identify with a choice in the sense of being the author of a choice or action (Pettit, 2001b, p. 64). The congruence of one's actions and one's convictions, hence, marks a condition for freedom. The Freedom of self also requires *rational control*, i.e. the absence of pathologies as described by Pettit (2001b, p. 43) or *'being fit to be held responsible for one's actions'* in the sense of an intrapersonal capacity for free action. Rationality is not thought of here as 'perfect', but it requires that beliefs will be updated if there is new relevant information. If both rational and volitional control are present, one can argue that a) there is a fully voluntary choice (which is of importance in light of the discussion above), and b) that the desires and beliefs of a person – the idea of what 'good' behaviour is – are what matters with respect to the perception of the benefits ascribed to eco-sufficiency. In particular, this last aspect can be understood as an important part of the identity of a person with great influence on truly voluntary decision making.

[5] Pro-environmental behaviour may also include reduced consumption. Reduced consumption could be understood as a 'donation' (giving up private funds) to do 'good' (protecting the environment). An open empirical question is if individual pro-environmental behaviour (e.g. eco-sufficiency) might possibly 'crowd out' the pro-environmental behaviour of others.

The importance of identity for decision-making is also acknowledged in economics. Akerlof and Kranton (2000) argue that identity invokes an externality with signals generated through identity in relation to others and that identity can change (or influence) preferences as used in economics. Akerlof and Kranton state that the choice of identity is one of the most important economic decisions people make (p. 717). In this context, the work of Frankfurt (op. cit.) examines how such choices are made. Akerlof and Kranton (op. cit.) show that identity can explain economic outcomes and individual decisions to a large extent. Examples include the choice of occupation in relation to gender identity (p. 732), the economics of the household (p. 745) or even the economic drivers of poverty and social exclusion (p. 737).

Several implications follow from the perspective that eco-sufficiency generates benefits which are highly related to individual values embedded in higher-order volitions. First, it is possible that a person acts against the higher-order volition in some situations. For instance, a person could occasionally buy convenience products which are not eco-friendly, even if he or she in principle objects such behaviour for ecological reasons. This is an important reason why revealed preferences may be unsuitable to identify eco-sufficient behaviour empirically.[6] Second, higher-order volitions can originate from a 'perfectionist view' as they are related to individual moral ideals of a good life in accordance with the ecological capacity of the planet. This implies that the benefits that might occur from eco-sufficiency cannot be generalised to all members of society. Third, eco-sufficiency will not necessarily require benefits which are tangible in conventional economic terms and can include non-material benefits. In this light, benefits of an eco-sufficient lifestyle should be understood in a broader sense as benefits which are related to the individual perception of a good life. Finally, this implies that there are limits to the interpersonal comparison of benefits from eco-sufficiency. This also has important implications for possible empirical work, e.g. the valuation of non-pecuniary benefits and aggregated welfare which would require some type of interpersonal comparisons (see also Rawls, 1999, p. 13).

3.3 Public Discourse and Social Outcomes

Conceptualising eco-sufficiency as volition of higher order imposes strong limitations on interpersonal comparison, but it opens the floor for public discourse. Discourse seems necessary, since there is the need to agree upon a 'sufficiency threshold' which also is in accord with considerations of social justice as discussed above. Discourse can be limited to the question of *what* choices should be made, but it can also include a discussion on *why* these choices are made (List, 2006). Discourse about eco-sufficiency and its benefits, when described as a largely individual concept, would explicitly require including the 'why' into the discourse to account for social norms which might motivate eco-sufficiency as discussed above. Discourse between proponents of eco-sufficiency and others could raise awareness for the ecological and social benefits of a sufficient life and promote understanding of the individual motives of proponents of eco-sufficiency.

[6] Any empirical assessment of revealed preferences requires a law of large numbers in order to derive 'average' preferences or volitions. Since we have argued that aspects of identity and higher-order volitions are relevant for the benefits that a person ascribes to eco-sufficiency, revealed 'average' preferences are of little use.

An important aspect of the discourse is that it needs to be 'informed'. In many cases, positive attitudes towards eco-sufficiency are based on beliefs about climate change. Citizens (and experts) need information regarding the actual relevance and severity of the problem as a basis for coordinated public action. This, in particular, is a problem in relation to the design of climate change policies and the definition of a possible sufficiency threshold. The position of people in the far future needs to enter any assessment of the impacts of climate change and the required action today (Posner and Weisbach, 2010). The standard economic tools for such assessments are 'Integrated Assessment Models'. However, these models deliver different results regarding the optimal response to climate change and the social cost of carbon (Nordhaus, 2008; Stern, 2008; Tol, 2011). There is no consensus in the literature about the actual impact of climate change and the required action (Tol, 2012). But there is consensus that strong losses are to be expected if temperatures increase significantly, that there will be a strong negative impact of climate change on low-income countries, and that there is vast right-skewed uncertainty in the assessment of climate change damages (Tol, 2009). There even is a discussion about possible 'catastrophic risks' of climate change (Weitzman, 2014). Thus, uncertainty about the impact of climate change causes severe limitations for an informed discourse in the sense of a rational collective decision process as it increases the likelihood of rational disagreement.

Moreover, there are some important moral aspects that need to be addressed, i.e. the 'discount rate' which weighs costs and benefits in the future. Sen's (1967) 'assurance problem' implies that optimal social discount rates are not necessarily equal to market interest rates (see Posner and Weisbach, 2010, Ch. 7).[7] Also questions regarding the historical responsibility of different countries or groups of countries for climate change are relevant (Schüssler, 2011). Another important aspect is related to poverty and deprivation in relation to climate change policies. Either with regard to the assessment of social welfare in aggregate (Adler and Treich, 2015) or in order to avoid individual deprivation in relation to energy services. Adequate indicators of deprivation would be required to tackle deprivation. However, the literature on this issue appears to be underdeveloped (Heindl and Schuessler, 2015).

Given large uncertainty and the moral import of the above-mentioned aspects, the individual perceptions of the problem of climate change and the adequate response diverge and public discourse is needed (Stern, 2015). Within a society, consensus may be reached regarding 'standard' policies to address the problem of climate change, such as the introduction of a carbon price, on the basis of economic arguments.[8] However, some members of society may

[7] Sen discusses the 'isolation problem,' a simple prisoners dilemma type of game in which a Pareto-inferior outcome is the result of the strict dominance of an individual strategy (Sen, 1967, p. 113). Sen further demonstrates that it would be possible to increase welfare without the need for compulsory enforcement, meaning to overcome the 'isolation problem,' if everyone would be assured that the other agents make decisions which maximise joint welfare (see also Bowles, 2004, p. 24). In the presence of an externality, the market outcome will be different, depending on if the externality is internalised or not. Under the 'assurance problem' and in the absence of enforcement, the externality will not be internalised because of the dominance of an individual strategy. Therefore market interest rates – as a result of 'isolated' Pareto-inferior decisions – omit the external effect.

[8] This includes optimal abatement volumes as well as the design of economic instruments to achieve emission reductions.

wish to contribute *beyond* the standard policy based on individual ancillary action in the form of eco-sufficiency.

There are two further, more general aspects which are of particular importance in relation to public discourse on eco-sufficiency. Pettit (2001b) describes 'discursive control' as a necessary condition for freedom of action, self, and the person. He remarks (2001b, p. 101): *"Did we praise or blame an agent only because of hoping to reinforce or alter their behaviour […] then praising or blaming someone would be a highly disrespectful act and would be a reasonable ground for resentment*." This refers to the possibility of strategic manipulation in the discourse which is to be avoided. This does not imply that humoristic, satiric or provocative remarks are generally inadmissible in a (public) discourse. Yet, ultimately, any such remarks should relate to reasonable arguments, as opposed to defamation and manipulation.

A second aspect is that the discourse needs to be open, in so far that all possible options as outcome of the discourse need to be available (Schüssler, 1996). It is important to avoid situations in which choices are limited in the sense that they are restricted to different versions of (or policies related to) sufficiency but do not consider non-sufficiency. It is inevitable for a respectful discourse to openly discuss advantages and disadvantages of a sufficient versus a non-sufficient lifestyle in order to preserve individual freedom in all relevant domains. A comprehensive deliberative discourse provides the basis for proponents and critics of sufficiency alike to rationally defend their views.

3.4 Welfare and Welfare Measurement

Above, we have argued that eco-sufficiency cannot be represented in a standard first-order preference framework. In the discussion on eco-sufficiency, it is also emphasised that such frameworks tend to be biased towards 'priced market goods', i.e. if the choice set under consideration consists only of such goods.[9] Many things which are important to us do not come with a price tag on (Sandel, 2012). Examples are deep friendship, the affection of a beloved person, or the love and attention a child receives from his or her parents. These things can be described – in broader economic terms – as externalities: non-traded goods without a market price. Neoclassic economic theory largely fails to account for these types of goods.

What does this imply for sufficiency? The fact that ecological goods are (often) non-priced goods is independent from the value (be it material or non-material) that a person ascribes to other non-priced goods. This makes it difficult to evaluate how weighty eco-sufficiency is in comparison to other goods, and how potential trade-offs should be assessed. To this end, it is not clear why ecological aspects should play a prominent role in the discussion on non-priced goods. Ecological aspects play a role *among other things*. Thus, we cannot derive absolute priority of ecological goods over other goods in a positive way. As argued above, the value and priority of ecological non-priced goods to a large extent originates from individual higher-order volitions and the perception of behaviour by peers.

[9] A similar argument can be found in the discussion on economic inequality. See Frankfurt (2015, p. 11) for a recent account.

Because of this, voluntary sufficiency leads to a problem related to traditional approaches of welfare and inequality measurement. The distributional outcome of eco-sufficiency within society as a whole hinges on the number of people who choose to live sufficiently and the number of people whose consumption remains unchanged. Under the assumption that eco-sufficiency generally implies a decrease in individual consumption, we would observe increasing inequality in society as a whole if a significant number of people chose to live sufficiently, while other members of the same society maintained the initial consumption patterns. We can think about this in terms of inequality, as depicted by the Lorenz curve. If more people adopted an eco-sufficient lifestyle, we would observe a concentration in the lower left corner of the consumption-based Lorenz curve, indicating an increase in inequality which is usually interpreted as an undesirable social outcome.[10]

However, under the proviso that eco-sufficiency is a voluntary and non-deprived concept as developed above, people would still be content (or would become truly content just because they live sufficiently). Thus, in the case of sufficiency being a broader phenomenon in society, it would be necessary to reconsider the interpretation of overall inequality and relative poverty. The common interpretation that increasing inequality of income or consumption indicates a negative development would not hold any more in this case.

