

THE UNIVERSITY OF CALGARY

(In)Equality

by

Risa Kawchuk

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF ARTS

DEPARTMENT OF PHILOSOPHY

CALGARY, ALBERTA

AUGUST 23, 1996

©Risa Kawchuk 1996

THE UNIVERSITY OF CALGARY
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "(In)Equality" submitted by Risa Kawchuk in partial fulfillment of the requirements for the degree of Master of Arts.

Thomas Hurka
Supervisor, Thomas Hurka, Dept. of Philosophy

Brenda M. Baker
Brenda Baker, Dept. of Philosophy

Stanford Shedd
Stanford Shedd, Dept. of Economics

Sept. 13, 1996
Date

ABSTRACT

Many egalitarians have characterized their view as one that accepts equality as an intrinsic moral value, and one that is concerned with relations between the lives of individuals. In comparing different outcomes with respect to these concerns, different approaches to assessing the disvalue of relations of inequality between individuals have been offered. The assumption has been that by focussing on relations of inequality, the concerns for equality and relations between individuals is addressed--that equality and inequality stand in an inverse or reciprocal relation to one another, that they are 'two sides of the same coin'. In surveying various approaches to assessing inequality, all of which have shortcomings for the egalitarian, I argue that the above assumption should be rejected--that equality and inequality are not 'two sides of the same coin'. I also consider some implications of rejecting this common assumption, including what a more acceptable egalitarian measure or method for comparing outcomes with respect to equality and relations between individuals would look like: it would assign positive value to equality, in addition to disvalue to inequality.

TABLE OF CONTENTS

Approval Page.....	ii
Abstract.....	iii
Table of Contents.....	iv
PRECIS.....	1
CHAPTER ONE: INTRODUCTION.....	8
1.1 Egalitarianism Versus Other Moral Systems.....	8
1.2 Equality Versus Priority.....	13
1.3 Egalitarianism: Objections and Replies.....	17
1.31 Benefits Without Harms.....	17
1.32 Levelling Down: Harms Without Benefits.....	19
1.4 Some Questions for Egalitarianism.....	25
1.5 My Question and My Methodology.....	33
1.51 Reflective Equilibrium.....	36
1.52 How to Interpret My Examples.....	37
1.53 (In)equality and Inequality.....	41
CHAPTER TWO: DEVIATION.....	42
2.1 Intuitive Plausibility.....	42
2.2 Arbitrariness.....	43
2.21 DEV MED.....	44
2.22 DEV AVE.....	45
2.3 Misrepresentation of the Egalitarian's Concern.....	47
2.31 Insensitivity to Redistributions.....	48
2.32 Implausibility for Variations in Population Size.....	52
2.4 Deviation's Importance: Clarifications and Distinctions.....	56
CHAPTER THREE: ECONOMIC MEASURES.....	60
3.1 Statistical / Summary Measures.....	61
3.11 Relative Mean Deviation (M).....	61
3.12 Variance (V), Coefficient of Variance (C), Standard Deviation of Logarithms (H).....	64
3.13 Range (E).....	68
3.14 Gini Coefficient (G).....	72
3.2 Atkinson's Measure.....	83
3.3 A Complex Measure.....	85
3.31 Sen's Intersection Approach.....	85
CHAPTER FOUR: INDIVIDUAL COMPLAINTS.....	92
4.1 Individual Complaints: Three Fundamental Questions.....	93
4.11 The Complex Nature of Individual Complaints: An Analogy.....	94

4.12 Who has a Complaint About Inequality?.....	96
4.13 How Large is Their Complaint?.....	98
4.14 Combining Complaints.....	100
4.2 Individual Complaints Versus Other Inequality Measures.....	108
CHAPTER FIVE: INDIVIDUAL COMPLAINTS EVALUATION.....	112
5.1 The Advantages of Complexity.....	113
5.11 Temkin's Argument for Complexity.....	115
5.2 Complexity as Reflected by Individual Complaints.....	129
5.22 A First Confusion: Conjuncts and Conjunctions.....	133
5.23 A Second Confusion: Motivation and Explanation of.....	136
AVE, MP, and WAP	
5.24 Revise or Reject?.....	147
5.3 Temkin's Project.....	152
5.4 Population Variations.....	153
CHAPTER SIX: EQUALITY, INEQUALITY AND (IN)EQUALITY.....	158
6.1 One Option: Relativizing to Population Size.....	159
6.12 Problems With Relativizing to Population Size.....	164
as a Solution to Adding BOPs	
6.2 Giving Poaitive Value to Equality: Preliminary Worries.....	172
6.21 At the Level of Principles: Violating the Pedantic Assumption.....	173
6.22 At the Level of Judgments: Are Larger Equal Worlds Better?.....	181
6.3 Giving Positive Value to Equality: Further Concerns.....	184
6.31 Ad Hoc.....	185
6.32 Scope.....	188
6.33 What About Little Inequalities?.....	189
6.24 Only an Academic Exercise?.....	192
CHAPTER SEVEN: ASSIGNING POSITIVE VALUE TO EQUALITY.....	195
7.1 Other Options: Avoiding Equality as a Positive Value.....	196
7.11 Maintain the Pedantic Assumption Through a.....	196
Non-individualistic Approach?	
7.12 Negative Egalitarianism.....	198
7.2 Assigning Positive Value to Equality.....	200
7.21 Direct Value.....	200
7.22 Discounting.....	203
7.3 Complex Complexity.....	206
7.31 Complicated Calculations.....	206
7.32 Complex Balancing of Values.....	207
APPENDIX A.....	209