This observation provides evidence that there is a need for alternative approaches to measure welfare and inequality under two conditions. First, eco-sufficiency and related concepts must be a significant phenomenon in society in order to provide a justification for alternative approaches to welfare measurement. Second, sufficiency can only be understood within a normative framework that avoids the identification of lower income and consumption with welfare loss and which is further able to depict welfare gains achieved by a sufficiency lifestyle. A purely monetary approach to welfare measurement will likely underestimate the benefits perceived by proponents of sufficiency (Fleurbaey, 2009, p. 1035).[11] Under such an approach, it is also inevitable to distinguish involuntary deprivation from voluntary sufficiency. This requires interpersonal comparison of individual volitions and intentions. The prevailing view in economics is that such empirical comparisons are very complicated, in particular when based on individual values (Arrow, 1963; Cooter and Rappoport, 1984). But interestingly, there is some overlap with Wicksell's (1958) theory of just taxation which also requires information on individual valuation of public goods in comparison to other goods.

[10] An interesting aspect is that we would likely observe a rather equal distribution of consumption within the group of eco-sufficientarians if the equivalised consumption threshold per capita was set in a similar way by eco-sufficientarians by virtue of ecological objectives. If eco-sufficientarians tend to value equality as such, this can be an additional benefit from eco-sufficiency, at least if a social comparison is made within the group of eco-sufficientarians.

[11] Because eco-sufficiency may involve non-pecuniary benefits, any money-metric based approach to welfare measurement (Fleurbaey, 2009, pp. 1036-1055) appears problematic. This also includes approaches such as 'green accounting', in particular if two different populations (proponents and opponents of sufficiency) are compared (Fleurbaey, 2009, p. 1036). Alternative approaches, such as measures of subjective well-being or happiness may – at best – represent a rough proxy for welfare in this context and may possibly downplay the role of consumption (Fleurbaey, 2009, p. 1056). Sen's (1987) capability approach has the merit of being rather flexible (Fleurbaey, 2009, p. 1067). Bernheim and Rangel propose a model of behavioural welfare economics which could be of interest in the context of eco-sufficiency (Bernheim, 2009).

Wicksell takes the view that the willingness to contribute to a public good (and hence the benefits from public good provision) differs between individuals. Consequently, and as an outcome of fair and free cooperation (Buchholz and Peters, 2007), optimal contributions to public good provision are 'individual' and contingent on personal preferences (Johansen, 1963; Lindahl, 1958). If eco-sufficiency is interpreted as an individual action in accordance with individual preferences, the connection to Wicksell's theory is obvious and there are a number of important implications. Differences in individual efforts are, for instance, optimal from an economic viewpoint. Welfare would be decreased if all people were forced to contribute to public good provision in the same way. Public good provision according to individual preferences further provides the basis for 'unanimous approval' of public good provision, which can be understood as a democratic legitimation and an outcome of public discourse. The willingness to contribute to a public good ('Lindahl price') could also serve as a yardstick for welfare measurement. Another important implication of Wicksell's theory has already been discussed in Section 3.1, namely that such an approach necessarily requires justice in the initial distribution of income and wealth. To put it in the words of John Rawls (1971, p. 250): *"Without this important proviso, [Wicksell's principle] would have all the faults of the efficiency principle […]."* The problem, however, is that the individual valuation and willingness to pay for a public good (such as climate protection) are hard to identify. Thus, further advancing concepts for alternative welfare measurement and ecological valuation under the conditions rehearsed above are important aspects for future research.

3.5 Implications for Environmental Policy

Policies for the protection of the environment often consist of standards for pollution control and/or technology deployment, but *price- or quantity-based policies* play an important role as well. These policies have in common that they aim at reducing polluting activities but do not necessarily imply a reduction in overall consumption. Price and quantity regulation further impose restrictions on pollution in aggregate, but they do not impose restrictions on a personal basis.

It is useful to examine under which circumstances ecological benefits from an eco-sufficient lifestyle are actually transferred into ecological benefits for society as a whole and if there are situations in which this can be circumvented by 'standard' environmental policies.[12] Alcott (2008) states that sufficiency could cause adverse effects through what is known as 'general equilibrium effects' in economics. If many people consumed less motivated by sufficiency, prices of goods would decrease which would make goods more affordable for those who do not subscribe to a sufficient lifestyle. Thus, non-sufficientarians could consume more and the ecological benefits generated by sufficiency would be reduced or fully compensated because of a 'rebound effect' in consumption or carbon leakage.[13] This argument follows a similar logic as the 'green paradox' does on a macroeconomic level (Ritter and Schopf, 2013).

[12] In such a situation, referring to the framework of standard preferences, choosing a sufficient lifestyle would be irrational because it does not cause any ecological benefit.

[13] The rebound effect occurs if resource saving technology or behaviour does not lead to a corresponding reduction in overall resource consumption because of changes in prices and income. The 'Green Paradox' is related to this perspective via Hotelling's rule of resource extraction (Hotelling, 1931). Carbon leakage occurs if

Alcott's concerns are sound in terms of economic theory and could be described as a 'sufficiency paradox'. But there is another aspect which is relevant in practice. While the rebound effect described by Alcott hinges on the magnitude of changes in prices, substitution of goods, and saving rates, it is further possible that the mere existence of environmental policies could render sufficiency ineffective to some extent. In particular, this is the case under quantity regulation of pollutants under which an economy-wide 'cap' on pollution is imposed (see also Perino, 2015).

An example for quantity regulation is the European Emissions Trading Scheme (EU ETS). The amount of EU-wide annual greenhouse gas emissions of utilities and industrial installation is 'capped' under the EU ETS, and companies are allowed to trade emission permits. The scheme is fairly cost-efficient and effective in the sense that the amount of EU-wide emissions per year will not exceed the cap. However, the cap on emissions is independent of individual consumption behaviour.[14] If people chose to reduce the consumption of CO_2-intensive goods, the price at which allowances are traded would decrease, but the amount of overall emissions would remain unchanged. This occurs because the quantity of annual emissions is exogenously given by the cap, while the price of emissions is endogenous. The effect was previously discussed in relation to differing ambitions in climate policy across EU-member states where similar problems arise (Heindl et al., 2015). Thus, eco-sufficiency is ineffective under quantity regulation if the 'cap' is exogenous.

However, sufficiency will be effective under price regulation. Price regulation refers to policies which directly impose a price on polluting activities such as carbon taxes. The tax makes polluting activities more expensive vis-à-vis other activities and by that shifts aggregated demand towards more environmentally friendly goods so that a reduction of pollution is achieved by virtue of the tax. Now, if a person lowers consumption motivated by eco-sufficiency, the tax rate will remain unaffected, while the quantity of emissions will be endogenous. In this case, the tax provides unchanged incentives to lower demand for those who do not subscribe to sufficiency, independent of ancillary emission reductions on a personal level. Sufficiency will be effective if it causes a more pronounced reduction in consumption, as would have been the case by virtue of the tax alone.[15]

The academic debate on 'prices versus quantities' was initially motivated by uncertainty of costs and benefits in environmental regulation (Weitzman, 1974) and was later expanded to policy interactions between jurisdictions (Heindl et al., 2015). Sufficiency adds another important facet to the discussion. From this point of view, quantity regulation with an exogenous 'cap' could cause problematic policy interactions if sufficiency was expected to

---

greenhouse gas emissions are increased in countries without climate policy, because production is shifted from countries with emission control policies to countries without strict emission control.

[14] In a democratic society, the 'cap' is usually the outcome of a political decision process. It is of course possible that climate policy becomes more (or less) ambitious over time as an outcome of public discourse. However, the bargaining process is usually a collective process. Individuals have little influence on specific climate policy targets in a certain point of time. This is the reason why we consider the 'cap' as exogenous.

[15] We do not want to claim, in this context, that price regulation is generally more effective than quantity regulation, but only examine interactions with voluntary sufficiency. One problem of price regulation is that it leads to increased tax revenues. These may be spent in a way that creates additional emissions by the government or by citizens if the money has to be channelled towards them via tax reductions. Thereby, the positive environmental effect of a price scheme could be cannibalised (Wackernagel and Rees, 1997, p. 20).

make a significant contribution to achieve environmental objectives. In such a situation, 'standard' policies would need to take interactions with voluntary sufficiency into account in order to maximise the *joint environmental benefit* under both approaches.

4. Synthesis: The Prospects of Voluntary Sufficiency

If understood as purely voluntary, sufficiency of course has a proper place in a liberal society and can be a non-deprived concept. From this perspective, claims about the potential incompatibility of sufficiency with liberal values and a democratic society appear implausible. Nevertheless, we have identified a number of issues which are relevant in practice. Three aspects are of particular importance:

First, individual liberties and the demands of social justice limit the applicability of sufficiency to some extent. Freedom of choice, as described above, requires that all relevant options are physically available. This implies that a voluntary decision to live sufficiently also requires the option to live non-sufficiently. From this perspective, the carbon footprint of a person which involuntary lives in poverty is unsuitable as a reference for a sufficient life. Sufficiency in the sense of 'having just enough' implies an upper threshold of consumption in accordance with the ecological capacity of the planet. This can cause a conflict with the widely accepted demands of social justice, often described as a social minimum, which imply a lower threshold of consumption. If the sufficiency threshold is below the threshold implied by a social minimum we face a moral dilemma. The relation and interdependence of both concepts has received little attention so far. Since there is the possibility that both concepts are incompatible in practice, theoretical and empirical work related to sufficiency and social justice is required.

Second, sufficiency cannot be comprehensively expressed in a standard preference setup, and its implications need to be a subject of public discourse. Sufficiency as a non-deprived concept requires non-pecuniary benefits from living sufficiently to compensate for a reduction in consumption. It is unclear how such a concept is related to the standard preference framework as used in (neoclassical) economics. This also limits the options for empirical assessments of sufficiency, since the related benefits are not directly observable. Concepts as found in the field of behavioural economics could help to overcome this problem but, to the best of our knowledge, there are no direct applications to sufficiency so far in the literature. The perspective of sufficiency as a highly individual concept causes severe limitations for policy making, but interference in the private domain (i.e. taking the form of non-voluntary sufficiency in the sense of publicly uncontrolled obligations) is to be avoided in order to preserve individual liberties. We have proposed public discourse as a potential solution to this problem. The proposed comprehensive deliberative discourse is understood as an ongoing discourse about the value of non-priced goods, the demands of ecological sustainability, uncertainties of climate change, and other relevant economic, social, and normative aspects. The discourse is not only limited to the question of *what* should be done; it also explicitly includes the question of *why* members of a society take a specific view or assign a certain weight to ecological objectives. Such a discourse could augment the existing discourse on how to define 'standard' environmental policies which is a more minimal liberal type of discourse.

Third, sufficiency can have important implications for the measurement of welfare and inequality as well as for the design of 'standard' environmental policies. Sufficiency, if a broader phenomenon, will make the application of alternative measures of welfare necessary. This occurs because standard measures of equality would likely indicate increasing inequality in society as a consequence from sufficiency, and underestimate non-pecuniary benefits. However, the standard interpretation of increasing inequality as a negative social outcome could not be maintained under voluntary sufficiency. Alternative measures would require interpersonal comparisons to account for non-pecuniary benefits, which are hard to identify, particularly if interpreted as result of higher-order volitions. To some extent, similar difficulties as in Wicksell's theory of just taxation occur, e.g. how to identify the individual valuation of public goods (Hansjürgens, 2000). Furthermore, existing environmental policies, i.e. quantity regulation, can cause sufficiency to be ineffective or even unnecessary (Perino, 2015). There is strong interaction between 'standard' policies and voluntary sufficiency. In order to maximise the *joint ecological benefits* from standard policies and individual ancillary voluntary approaches, these interactions should receive increased attention by policy makers. In particular, negative effects of standard policies on voluntary sufficiency should be avoided.

Overall, the protection of the environment obviously requires some degree of domination under discursive public control. However, we have taken the perspective that uncontrolled domination in the private sphere must be avoided in order to preserve individual liberties and the voluntary notion of sufficiency (Pettit, 2012). This implies that an individual must be able to engage in favour or against specific actions in the discourse. Moreover, there has to be freedom of individual action under the constraints of the publicly controlled law. Therefore, the prospect of sufficiency hinges on the aspect of voluntariness to a large extent. Different definitions of sufficiency exist. While some stress the voluntary notion of sufficiency (Fischer and Grießhammer, 2013), others explicitly hold perfectionist views without emphasising aspects of voluntariness (Princen, 2005; Sachs, 2009; Salleh, 2011).[16] In the light of the arguments mentioned above, it is essential to distinguish these different versions of sufficiency as they will have different implications in many aspects.

Specific policies motivated by sufficiency need to undergo examination to study if they will interfere with the voluntary notion of sufficiency as discussed above. This includes soft measures or nudging as well as more comprehensive policies.[17] Voluntary sufficiency has the potential to deliver important environmental benefits while being compatible with 'standard' environmental policies, the demands of social justice, and individual freedom. Non-voluntary sufficiency would likely increase positive ecological effects to a strong extent. This, however,

[16] Perfectionists typically ascribe to an essentialist ideal of human nature (Hurka, 1993). Strong perfectionism then is "comprehensive in its ranking of goods and ways of life, coercive in its means of pursuit, pure in its (exclusive) concern for the good life, and state-centred in its principled preference for the state as the direct and primary agent of the promotion of the good life" (Chan, 2000, p 16). Hence, such accounts involve the transition from a particular preferred conception of the good life to a comprehensive political program that serves this conception (Arneson, 2000).

[17] Examples for environmental nudges are the labelling of cars with coloured stickers according to their environmental footprint or the 'Ambient Orb', a little ball that turns red when a customer is using a great deal of energy in his or her household (Thaler and Sunstein, 2008, 200-210). It is questionable to what extent environmental nudges are compatible with individual liberties, as they do not directly command a particular behaviour but can be perceived as coercive (Sugden, 2009).

would cause severe restrictions in other parts of private and social life, which are incompatible with political liberalism (Rawls 1985). Thus, the concept of eco-sufficiency may face a dilemma, meaning that it either has limited relevance for policy making or it is incompatible with the values of a liberal and pluralist society.

5. Conclusion

This article investigates a number of so far underexposed problems related to eco-sufficiency and possible applications of eco-sufficiency in practice. In particular, we focus on the implications for the design of standard environmental policies, wealth and inequality measurement, standard economic preference frameworks, political liberalism, and social justice.

We have argued that sufficiency goes beyond aspects of 'standard preferences' as used in economics but behavioural economic models are very well able to explain behaviour related to eco-sufficiency. From the perspective of philosophy, this problem is related to 'higher-order volitions' and aspects of personal identity, which are not necessarily revealed in acts of consumption. Eco-sufficiency may generate individual benefits which are not tangible in conventional economic terms and can include non-material benefits. In particular, these may relate to individual perception of the good life.

This is important, in so far as sufficiency is considered to be motivated by individual benefits from a sufficient life which cannot be generalised to all members of society. Imposing obligations derived from an individual perception of the benefits of sufficiency onto others would necessarily cause strong interference in the private sphere and is to be avoided. Public authorities should promote a comprehensive deliberative discourse regarding the benefits and costs of sufficiency without directly interfering in the process.

We show that there is the possibility of sufficiency being in conflict with the demands of distributive justice. Distributive justice implies a lower threshold for consumption in the sense of a social minimum, while eco-sufficiency implies an upper threshold for consumption for ecological reasons. Thoughtful consideration of the demands of social justice in the design of policies motivated by sufficiency is inevitable in order to obtain public support. Sufficiency – if a broader phenomenon in society – can also justify the application of alternative approaches to measure welfare and inequality.

Voluntary sufficiency can deliver ecological benefits and can therefore be beneficial for society as a whole. However, we have discussed possible interactions between 'standard' environmental policies and individual sufficiency. The actual choice of policy can be relevant regarding whether ancillary ecological benefits from individual sufficiency beyond the existing standard policy will be effective or not. This, in particular, is the case under regulation by quantities with an exogenous 'cap'. Hence, environmental policies should be designed in a manner that a) secures contributions from non-sufficientarians to achieve ecological benefits, as agreed upon based on a political compromise, and b) that allows for individual contributions to public good provision by sufficientarians beyond the ecological benefits agreed upon.

Overall, the voluntary notion of sufficiency limits the scope of eco-sufficiency for policy making. Voluntary sufficiency largely is a matter of civil society without much need for governmental intervention. Such limitations may be overcome by relaxing the condition of voluntariness. We do not want to claim that non-voluntary environmental policies are problematic in general or that there should be no such policies. But what emerges from our discussion is that non-voluntary sufficiency touches particularly sensitive grounds by interfering with individuals' higher-order volitions, concepts of the good life and identity. Thus, non-voluntary sufficiency is likely to be more effective but incompatible with the values of a liberal society. To overcome this dilemma, further research on sufficiency could focus on how voluntary sufficiency can be promoted more effectively in public discourse. Moreover it should study how sufficiency can be integrated in a more comprehensive normative framework related to welfare and social justice, and how its effectiveness for the protection of the environment can be ensured in interaction with other policies. ■

Acknowledgements:

We thank Wolfgang Buchholz, Goytom Abraha Kahsay, Klaus Rennings, Rudolf Schüssler, and two anonymous reviewers for their helpful comments. The financial support of the German Ministry of Education and Research (BMBF) in the project "Sozialpolitische Konsequenzen der Energiewende in Deutschland (SOKO Energiewende)," grant 01UN1204A and 01UN1204E, is gratefully acknowledged.

References:

Acemoglu, D., Aghion, P., Bursztyn, L., Hemous, D., 2012. The Environment and Directed Technical Change. American Economic Review 102, 131–166.

Adler, M.D., Treich, N., 2015. Prioritarianism and Climate Change. Environmental and Resource Economics 62, 279–308.

Akerlof, G.A., Kranton, R.E., 2000. Economics and Identity. The Quarterly Journal of Economics CXV, 715–752.

Alcott, B., 2008. The sufficiency strategy: Would rich-world frugality lower environmental impact? Ecological Economics 64, 770–786.

Alcott, B., 2012. Mill's scissors: Structural change and the natural-resource inputs to labour. Journal of Cleaner Production 21, 83–92.

Anderson, E., 1999. What is the Point of Equality? Ethics 109, 287–337.

Andreoni, J., 1990. Impure Altruism and Donations to Public Goods: A Theory of Warm-Glow Giving. The Economic Journal 100, 464–477.

Arneson, R.J., 2000. Perfectionism and Politics. Ethics 111, 37–63.

Arrow, K.J., 1963. Social choice and individual values. John Wiley & Sons, New York.

Baumol, W.J., Oates, W.E., 1971. The use of standards and prices for protection of the environment. The Swedish Journal of Economics 73, 42–54.

Bénabou, R., Tirole, J., 2006. Incentives and Prosocial Behavior. American Economic Review 96, 1652–1678.

Bénabou, R., Tirole, J., 2011. Identity, Morals, and Taboos: Beliefs as Assets. Quarterly Journal of Economics 126, 805–855.

Berlin, I., 1969. Four Essays on Liberty. Oxford University Press, Oxford.

Bernheim, B.D., 2009. Beyond Revealed Preference: Choice-Theoretic Foundations for Behavioural Welfare Economics. Quarterly Journal of Economics 124, 51–104.

Bowles, S., 2004. Microeconomics - Behavior, Institutions, and Evolution. Princeton University Press, Princeton and Oxford.

Brennan, G., Pettit, P., 2004. The Economy of Esteem. Oxford University Press, Oxford.

Buchan, N.R., Johnson, E.J., Croson, R.T.A., 2006. Let's get personal: An international examination of the influence of communication, culture and social distance on other regarding preferences. Journal of Economic Behavior & Organization 60, 373–398.

Buchholz, W., Cornes, R., Rübbelke, D., 2012. Matching as a cure for underprovision of voluntary public good supply, Economics Letters.

Buchholz, W., Peters, W., 2007. Justifying the Lindahl solution as an outcome of fair cooperation. Public Choice 133, 157–169.

Chan, J., 2000. Legitimacy, Unanimity, and Perfectionism. Philosophy and Public Affairs 29, 5–42.

Cooter, R., Rappoport, P., 1984. Were the ordinalists wrong about welfare economics? Journal of Economic Literature XXII, 507–530.

Cornes, R., Sandler, T., 1996. The Theory of Externalities, Public Goods, and Club Goods, 2nd editio. ed. Cambridge University Press, Cambridge.

Demaria, F., Schneider, F., Sekulova, F., Martinez-Alier, J., 2013. What is Degrowth? From an Activist Slogan to a Social Movement. Environmental Values 22, 191–215.

Dixit, A., 2004. Lawlessness and Economics: Alternative Models of Governance. Princeton University Press.

Dixit, A., Olson, M., 2000. Does voluntary participation undermine the Coase Theorem? Journal of Public Economics 76, 309–335.

Dworkin, R., 2000. Sovereign Virtue. Harvard University Press, Cambridge (Massachusetts).

Fischer, C., Grießhammer, R., 2013. When Less is More - Sufficiency: Terminology, Rationale and Potentials. Institute for Applied Ecology Working Paper 2.

Fischer, C., Heutel, G., 2013. Environmental Macroeconomics: Environmental Policy, Business Cycles, and Directed Technical Change. Annual Review of Resource Economics 5, 197–210.

Fischer, C., Newell, R.G., 2008. Environmental and technology policies for climate mitigation. Journal of Environmental Economics and Management 55, 142–162.

Fischer, C., Preonas, L., 2010. Combining Policies for Renewable Energy: Is the Whole Less Than the Sum of Its Parts? International Review of Environmental and Resource Economics 4, 51–92.