PRECIS

This thesis concerns egalitarianism¹. Egalitarianism, as its name suggests, is a moral system that accepts equality as an intrinsic moral value. The egalitarian's distinguishing concern is not with how much people have, or how people fare; "her concern is with how much people have *relative to others*" (Temkin, p.200)--that is, how well people fare relative to one another. One way of expressing this distinguishing concern of egalitarianism is in terms of 'relations' between the lives of individuals. The egalitarian attributes value and disvalue to relations between the lives of individuals, and not merely to the content of lives.

The above characterization of egalitarianism raises an important question: *Which* relations between individuals² is the egalitarian concerned with? Though this question admits of more than one interpretation, by far the most common interpretation is:

(1a) Which relations *of inequality* between individuals matter for the egalitarian? Much discussion has centered on this question. It has been debated whether the egalitarian should care about the relations of inequality between all individuals in a society, or only some. Should she, for instance, care solely about inequalities involving people who are badly-off? And if so, those who are badly off by some absolute standard, or those badly-off relative to the rest of their society? Is inequality between extremely well-off individuals morally significant at all? Or should her concern be restricted to inequality involving the *very* worst-off members of a society? These issues suggest a further question:

¹ See Chapter One, Section 1.1 and 1.2 for a discussion of the precise meaning of 'egalitarianism' in this thesis.

² In general, I refer to "relations between individuals" rather than the more verbose "relations between the lives of individuals".

(1b) *How much* should the egalitarian care about the inequality between different individuals? Should she care in the same way about all inequalities, or should the inequality between certain individuals count for more? Should the amount of disvalue attributed to an inequality depend solely on the size of the 'gap' between individuals, or should it also depend upon the actual levels involved? For instance, does inequality matter more 'lower down': does a 10 unit difference in our levels of welfare matter more if I have 10 units of welfare and you have 20, than if I have 100 and you 110?

Despite much debate about questions (1a) and (1b), there is a fair amount of consensus as to the egalitarian's answers, especially to the former question. One characteristic of the egalitarian is that she accepts equality as an *intrinsic* moral value; hence, she should assign disvalue to the inequality between any two individuals--all relations of inequality count. There is somewhat less agreement about her answer to (1b), since there is debate about the precise way in which inequality should be measured or assessed. Nonetheless, there is general consensus that the inequality between different individuals need not be assigned equal weight, and in particular, inequalities 'lower down' may indeed count for more.

On the other hand, very little--if any--attention has been paid to the other interpretation of the original question. '*Which* relations between individuals is the egalitarian concerned with?' can also be interpreted as:

(2a) Which *kinds* of relations matter for the egalitarian? Is she concerned only with relations of inequality, such that she assigns them (varying strengths of) disvalue, or do relations of equality also matter? There has been little, if anything, said about this question because most writers have accepted what I refer to as "the pedantic assumption". I use this term to refer to the common assumption that equality and inequality stand in an inverse or reciprocal relation to one another--that they are, so to speak, two sides of the same coin--and hence that caring about or speaking about *both* of them is pedantic. This

inverse/reciprocal relationship that supposedly holds between equality and inequality has many different expressions; some of the more common are 'more/less', 'better/worse', and 'value/disvalue'. I have chosen the label "the pedantic assumption" from Parfit's statement of the value/disvalue version of this idea:

...inequality is bad. That seems to me the heart of this view. But I shall keep the familiar claim that, on this view, equality has value. It would be pedantic to claim instead that *inequality* has *disvalue*. (*Equality or Priority?*, p.5)

Parfit is far from alone; the pedantic assumption is wide-spread. For example, Temkin says:

The set of issues that most philosophers cast in the terminology of *equality*, most economists cast in the terminology of *inequality*. The issues are the same, but there are two ways of talking about them. Thus the egalitarian's concern to promote equality just is the concern to reduce inequality...(*Inequality*, p.7)

The final line above contains the more/less version of the pedantic assumption: the concern to "promote equality" (i.e., make more equality) just is the concern to "reduce inequality" (i.e., make less inequality). And the claim that equality and inequality are just "two ways of talking" about the same issue is a version of the idea that equality and inequality are just "two sides of the same coin".

Temkin also states the pedantic assumption in a combined better/worse-value/disvalue form. Much of his book *Inequality* involves "considering situations in terms of but one respect--inequality--in which they can be better or worse" (p.7). To focus concern on only inequality, and not other moral concerns, he suggests that readers

"...think about such situations by imagining, contrary to fact, that equality were their only moral concern. That is, by asking themselves how they would judge such situations *if* equality were the only thing they valued" (ibid., fn.10; see also p.54, fn.2).