Fleurbaey, M., 2009. Beyond GDP: The Quest for a Measure of Social Welfare. Journal of Economic Literature 47, 1029–1075.

Frankfurt, H., 1971. Freedom of the Will and the Concept of a Person. The Journal of Philosophy 68, 5–20.

Frankfurt, H., 1987. Equality as a Moral Ideal. Ethics 98, 21–43.

Frankfurt, H., 2015. On Inequality. Princeton University Press, Princeton.

Guttman, J.M., 1978. Understanding Collective Action: Matching Behavior. American Economic Review 68, 251–255.

Hansjürgens, B., 2000. The influence of Knut Wicksell on Richard Musgrave and James Buchanan. Public Choice 103, 95–116.

Heindl, P., Schuessler, R., 2015. Dynamic Properties of Energy Affordability Measures. Energy Policy 86, 123–132.

Heindl, P., Wood, P.J., Jotzo, F., 2015. Combining International Cap-and-Trade with National Carbon Taxes, in: Gronewald, M., Hintermann, B. (Eds.), Emissions Trading as a Policy Instrument: Evaluation and Prospects. MIT Press, Cambridge (Massachusetts), pp. 123–147.

Hepburn, C., 2006. Regulation by Prices, Quantities, or Both: A Review of Instrument Choice. Oxford Review of Economic Policy 22, 226–247.

Hoel, M., Karp, L., 2002. Taxes versus quotas for a stock pollutant. Resource and Energy Economics 24, 367–384.

Hotelling, H., 1931. The Economics of Exhaustible Resources. Journal of Political Economy 39, 137–175.

Hurka, T., 1993. Perfectionism. Oxford University Press, New York.

Huseby, R., 2010. Sufficiency: Restated and Defended. Journal of Political Philosophy 18, 178–197.

Johansen, L., 1963. Some Notes on the Lindahl Theory of Determination of Public Expenditures. International

Economic Review 4, 346–358.

Kahsay, G.A., Samahita, M., 2015. Pay-What-You-Want pricing schemes: A self-image perspective. Journal of Behavioral and Experimental Finance 7, 17–28.

Kallis, G., 2011. In defence of degrowth. Ecological Economics 70, 873–880.

Kanschik, P., 2016. 'Eco-sufficiency and Distributive Sufficientarianism – Friends or Foes? Environmental Values (forthcoming).

Kaya, Y., Yokobori, K., 1997. Environment, Energy, and Economy: Strategies for Sustainability. United Nations University Press, Tokyo.

Lange, A., Löschel, A., Vogt, C., Ziegler, A., 2010. On the self-interested use of equity in international climate negotiations. European Economic Review 54, 359–375.

Lange, A., Vogt, C., 2003. Cooperation in international environmental negotiations due to a preference for equity. Journal of Public Economics 87, 2049–2067.

Lindahl, E., 1958. Just Taxation - A Positove Solution, in: Musgrave, R.A., Peacock, A.T. (Eds.), Classics in the Theory of Public Finance. Macmillian & Co. Ltd., London.

List, C., 2006. The Discursive Dilemma and Public Reason. Ethics 116, 362–402.

Montgomery, W.D., 1972. Markets in Licenses and Efficient Pollution Control Programs. Journal of Economic Theory 5, 395–418.

Newell, R.G., Pizer, Pizer, W.A., 2003. Regulating stock externalities under uncertainty. Journal of Environmental Economics and Management 45, 416–432.

Nordhaus, W., 2015. Climate Clubs: Overcoming Free-riding in Climate Policy. American Economic Review 105, 1339–1370.

Nordhaus, W.D., 2008. A Question of Balance. Yale University Press, New Haven.

Nussbaum, M., 1999. Sex and Social Justice. Oxford University Press, Oxford.

Pauen, M., 2007. Self-Determination: Free Will, Responsibility, and Determinism. Synthesis Philosophica 44, 455–475.

Perino, G., 2015. Climate Campaigns, Cap and Trade, and Carbon Leakage: Why Trying to Reduce Your Carbon Footprint Can Harm the Climate. Journal of the Association of Environmental and Resource Economists 2, 469–495.

Pettit, P., 2001a. Deliberative Democracy and the Discursive Dilemma. Philosophical Issues 11, 268–299.

Pettit, P., 2001b. A Theory of Freedom - From the Psychology to the Politics of Agency. Blackwell Publishing Ltd, Oxford.

Pettit, P., 2012. On the People's Terms. Cambridge University Press, Cambridge (Massachusetts).

Pigou, A., 1912. Wealth and Welfare. London.

Pizer, W., 2002. Combining price and quantity controls to mitigate global climate change. Journal of Public Economics 85, 409–434.

Posner, E.A., Weisbach, D., 2010. Climate Change Justice. Princeton University Press, Princeton.

Princen, T., 2005. The logic of sufficiency. MIT Press, Cambridge (Massachusetts).

Rawls, J., 1971. A Theory of Justice. Harvard University Press, Cambridge (Massachusetts).

Rawls, J., 1985. Justice as Fairness: Political not Metaphysical. Philosophy and Public Affairs 14, 223–251.

Rawls, J., 1993. Political Liberalism. Columbia University Press, New York.

Rawls, J., 1999. The Law of Peoples. Harvard University Press.

Ritter, H., Schopf, M., 2013. Unilateral Climate Policy: Harmful or Even Disastrous? Environmental and Resource Economics 58, 155–178.

Sachs, W., 1993. Die vier E's: Merkposten für einen massvollen Wirtschaftsstil. Politische Ökologie 11, 69–72.

Sachs, W., 2009. Fair Wealth: Pathways into Post-Development, in: Rethinking Development in a Carbon-Constrained World: Development Cooperation and Climate Change. Finland Ministry of Foreign Affairs, Helsinki, pp. 196–206.

Salleh, A., 2011. Climate Strategy: Making the choice between ecological modernisation or living well. Journal

of Australian Political Economy 66, 124–149.

Sandel, M.J., 2012. What Money Can't Buy: The Moral Limits of Markets. Farrar, Straus, and Giroux, New York.

Schüssler, R., 1996. Licht und Schatten des Diskurses. Analyse & Kritik 18, 208–224.

Schüssler, R., 2011. Climate justice: a question of historic responsibility? Journal of Global Ethics 7, 261–278.

Sen, A., 1967. Isolation, Assurance and the Social Rate of Discount. The Quarterly Journal of Economics 81, 112–124.

Sen, A., 1987. Commodities and Capabilities. Oxford University Press, India, New Delhi.

Shields, L., 2012. The Prospects for Sufficientarianism. Utilitas 24, 101–117.

Stern, N., 2008. The Economics of Climate Change. American Economic Review: Papers and Proceedings 98, 1–37.

Stern, N., 2015. Economic development, climate and values: making policy. Proceedings of the Royal Society B 282.

Sugden, R., 2009. On Nudging: A Review of Nudge: Improving Decisions About Health, Wealth and Happiness by Richard H. Thaler and Cass R. Sunstein. International Journal of the Economics of Business 16, 365–373.

Thaler, R.H., Sunstein, C.R., 2008. Nudge: Improving Decisions About Health, Wealth and Happiness. Yale University Press, New Haven.

Tol, R.S.J., 2009. The Economic Effects of Climate Change. Journal of Economic Perspectives 23, 29–51.

Tol, R.S.J., 2011. The Social Cost of Carbon. Annual Review of Resource Economics 3, 419–443.

Tol, R.S.J., 2012. On the Uncertainty About the Total Economic Impact of Climate Change. Environmental and Resource Economics 53, 97–116.

van't Veld, K., Kotchen, M.J., 2011. Green clubs. Journal of Environmental Economics and Management 62, 309–322.

Wackernagel, M., Rees, W.E., 1997. Perceptual and structural barriers to investing in natural capital: Economics from an ecological footprint perspective. Ecological Economics 20, 3–24.

Weitzman, M.L., 1974. Prices vs. Quantities. The Review of Economic Studies 41, 477–491.

Weitzman, M.L., 2014. Fat Tails and the Social Cost of Carbon. American Economic Review: Papers and Proceedings 104, 544–546.

Wicksell, K., 1958. A new principle of just taxation, in: Musgrave, R.A., Peacock, A.T. (Eds.), Classics in the Theory of Public Finance. Macmillian & Co. Ltd., London, New York, pp. 72–118.

V

Article V

Defending the Concept of Energy Poverty

Submitted to:

Ethics, Policy & Environment (February 23rd, 2015)

Attached here is the submitted draft.

An earlier version of the Article is forthcoming as:

'Der Begriff der Energiearmut', in B. Emunds (ed.), *Soziale Ungleichheiten – Herausforderungen für die Umweltpolitik*. Marburg: Metropolis Verlag.

The entire section "Energy poverty versus alternative concepts" is not included in this version, while the section "Towards a needs-based definition of energy poverty" has seen major changes, and the remaining sections minor changes.

A collaborative paper with Peter Heindl and Rudolf Schüßler is forthcoming as:

'Anforderungen an Energiearmutsmaße, in: Großmann, K., Schaffrin, A., Smigiel, C. (eds.), *Energie und soziale Ungleichheit: Zur gesellschaftlichen Dimension der Energiewende in Deutschland und Europa*. Springer VS, Wiesbaden.

This paper includes a shortened earlier version of the section "Justifying the concept of energy poverty".

Defending the Concept of Energy Poverty

Energy poverty remains a challenged concept without firm establishment in public policy on a national and international level. This paper addresses those still skeptical about the very idea of energy poverty and provides arguments to defend the concept against fundamental criticism. First, it is shown why energy poverty should be conceptualized, measured and tackled as a specific form of poverty. Secondly, conceptual confusions surrounding the concept are clarified, in particular the relation to fuel poverty and the difference between energy poverty definitions, measures and indicators. Further, a needs-based understanding of energy poverty is outlined.

The concept of energy poverty (often called 'fuel poverty') has gained increasing momentum in recent years. The concept is most firmly established in the UK where the government measures and addresses it in a policy context since 2000 (Boardman, 2010; Hills, 2012). Energy poverty is also increasingly discussed for the EU (Bouzarovski, Petrova, & Sarlamanov, 2012; Healy, 2003; Thomson & Snell, 2013), various European countries (Dubois, 2012; Heindl, 2013; Scheer, 2012), developing countries (Nussbaumer, Bazilian, Modi, & Yumkella, 2011, Guruswamy, 2011, Pachauri & Spreng, 2005; Sesan, 2012), New Zealand (Howden-Chapman et al., 2012; Lloyd, 2006) and North / South American countries (Harrison & Popke, 2011; Pereira, Freitas, & da Silva, 2010).

Still, energy poverty remains a challenged concept. It is more firmly established in academia than in public policy. Hardly any countries and international organizations officially use the term to design and monitor their policies. There are two underlying reasons for this. First, some doubt that energy poverty ought to be established as a separate concept. One may argue that introducing specific poverty concepts like health poverty, education poverty and energy poverty dilutes attention from what really matters, because poverty is a holistic state that needs to be addressed accordingly. Peter

Walker, a former British Secretary of State for Energy, put it as follows (Healy, 2003, p. 2):

> I'm afraid I must take issue with the term, 'fuel poverty'. People do not talk of 'clothes poverty' or 'food poverty' and I do not think it is useful to talk of fuel poverty either.

Critics like Walker are yet to be convinced that we need to discuss, measure and monitor energy poverty as a separate concept.

The second line of argument against adopting the concept of energy poverty in public policy is that it is unclear what energy poverty means. Current discussions are typically embedded in specific regional circumstances and challenges (e.g. given a particular electricity infrastructure, housing stock or volatility of energy prices) and hence take fundamentally different approaches. What adds to the confusion is, first, that most authors do not differentiate between definitions, measures and indicators for energy poverty and, secondly, that there is a parallel usage of the terms 'fuel poverty' and 'energy poverty'—which some equate and others regard as distinct concepts.

All this makes it easy for hesitant politicians to avoid adopting the concept. The European Union, for instance, has recently stopped pushing for a EU-wide definition and measure of energy poverty, due the lack of a commonly accepted understanding of the term (Bouzarovski et al., 2012, pp. 78–79). Existing definitions and indicators of energy poverty lack the credibility of the $1.25 poverty line or 50% / 60% median income indicator—particularly on an international level. The above criticisms persist in spite of the existence of an extensive body of empirical research on energy poverty. Most researches in the field agree about the value of conceptualizing and addressing energy poverty on a regional, national and global level, despite different frameworks and methodologies.

Unlike most of the published work on energy poverty, this paper neither focuses on empirical issues nor makes a direct contribution to advance practical issues in measuring energy poverty. The focus here is on legitimacy concerns of a fundamental kind. In consequence, the article is addressed at those still skeptical about the very idea of energy poverty and those who seek arguments to defend the concept against such criticism.

In particular, the paper shows why the concept of energy poverty ought to be separately addressed and measured as a specific poverty concept. Secondly, it is explained why energy poverty should be preferred over rival terms, in particular fuel poverty. Third, the distinction between definitions, measures and indicator is introduced in order to explain the current diversity of approaches to energy poverty. Finally, it is argued that three types of definitions can be currently found in the debate, of which the needs-based type of definition is the most attractive.

Justifying the concept of energy poverty

Unlike energy poverty, the concept of poverty is firmly established in the public arena. The first goal of UN Millennium Development Goals (MDG) from 2000—signed by all UN member countries—is to eradicate extreme poverty and hunger. The UN World Summit for Social Development in Copenhagen defines absolute poverty as ‘severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information’ (United Nations, 1995, pp. II.19). Conceptualizing, addressing and measuring of poverty is often not couched in terms of ends but in terms of the (material) means that satisfy these needs. The reason is that means are usually more tangible. The most prominent means used to indicate poverty is income. Even though other types of indicators are increasingly discussed, the relevance

of income for measuring poverty can be justified with the value of money as a means to satisfy a variety of the most basic needs (or as a means to purchase other important means).[1]

Specific forms of poverty are sometimes singled out. Examples are the concepts of famine and homelessness, which are well-established specific poverty concepts. Next to energy / fuel poverty, water poverty is another specific poverty concept increasingly discussed (Manandhar, Pandey, & Kazama, 2012; Sullivan, 2002). However, as of now, there are no standards or conditions for the introduction and justification of such concepts. In case of energy poverty, critics worry that the introduction of the concept may lead to an inflation of specific poverty concepts and dilute attention from what really matters (Healy, 2003, p. 2; Kopatz, 2013, p. 63). Rather, public policy should holistically aim at providing decent (overall) living conditions to all citizens. A comprehensive approach would be more helpful in fighting poverty than addressing, conceptualizing and measuring each dimension of poverty separately.

In what follows, I introduce and defend three necessary conditions for the establishment of specific poverty concepts. First, specific poverty concepts should refer non-postponable basic needs or to non-substitutable means that satisfy such needs. Secondly, specific poverty concepts should not be reducible to income poverty or other forms of poverty. Thirdly, specific poverty concepts need to refer to a problem of great urgency given (contingent) social and political circumstances.

Let us first look at the role of basic needs in satisfying specific poverty concepts. The concept of 'opera poverty' is a superfluous poverty concepts for three reasons.

[1] In particular, many researchers now prefer multi-dimensional poverty indicators (Alkire & Foster, 2011).

First, it aims at fulfilling entertainment needs and we may say that such needs are not sufficiently basic. Secondly, even if entertainment needs were basic needs, we may say that such needs are postponable and hence lack as sense of urgency that is typically associated with poverty. And finally, opera visits are substitutable by other ways of entertainment. Analogue considerations apply concepts like 'beer poverty' or 'ice cream poverty'.[2]

However, the introduction of the concept of famine (i.e. the widespread scarcity of food in a geography) as a specific poverty concept seems reasonable in light of these considerations. Nutritional needs are very fundamental, cannot be postponed and cannot be satisfied by means other than food. The lack of food almost immediately leads to severe deprivation and that should prima facie be a reason to conceptualize it in poverty research and address it in public policy.

Now, what about energy poverty? Let us first note that human beings do not have a need for energy. Energy services are a means to satisfy human needs. So, the question is if energy poverty as a means is crucial for the satisfaction of basic needs. In specifying the right for an adequate standard of living, the universal declaration of human rights lists means such as food, clothing, housing, medical care, social services and education (United Nations, 1948). Energy is notably missing here. In 1948, when the declaration was ratified, this may or may not have appropriate. But nowadays, it seems clear that energy services in form of electricity and warmth are a crucial non-substitutable means to satisfy a variety of non-postponable basic needs in rich and poor

[2] Obviously, there may be exceptions. For some people's welfare, opera visits may be non-substitutable, for others the consumption of alcohol is non-postponable. However, it is hard to see how such phenomena relate to poverty at all. I understand the notion of a basic as only referring to the needs of a substantial part of the population.

countries alike. People in the developed world cannot postpone the needs that are satisfied by radiators, stoves, refrigerators, washing machines, warm water, light and communication devices. Grid failures or power and gas cuts almost immediately lead to severe deprivation—due to the non-substitutability of energy services with other means.[3] In developing countries, it is even more obvious how energy services relate to virtually all dimensions of poverty, including hunger, education, gender equality, child mortality, health, fighting diseases and ensuring environmental sustainability (Guruswamy, 2011, pp. 153–157; Pachauri, Mueller, Kemmler, & Spreng, 2004, p. 2083).

Yet, some specific poverty concepts may relate to non-postponable basic needs but are reducible to other poverty concepts. Income poor people may lack the means to afford necessary consumer goods, for example clothing. In such cases, the respective type of poverty strongly correlates with income poverty; or, put differently, increasing incomes could solve the problem. Many other consumer goods are reducible to (income) poverty in this sense.[4] In such cases, there is no need to introduce specific

[3] One may say that energy services are nevertheless a means less fundamental than food. After all, one could use candles instead of electric light, substitute radiators with a pile of blankets and survive on non-cooked food. However, these alternatives are so cumbersome (and sometimes even stigmatizing) that a person without access to affordable energy services virtually immediately suffers from severe deprivation and should certainly be considered poor. Thus, from a poverty perspective, energy services are non-postponable and non-substitutable.

[4] The term 'reduction' is mainly used in metaphysics, philosophy of mind and science, There, it means that 'an entity *x* reduces to an entity *y* then *y* is in a sense *prior to x*, is *more basic than x*, is such that *x fully depends upon* it or is *constituted by I*' (van Riel & van Gulick, 2014). Reducibility shall signify something comparable but less strong here. The fact that a specific type of poverty depends on something more basic and prior, i.e. a lack of

poverty concepts in public policy. Famines, however, are not reducible to income, as they are not caused by low incomes, typically cannot be addressed by supporting people with additional income and cannot be reduced to other forms of poverty.[5] This irreducibility to income poverty or other poverty concepts should be a precondition for the introduction of specific poverty concepts in order to avoid superfluity.

Now, it seems that energy poverty is analogous to the concept of famine here. A substantial amount of the energy poor are not income poor and vice versa. The reason is the dependency of energy poverty to capital and infrastructure investment in the household (Boardman, 2010, p. xv):

> With fuel poverty, the real differentiating cause is the energy inefficiency of the home as a result of insufficient capital expenditure on improving the calibre of the home. As a consequence, the home is expensive to heat and so some of the poorest people have to buy the most expensive warmth. This emphasis on capital expenditure is what differentiates fuel poverty from poverty. Raising incomes can lift a household out of poverty, but rarely out of fuel poverty.

Special needs (e.g. a higher need for warmth for the elderly, small children and the unemployed), a low energy-efficiency of the household, or a combination of both can drive some people into energy poverty that are not income poor. The relevance of capital expenditure to overcome such deprivation is even more obvious for people in

---

income, is an empirical claim, which may turn out to be empirically true for the world we live in but which is not analytically, conceptually or in all possible worlds true.

[5] There have been different theories about the causes of famines. Traditionally, it has been argued that famines are caused by a break-down of food supply, while Amartya Sen famously held that famines are caused by the break-down of the ability of a person to exchange her entitlements for food (Devereux, 2001; Sen, 1981). Within either theory, famines are not caused by low incomes. Rather, low incomes are typically one of the preconditions of famines.

developing countries without access to power and heat grids. People do not have the means to pay for connecting their homes to the grid. So, energy poverty is not reducible to a lack of income and, further, it is hard to see how it could be reduced to other conceptions of poverty (e.g. multidimensional ones).

Finally, a specific form of poverty needs to pose an urgent challenge in order to justify its introduction in public policy. Much more than the other two conditions, the condition of urgency is an empirical condition that depends on contingent social and economic circumstances. Forms of poverty do not need to be singled out with a specific concept if they are neither particular prevalent or challenging at a particular place and time.

Now, I believe that even critics of energy poverty concede that developing countries have severe problems related to their population's access to modern energy infrastructure. 1.4 billion people do not have access to reliable, safe, and efficient energy for cooking, lighting and space heating (Guruswamy, 2011, p. 140). For the developed world, the urgency of the problem is more controversial, yet a large number of researchers agree on its importance. This is not the place to review this extensive body of research but beyond the mere numbers, there is another reason to argue for the urgency of energy poverty in public policy: its connection to climate change policy (Moellendorf, 2014). The transition towards renewable energies has lead and is likely to continue to lead to higher energy prices and hence increasing energy poverty. Some hold that the trade-off between climate change policy and energy poverty can be balanced (Ki-moon, 2011; Ürge-Vorsatz & Tirado Herrero, 2012). But rising energy poverty may also lead to a legitimacy crisis of climate change policy. Climate targets are inacceptable from the perspective of developing countries if they can only be reached if their population remains stuck in energy poverty. Further, the relatively poor

in richer countries may consider change policies to be an unnecessary luxury. Beyond its urgency as a phenomenon in its own right, this (potential) trade-off with climate change policy adds urgency to the concept of energy poverty.

Justifying the introduction of energy poverty based on the three criteria discussed here does not lead to an inflation of specific poverty concepts. The argumentative bar used here is high enough to prevent conceptual inflation in other areas. There are few specific poverty concepts that relate to non-substitutable means that satisfy non-postponable basic needs, pose a problem of great urgency and are irreducible to income poverty or other forms of poverty. Beyond the concepts of famine, homelessness and energy poverty, only 'education poverty' and 'water poverty' may arguably satisfy these criteria—while 'entertainment poverty', 'culture poverty' or 'clothes poverty' do not pass the bar. Introducing energy poverty should be regarded as a singular and sensible addition to, rather than a rejection of a holistic understanding of poverty.

Energy poverty versus alternative concepts

In the last section, I implicitly assumed that energy poverty is the appropriate term to refer to energy-related deprivation. Yet, even those convinced that there should be a conceptualization of energy-related deprivation could argue that energy poverty is not the appropriate concept, or that it is only appropriate for some but not all types of energy-related deprivation. And, indeed, some authors use the term 'fuel poverty', while others have introduced terms like energy vulnerability or energy injustice. The relationship between these terms remains unclear. In any case, conceptual variety and unclear scopes provide hesitant governments and international organization an argument to question the legitimacy of the concept of energy poverty and avoid a thorough

introduction of the concept to measure their policy. In what follows, I defend a broad scope for energy poverty as a comprehensive concept to refer to all kinds of energy-related deprivation.

It has been noted before that the relationship between fuel poverty and energy poverty is unclear (Li, Lloyd, Liang, & Wei, 2014). In the UK, the term 'fuel poverty' has been firmly established in government policy and is sometimes discussed for other developed countries with cold climates (Boardman, 2010; Liddell, Morris, McKenzie, & Rae, 2011; Heindl, 2013; Thomson & Snell, 2013).The term 'energy poverty', on the other hands, tends to be used in the context of developing countries and related to access to energy services (Guruswamy, 2011; Nussbaumer et al., 2011; Pachauri & Spreng, 2005). However, some authors identify the former as 'energy poverty' (Bouzarovski et al., 2012; Harrison & Popke, 2011), or the latter as 'fuel poverty' (e.g. Foster, Tre, & Wodon, 2000).

Brenda Boardman, who had a decisive role in coining the term 'fuel poverty', has stated both terms refer to the same phenomenon (Boardman, 2010, p. 15). Other authors have explicitly argued that the terms signify something different (Li et al, 2014; Liddell et al., 2011, p. 64).[6] Given the controversial status of any energy-related poverty concept in most countries and international organizations, it would at least prima facie be better to stick to one term, unless there are strong reasons against this. Li et al. have built the most thorough argument for distinguishing fuel and energy poverty (Li et al,

[6] This discrepancy also plays a role in translation. In French, on the one hand, two terms have been introduced ('précarité énergétique' and 'pauvreté énergétique', Laurent, 2012) and show the same ambiguity as in English. In German, on the other hand, both fuel and energy poverty translate into the same term ('Energiearmut', Kopatz, Spitzer, & Christanell, 2010).

2014). According to Li et al, the distinction is justified because energy and fuel poverty apply to different climates, have a different definition focus and a different measurement approach.[7]

What about the argument that different climates justify the distinction? The idea is that fuel poverty refers to warmth-related deprivation and hence only exists in colder climates. Energy poverty would then only refer to a lack of electricity. And indeed, fuel poverty is often understood as the inability to keep one's home warm at reasonable cost—that is, without any reference to electricity (Hills, 2012, pp. 7–8). This means people in cold climates could be both fuel and energy poor (Li et al, 2014,, p. 480), while regions with a warm climate could by definition only face the challenge of energy poverty.

Two arguments speak against such an understanding. First, as Li et al. themselves acknowledge, there are structural similarities and connections between warmth and electricity that justify grouping them together (2014, p. 479). Both involve costs and capital investments on a household level with a large-scale energy infrastructure in the background. Additionally, electricity is in many cases used to generate warmth; and heat and power services are often offered by the same providers. Secondly, and even more importantly, virtually all fuel poverty measures and indicatros themselves typically include electricity costs (Boardman, 2010; Hills, 2012; Heindl, 2013).[8] So, it cannot be considerations of climate alone that justify the distinction.

[7] They mention a fourth difference: the establishment of term in different research communities and environment. However, it is unclear how this could justify a distinction between the terms, unless there are some further reasons beyond their (contingent) history.

[8] Note that I suggest not including mobility amongst energy services even though many forms of mobility rely on energy. There are two reasons for this: first, unlike warmth and electricity, mobility is hardly connected with capital investment in a person's household;

Beyond climate, Li et al. hold that a different definition focus is what distinguishes the two terms (2014, p. 479). Individuals may experience energy-related deprivation if they do not have access to energy services at all ('energy poverty') or if they cannot afford these services, despite having access to them ('fuel poverty'). Now, such a distinction may seem reasonable at first. After all, it is a great difference if a household does not have access to heating at all or if a household only has to economize on heating. It is also clear that these two cases require very different policy responses.

Yet, this does not justify the distinction. First of all, the two cannot always be so clearly distinguished: Would a household who cannot pay his electricity bills and whose power has been cut off in consequence by his provider be considered to have a problem with access or affordability? Is someone energy poor or fuel poor, if her home is connected to the grid but she cannot afford electric sockets? Secondly, both terms describe energy-related deprivation of different degrees but that as is true of other terms as well, in particular poverty. No one denies that there is a difference between poverty in the United States and Mozambique. But that does not mean that there ought to be two different concepts. And finally, measures of energy-related deprivation could acknowledge depth of poverty and not just headcount-identification (Hills, 2012)—which means that a lack of access could be weighted heavier than a lack of affordability if one examines a geography in which both phenomena are present.

This leads to the final difference between energy and fuel poverty that Li et al. highlight: the usage of different measures. For fuel poverty, expenditure-based indicators and measures relate energy expenditures to income, while energy poverty is

---

secondly, defining adequate mobility is much harder and, in any case, conceptually different from defining adequate service levels for warmth and electricity.

typically measured by numerical indices concerning physical access to energy (Li et al., 2014, pp. 476–477). Now, strictly speaking, this is not correct: as noted above, some authors use the terms vice versa. But even if it were correct, it would remain unclear why the fact that there are different measures for energy-related deprivation should imply that there have to be different concepts. For a global investigation (if such an investigation were reasonable), one would need an indicator for energy poverty that captures access and affordability criteria. For investigations of regions with primarily access or affordability issues, one could measure only the respective issue. The same variety of indicators and measurements can be found in poverty research without anyone demanding to split up the notion of poverty.

So, neither of the aspects mandates a distinction between energy poverty and fuel poverty. Further, the distinction as put forward in Li et al. rules out energy-related deprivation in wealthy regions with hot climates by definitions (e.g. Singapore or the South of United States) because fuel poverty applies only to cold climates and energy poverty only to country with energy access problems. If one accepts that there is no need for two notions, ‘energy poverty’ is a natural choice because it is broader and more neutral. Fuel poverty is typically associated with heating rather than electricity (Schuessler, 2014, p. 3). This is not a problem in the UK context where warmth is arguably the most important type of energy-related deprivation—but this may not be the case for other geographies. Further, it is energy services that matters to households, not particular sources of energy. And even if that were the case, ‘fuel’ does not refer to all energy sources (e.g. renewables) which could be misleading.

Consequently, the term ‘energy poverty’ is more appropriate and the dualism of energy poverty and fuel poverty should be overcome. In countries where the term ‘fuel

poverty' has been well established, fuel and energy poverty could be understood as synonymous with energy poverty, as suggested by Boardman.

Now, energy poverty and fuel poverty are not the only terms found in the literature. Other authors characterize energy-related deprivation with terms like 'energy vulnerability' (Bouzarovski, Petrova, Kitching, & Baldwick, 2013; Day & Walker, 2013) , 'energy (in)security' (Sovacool & Mukherjee, 2011; Sovacool, Sidortsov, & Jones, 2014), or 'energy (in)justice' (Bickerstaff, Walker, & Bulkeley, 2013; Sovacool et al., 2014; Walker & Day, 2012). In how far are these concepts alternatives to energy poverty?

Day and Walker hold that term energy vulnerability describes 'a situation in which a person or household is unable to achieve sufficient access to affordable and reliable energy services, and as a consequence is in danger of harm to health and/or well-being' (Day & Walker, 2013, p. 16). They argue that the concept of energy vulnerability has various advantages compared to fuel poverty, including that it is not presupposing any strict in-or-out criteria but rather conveys a sense of potentiality, precariousness, dynamism and local and temporal contingency. Now, it is certainly difficult to evaluate such claims on a conceptual level and one should wait to see how these presumed advantages transfer to empirical research. But apart from that, the choice of the term 'energy vulnerability' is unfortunate, as the term has already been established elsewhere referring to the vulnerability of a country's energy supply (Gnansounou, 2008; Percebois, 2007; Plummer, 1982). So, the term is at risk of misunderstandings. Day's and Walker's ideas should hence rather be seen as a contribution to the understanding of energy poverty. For much the same reason, the concept of 'energy security' is also not a good choice to refer to energy-related

deprivation, as this concept also has an established meaning in national security issues (Cherp & Jewell, 2014; Downs, 1999; Yergin, 2006).

The case is different for the idea of energy (in)justice. Poverty and justice issues are often intertwined. In fact, one could even argue that cases of poverty are typically also cases of injustice (although this does not work the other way around: there can be injustice amongst the non-poor). This also becomes clear looking at the understanding of energy justice that people are entitled to energy services if these are needed to secure basic goods (Sovacool et al., 2014). Energy poverty and energy justice, as it stands, may have some overlap: the former examines energy-related deprivation, the latter energy-related entitlements. As a specific justice concept, energy justice faces the same justificatory challenge that energy poverty faces—which I will not address here. What should be clear is that energy poverty and energy justice are congruent rather than competing frameworks.

Disentangling definition, measures and indicators of energy poverty

Even if the parallel usage between energy poverty and other terms is discounted, a plurality in approaches to energy-related deprivation remains. As it stands, there are a variety of different understandings of the term with no common ground in sight. In this section, I argue that the distinction between definitions, measures and indicators can help to structure current discussions on energy poverty and explain this diversity without providing an argument against using the notion in public policy. Indeed, some of the most prominent 'definitions' of the term are not actual definitions but indicators.

Different kinds of definitions serve different ends. In defining energy poverty, what is at stake is a 'real definition' rather than a 'nominal definition'. Nominal definitions explain the meaning of a term by (tautologically) expressing it in other terms

(e.g. in dictionaries). Real definitions, on the other hand, are statements about what the defined term really is. Unlike nominal definitions, such statements are like hypotheses (Gupta, 2014). In case of energy poverty, the nature of the phenomenon remains unclear and hence a real definition has to be established.

Typically, definitions are qualitative. For example, 'obesity' may be defined as a state in which body fat has accumulated to the extent that it is likely to have a negative effect on health. This definition may be 'translated' to a quantitative measure like the body fat percentage that is calculated by dividing total mass of body fat by total body mass. This measure then can be used to check whether a given person falls under the definition of obesity or not. For instance, a man with a body fat percentage above 25%. may be considered obese. However, mistaken as a definition of obesity, the 25% threshold is question-begging—why would be 25% rather than 20% or 30%? Yet, such criticism misses the target, as long as one does not refer to the definition in order to criticize the measure. One has to explain why a certain body fat percentage threshold does or does not appropriately measure obesity as defined above.

Indicators, unlike measures, do not translate definitions but are pragmatic short-cuts to measure complex phenomena. An indicator may simplify matters greatly or measure correlating facts rather than the phenomenon itself. An example would be to use the amount of junk food consumption as an indicator for obesity. The complexity of the definition is not—and does not have to be—captured by the indicator. We have no case of 'translation' here, as there will be a substantial number of false negatives and false positives (see also Schuessler, 2014, p. 16). Some individuals may consume a comparatively high amount of junk food but maintain a high level of athletic activity

that prevents obesity. These individuals are 'false positives'.[9] The difference between indicators and measures is not conceptual hair-splitting. A measure is more appropriate if it is important to avoid false positive or negatives. Indicators can be helpful to track phenomena on a macro-level if there is a lack of adequate data and can be more suitable for political communication given their simplicity.[10]

Let us now look at some of the most prominent definitions, measures and indicators for energy poverty. The Warm Homes and Energy Conservation Act (WHECA), issued by the UK government in 2000, includes the first official definition of energy (fuel) poverty (Hills, 2012, p. 24):

> For the purposes of this Act, a person is to be regarded as living 'in fuel poverty' if he is a member of a household living on a lower income in a home which cannot be kept warm at reasonable cost.

The definition was specified a year later in a strategy document: To measure energy poverty, the UK Government chose to identify a household as energy poor if it would need to spend more than 10 per cent of its income to achieve an adequate level of energy services.[11] This approach goes back to Brenda Boardman (Boardman, 1991, p. 227). Boardman mentions two reasons for choosing the 10% threshold. First, the

[9] It also works the other way around: some people may consume little junk food but become obese due to a lack of athletic activity or a genetic predisposition. These individuals are 'false negatives', as the indicator does not classify them.

[10] The difference between measures and indicators has received surprisingly little attention. It is sometimes discussed in the context of company performance measurement (Jones, 2012).

[11] There is an obvious discrepancy between the WHECA definition and the 10% threshold: the former only mentions warmth, while the 10% threshold encompasses all energy services. The same discrepancy can be found in Hills, 2012. Typically, British authors on fuel poverty rhetorically focus on warmth-related issues but include electricity in their measures and indicators.

three deciles of households with the lowest incomes in the UK actually spent 10% of their income on energy services in 1988. Secondly, Boardman argued that expenditures on energy services are disproportionate, if they are higher than the double median expenditure on energy services—and the median of the UK population was at ~5% in 1988 (Boardman, 2010, p. 22).

Typically, Boardman's 10% threshold is presented as a definition throughout the literature by friends and foes alike (Boardman, 2010; Liddell et al., 2011; Heindl, 2013; Liddell et al., 2011; Moore, 2012; Kopatz, 2013; Thomson & Snell, 2013).[12] However, it is actually not a definition but rather an indicator. To assess the adequacy of the 10% threshold, we need a definition against which we can assess the threshold and its different rationales. This means that a number of criticisms against the 10% threshold miss the target. For instance, the 10% threshold has been often criticized that it identifies some people with medium and high incomes as energy poor (Hills, 2012, pp. 29–31). Even the royal family of the UK is allegedly close to being fuel poor given the high energy costs of their energy-inefficient real estate (Blair, 2011). At the same time, some point out that in some cases even less than a 10% share of energy expenditure on income can be too much for an household (Kopatz, 2013, p. 68). In other words, the 10% threshold produces false negatives and false positives. This should be expected from any indicator. What needs to be examined is if their amount is tolerable and if the indicator shows systematic bias. Additionally, the charge that the 10%

[12] Consider Hills, a critic of the 10% threshold: 'At present, the official measurement of fuel poverty is through the use of a definition set out in the UK Fuel Poverty Strategy 2001. This states that a household is fuel poor if it would need to spend more than 10 per cent of its income to achieve adequate energy services in the home' (Hills, 2012, p. 29).

threshold is arbitrary (Hills, 2012, pp. 29–31) loses much of its force, as the charge of arbitrariness is much more severe for definitions than for indicators.

All this means that controversies surrounding the validity of the 10% threshold (or other indicators) do not mean that energy poverty is not or cannot be consensually defined. The 10% threshold may pick the proper instances of energy poverty sufficiently well in one geography but not in another. We should expect some plurality here, as energy poverty depends on a variety of circumstances and comes in various shapes. Different climates require different types and levels of energy services (e.g. warmth is only relevant in regions with cold winters). A similar plurality of measures and indicators can generally be observed in poverty research.

Furthermore, the use of energy services required for participation in society is constantly changing (e.g. the amount of energy needed for computers, mobile phones, tablets and televisions) and is relative to the level of development in a particular geography. Even within a particular society, adequate energy consumption differs—some members of society (children, disabled people, long-term unemployed, or the elderly) have higher energy needs.

Given such complexities, measures should be fine-grained and multidimensional, amongst other factors incorporating income, energy efficiency, access, preferences and needs, social norms and subjective factors.[13] Indicators as the 10% threshold or other expenditure-based indicators require much less data input and allow tracking policies on a macro-level. Their validity could then be checked in terms of their correlation with a more fine-grained (multi-dimensional) measure.

[13] The consensual measurement approach, for example, may be seen as an example of a measure (Healy, 2004; Thomson & Snell, 2013).

It is beyond the scope of this paper to dig deeper here but it should be clear that a plurality of approaches to measure and indicate energy poverty does not discredit the use of the concept in public policy. Neither should current controversies about the right indicator nor instances of false positives or negatives put the value of the concept in question.

Towards a needs-based definition of energy poverty

Given the considerations above, a robust definition of energy poverty is still needed. The comprehensive scope of term requires such a definition to be broad and open to a variety of different circumstances. This is what will be the focus in the remainder of this section.

Currently, there are three different clusters of energy poverty definitions. The first understanding, primarily of British origin, applies energy poverty to income-poor people that face unreasonable or excessive costs. These approaches follow the WHECA definition quoted above (Hills, 2012, p. 24). The Hills report, for example, identifies a person as energy poor if she has a low income and faces excessive energy expenditures compared to the rest of the population. This understanding can also be seen as the rationale behind the 10% threshold, given that Boardman justifies it with the claim that a double median income share of energy expenditures is excessive.

The second group of definitions typically characterizes energy poverty with the lack of access to modern energy sources (Moellendorf, 2014, p. 17; Pereira et al., 2011, p. 169; Li et al., 2014, pp. 476–477). This understanding goes back to the International Energy Agency (International Energy Agency, 2002). Typically, approaches based on this type of definition identify a household as energy poor if it lacks access to the

electricity grid, clean cooking facilities and / or other energy related facilities or appliances.

Obviously, these definitions mirror the distinction between energy poverty and fuel poverty. But if one rejects this distinction, what could be a sensible definition for energy poverty? The literature offers a third type of definition that identifies a person as energy poor if her energy-related basic needs are not met. For example, Foster et al. have held that '[a] household is said to be fuel poor if its energy consumption does not meet basic energy needs' (Foster et al., 2000, p. 2). The French government has stated that 'précarité énergétique' applies to individuals with difficulties to meet their basic energy needs due to the inadequacy of their resources or housing conditions (Dubois 2012). Buzar understands energy poverty as 'the inability to heat the home up to a socially- and materially-necessitated level' (Buzar, 2007, p. 9), while the Irish government refers to the inability to afford adequate warmth (Office for Social Inclusion, 2007). In context of Brazil, Pereira et al. argue for an approach that understands energy poverty as the condition in which the fulfillment of basic needs is affected by a lack of energy (Pereira et al., 2011, p. 169). Needs-based definitions can encompass a plurality of ways in which needs are not fulfilled. This is, after all, what a Mozambican household without access to electricity and American household that cannot afford to heat sufficiently have in common: in some way or another, their needs relating to energy consumption are not met. Dropping the dichotomy of fuel and energy poverty, a needs-based definition is the most attractive definitional understanding of energy poverty.

The plausibility of a needs-based understanding of energy poverty can be illustrated by looking at Hills' understanding of energy poverty. Hills endorses the WHECA definition and hence an excessive cost definition of energy poverty (Hills,

2012, pp. 7–8). In proposing a new indicator, he analytically assumes that only people with required energy costs above a society's median can be energy poor.[14] This means that a poor person with energy costs below the median would not be considered energy poor, even if she were unable to heat her home adequately.

Now, one could respond to such criticism that such cases are indeed false negatives but that it will have to be checked if the number of such cases is intolerably high. But this is not Hills' response. Rather, he argues that such persons should not count as energy poor because 'it is not clear that their energy bills are at the core of their financial problems' (Hills, 2012, p. 36). This response makes clear that Hills does not conceptualize energy poverty in terms of the needs of individuals but in terms of an individual's energy expenditures relative to other people's energy expenditures. If an individual expenditure is not excessive, she cannot be energy poor.

Yet, as a specific poverty concept, energy poverty should not be about the core of a person's financial problems or the excessiveness of her spending compared to others—but rather about the deprivation that a person experiences. This is much in line with the justification of energy poverty as a separate concept given above. The Hills example shows the counter-intuitive implications of an excessive cost understanding of energy poverty. A similar argument could be construed against access approaches that put material conditions rather than individual deprivation in the center of their understanding of energy poverty. Material conditions—or the relative cost of energy—may help to indicate energy poverty. But what ultimately matters is individual deprivation. More could be said about what it means to have one's energy-related needs

[14] His second criteria is that a household needs to be left with a residual income below the official poverty line after energy expenses (Hills, 2012, p. 33).

unfulfilled. But what should have become clear is that needs-based definitions differ from the other two types of definitions—and that this makes a difference.

Conclusion

There is large body of empirical research on energy poverty by now. Yet, there is little systematic investigation into the nature and justification of the concept. This paper aims at closing this gap. In particular two challenges are addressed: the claims that specific poverty concepts like energy poverty are superfluous and misleading; and the claim that the meaning and scope of term is too unclear to be helpful in public policy.

Against the first challenge, the paper argues that the concept of energy poverty ought to be introduced as a separate concept for mainly three reasons: energy poverty leads to severe deprivations related to a variety of basic needs; energy poverty is irreducible to (income) poverty; and energy poverty is an urgent problem in developing and developed countries and a threat to the success of climate change policies.

Against the second challenge, I have argued that there are good reasons to stick to energy poverty as the comprehensive term to cover all types of energy-related deprivation and in particular avoid a dichotomy between energy and fuel poverty. Additionally, definitions, measures and indicators should be carefully distinguished in the debate. Given the complexity of the phenomena, a variety of measures and indicator and false positive / negative cases should be expected but not disqualify the concept of energy poverty in general.

Finally, three types of definitions for energy poverty were discussed. Of these, a needs-based conceptualization of energy poverty appears to be the most plausible. An exact definition—and adequate measures and indicators—will have to be developed elsewhere. Yet, the arguments provided here should help convince skeptics in national

governments and international organizations that they should no longer ignore the very idea of energy poverty.

References

Alkire, S., & Foster, J. (2011). Understandings and misunderstandings of multidimensional poverty measurement. *Oxford Poverty & Human Development Initiative, 43*.

Bickerstaff, K., Walker, G., & Bulkeley, H. (Eds.). (2013). *Energy justice in a changing climate: Social equity and low-carbon energy*. London / New York: Zed Books.

Blair, D. (2011). *Soaring prices push Queen close to 'fuel poverty'*. Retrieved from http://www.ft.com/intl/cms/s/0/36f46af8-fc0b-11e0-b1d8-00144feab49a.html#axzz3RSFPFb32

Boardman, B. (1991). *Fuel poverty: From cold homes to affordable warmth*. London, New York: Belhaven Press.

Boardman, B. (2010). *Fixing fuel poverty: Challenges and solutions*. London, Sterling, VA: Earthscan.

Bouzarovski, S., Petrova, S., Kitching, M., & Baldwick, J. (2013). Precarious domesticities: energy vulnerability among urban young adults. In K. Bickerstaff, G. Walker, & H. Bulkeley (Eds.), *Energy justice in a changing climate. Social equity and low-carbon energy* (pp. 30–45). London / New York: Zed Books.

Bouzarovski, S., Petrova, S., & Sarlamanov, R. (2012). Energy poverty policies in the EU: A critical perspective. *Energy Policy, 49*, 76–82.

Buzar, S. (2007). *Energy poverty in Eastern Europe: Hidden geographies of deprivation*. Burlington: Ashgate.

Cherp, A., & Jewell, J. (2014). The concept of energy security: Beyond the four As. *Energy Policy, 75*, 415–421.

Day, R., & Walker, G. (2013). Household energy vulnerability as 'assemblage'. In K. Bickerstaff, G. Walker, & H. Bulkeley (Eds.), *Energy justice in a changing climate. Social equity and low-carbon energy* (pp. 14–29). London / New York: Zed Books.

Devereux, S. (2001). Sen's Entitlement Approach: Critiques and Counter-critiques. *Oxford Development Studies, 29*(3), 245–263.

Downs, E. S. (1999). The Chinese Energy Security Debate. *The China Quarterly, 177*, 21–41.

Dubois, U. (2012). *Fuel poverty in France*. Retrieved from http://fuelpoverty.eu/2012/08/24/fuel-poverty-in-france/

Foster, V., Tre, J.-P., & Wodon, Q. (2000). Energy prices, energy efficiency, and fuel poverty. *World Bank discussion papers*,

Gnansounou, E. (2008). Assessing the energy vulnerability: Case of industrialised countries. *Energy Policy*, *36*(10), 3734–3744.

Gupta, A. (2014). Defintions. *Stanford Encyclopedia of Philosophy, Spring 2014 Edition*. Retrieved from http://plato.stanford.edu/archives/spr2014/entries/definitions/

Guruswamy, L. (2011). Energy poverty. *Annual review of environment and resources*, (36), 139–161.

Harrison, C., & Popke, J. (2011). "Because You Got to Have Heat": The Networked Assemblage of Energy Poverty in Eastern North Carolina. *Annals of the Association of American Geographers*, *101*(4), 949–961.

Healy, J. (2003). *Fuel poverty and policy in Ireland and the European Union*. *Studies in public policy: Vol. 12*. Dublin: Policy Institute.

Healy, J. D. (2004). *Housing, fuel poverty, and health: A pan-European analysis*. Aldershot: Ashgate.

Heindl, P. (2013). Measuring fuel poverty: General considerations and application to German household data. *ZEW Discussion Paper*, (No. 13-046).

Hills, J. (2012). *Final report of the Hills Independent Fuel Poverty review: Getting the measure of fuel poverty*. London: Centre for Analysis of Social Exclusion.

Howden-Chapman, P., Viggers, H., Chapman, R., O'Sullivan, K., Telfar Barnard, L., & Lloyd, B. (2012). Tackling cold housing and fuel poverty in New Zealand: A review of policies, research, and health impacts. *Energy Policy*, *49*, 134–142.

International Energy Agency (IEA). (2002). *World Energy Outlook: Energy and Poverty*. Paris.

Jones, P. (2012). *What is difference betwen a measure and an indicator?* Retrieved from http://www.excitant.co.uk/2012/05/what-is-the-difference-between-a-measure-and-an-indicator.html

Ki-moon, B. (2011). *'The Implications of Energy Poverty Enormous,' Says Secretary-General, Urging All to 'Join the Dots' Between Energy, Food, Water, Climate Security, Development*. Retrieved from http://www.un.org/News/Press/docs/2011/sgsm13755.doc.htm

Kopatz, M. (2013). *Energiewende. Aber fair!: Wie sich die Energiezukunft sozial tragfähig gestalten lässt*. München: Oekom.

Kopatz, M., Spitzer, M., & Christanell, A. (2010). *Energiearmut: Stand der Forschung, nationale Programme und regionale Modellprojekte in Deutschland, Österreich und Großbritannien*. *Wuppertal Papers: Vol. 184*. Wuppertal: Wuppertal Institut für Klima, Umwelt, Energie.

Laurent, É. (2012). Pour une justice environnementale européenne: le cas de la précarité énergétique. *Revue de l'OFCE, 120*(1), 99–120.

Li, K., Lloyd, B., Liang, X.-J., & Wei, Y.-M. (2014). Energy poor or fuel poor: What are the differences? *Energy Policy, 68,* 476–481.

Liddell, C., Morris, C., McKenzie, P., & Rae, G. (2011). *Defining Fuel Poverty in Northern Ireland: A preliminary review*. Coleraine.

Lloyd, B. (2006). Fuel Poverty in New Zealand. *Social Policy Journal of New Zealand, 27,* 142–155.

Manandhar, S., Pandey, V. P., & Kazama, F. (2012). Application of Water Poverty Index (WPI) in Nepalese Context: A Case Study of Kali Gandaki River Basin (KGRB). *Water Resources Management, 26*(1), 89–107.

Moellendorf, D. (2014). *The moral challenge of dangerous climate change: Values, poverty, and policy*. Cambridge: Cambridge University Press.

Moore, R. (2012). *Improving the Hills approach to measuring fuel poverty*. Research Report. Retrieved from http://www.consumerfocus.org.uk/files/2009/06/ACE-CSE-and-R-Moore-2012-11-Improving-the-Hills-approach-to-measuring-fuel-poverty.pdf

Nussbaumer, P., Bazilian, M., Modi, V., & Yumkella, K. K. (2011). *Measuring energy poverty: Focusing on what matters* (Vol. 42). Oxford: Oxford Poverty & Human Development Initiative.

Office for Social Inclusion. (2007). *National Action Plan for Social Inclusion 2007-2016*. Dublin.

Pachauri, S., & Spreng, D. (2005). Energy use and energy access in relation to poverty. *CEPE Working Papers*, (25).

Percebois, J. (2007). Energy vulnerability and its management. *Internation Journal of Energy Sector Management, 1*(1), 51–62.

Pereira, M. G., Freitas, M. A., & da Silva, Neilton F. (2011). The challenge of energy poverty: Brazilian case study. *Energy Policy, 39*(1), 167–175.

Pereira, M. G., Freitas, M. A., & da Silva, Neilton F. (2010). Rural electrification and energy poverty: Empirical evidences from Brazil. *Renewable and Sustainable Energy Reviews, 14*(4), 1229–1240.

Plummer, J. L. (1982). *Energy vulnerability*. Cambridge, MA: Ballinger Pub. Co.

Scheer, J. (2012). *Alleviating Energy Poverty in Ireland: an Efficient, Sustainable Approach*. Retrieved from http://fuelpoverty.eu/2012/08/28/alleviating-energy-poverty-in-ireland-an-efficient-sustainable-approach/

Schuessler, R. (2014). Energy Poverty Indicators: Conceptual Issues: Part I: The Ten-Percent-Rule and Double Median/Mean Indicators. *ZEW Discussion Paper*, (No. 14-037).

Sen, A. (1981). *Poverty and famines: An essay on entitlement and deprivation*. Oxford: Clarendon Press.

Sesan, T. (2012). Navigating the limitations of energy poverty: Lessons from the promotion of improved cooking technologies in Kenya. *Energy Policy, 47,* 202–210.

Sovacool, B. K., & Mukherjee, I. (2011). Conceptualizing and measuring energy security: A synthesized approach. *Energy, 36*(8), 5343–5355.

Sovacool, B. K., Sidortsov, R. V., & Jones, B. R. (2014). *Energy security, equality and justice*. New York: Routledge.

Sullivan, C. (2002). Calculating a Water Poverty Index. *World Development, 30*(7), 1195–1210.

Thomson, H., & Snell, C. (2013). Quantifying the prevalence of fuel poverty across the European Union. *Energy Policy, 52,* 563–572.

United Nations. (1948). *Universal Declaration of Human Rights*. Approved by the General Assembly at its Plenary Meeting on 6 December, 1948. Retrieved from http://www.un.org/en/documents/udhr/

United Nations. (1995). *Report of the world summit for social development*. Retrieved from http://www.un.org/documents/ga/conf166/aconf166-9.htm

Ürge-Vorsatz, D., & Tirado Herrero, S. (2012). Building synergies between climate change mitigation and energy poverty alleviation. *Energy Policy, 49,* 83–90.

van Riel, R., & van Gulick, R. (2014). Scientific Reduction. *Stanford Encyclopedia of Philosophy, Spring 2014 Edition*. Retrieved from http://plato.stanford.edu/entries/scientific-reduction/

Walker, G., & Day, R. (2012). Fuel poverty as injustice: Integrating distribution, recognition and procedure in the struggle for affordable warmth. *Energy Policy, 49,* 69–75.

Yergin, D. (2006). Ensuring Energy Security. *Foreign Affairs, 85*(2), 69–82.