Yet another combined form of the pedantic assumption is given by McKerlie. Egalitarianism as characterized above--that is, the moral system that accepts equality as an intrinsic moral value--he calls "the equality view". He says:

...according to the equality view the more inequality an outcome contains, the worse--other things being equal--it is. ("Equality and Priority", p.25)

In this thesis I argue that the pedantic assumption is neither obvious nor uncontroversial. I argue that equality and inequality, when understood *individualistically*--that is, when understood as relations between *individuals*--do not stand in a reciprocal or inverse relation to one another. This issue will be discussed in some detail in Chapter Six, but it is not difficult to motivate the idea that the pedantic assumption is questionable. Consider the following example³:

	a	b		a	b, b₂
A:	10	20	B:	10	both 20

Suppose that we are to compare two different outcomes, **A** and **B**. In **A**, there are two individuals, **a** and **b**, where **a** is worse off (with 10 units of whatever good it is we are comparing) and **b** is better off (with 20 units of the good). **B** results from **A** when another better-off individual, **b₂**, is added. Does it not seem that **B** has both *more inequality* as

³ Explanation of how to interpret the sorts of examples I use throughout this thesis can be found in Chapter One, Section 1.5.

well as *more equality* than A? For in A there was only *one* inequality, that between **a** and **b**, whereas in B there are *two* inequalities, that between **a** and **b**, and that between **a** and **b**₂. Yet in A there was *no* equality, whereas in B there is *some*--that between **b** and **b**₂. This example suffices, I think, to raise doubts about the inverse/reciprocal relationship that supposedly holds between equality and inequality, and makes the label "the pedantic assumption" seem ironic. This assumption seems more controversial than pedantic!

Thus unlike most others who have written on the issue, I *do* discuss question (2a) about which *kinds* of relations between individuals the egalitarian should be concerned with. I also consider the corollary of this question:

(2a) *How much* should the egalitarian care about the different kinds of relations between individuals? Should she care equally about relations of inequality and relations of equality, or is the disvalue of the former morally more significant than the value of the latter? How is she to measure or assess relations of equality and weigh them against her assessment of relations of inequality, a difficulty highlighted by the fact that inequality comes in varying strengths or degrees, whereas equality does not?

My concern in this thesis, then, is to survey various measures of inequality and ask whether or not they are adequate to the egalitarian's task of evaluating outcomes with respect to the concern for relations between individuals which attaches intrinsic value to relations of equality and disvalues relations of inequality⁴. In Chapters Two through Five, I consider the question of whether or not they are acceptable to the egalitarian as measures of inequality. Even though I reject the idea that the concern for (in)equality and the concern for inequality are one and the same, it is nonetheless apparent that the concern for inequality is indeed *part*--and a very important part--of the egalitarian's concern. In

⁴ I refer to this rather long-winded concern as the concern for '(in)equality'. See Chapter One, Section 1.5 for more on '(in)equality'.

Chapter Two I consider the simplest and most *prima facie* intuitively plausible measures of inequality: deviation measures. I argue that these measures are unacceptable to the egalitarian, for among other things, they misrepresent the concern about relations between individuals. In Chapter Three I consider some inequality measures proposed in the economic literature. I argue that while these measures are an improvement on deviation measures, they too are likely unacceptable to the egalitarian--different economic measures being unacceptable for different reasons and to different degrees. In Chapter Four I outline a complex approach to measuring inequality from the recent philosophical literature: the Individual Complaints framework. In Chapter Five I evaluate this framework, arguing that although it is successful in overcoming many of the most serious difficulties encountered by deviation and economic measures, it too is not without problems, especially with respect to its implications for variations in population size.

In Chapter Six I begin by considering the specific problem for Individual Complaints about population size, and go on to consider what this problem shows about measures of inequality in general. I argue that these examples suggest a much wider-ranging problem with inequality for the egalitarian: inequality measures do not fully or adequately capture the egalitarian concern for relations between individuals, focusing as they do *solely* on relations of *inequality*. In order for the egalitarian to evaluate and compare different outcomes with respect to relations between individuals, I argue that the egalitarian needs a measure which acknowledges and assesses all *kinds* of relations between individuals: those of inequality *and* those of equality. Thus, in Chapter Six it becomes clear that the ladder being climbed in the quest for an acceptable egalitarian

measure should be thrown away; a measure of inequality only is not what the egalitarian desires.⁵

Lastly, in Chapter Seven, I offer some measures which might capture the egalitarian's entire concern for relations between individuals. Such measures acknowledge and assess relations of both equality and inequality, and thus are possible routes for the egalitarian to pursue in her quest for an acceptable measure of (in)equality.

⁵ Of course, my argument depends upon questioning, and in fact rejecting, the pedantic assumption. For if one accepts this assumption, my argument seems misguided: if equality and inequality stand in an inverse/reciprocal relation to one another, wouldn't it be sufficient to be concerned with only one of them--typically inequality--in making judgments about relations between individuals? Much of Chapter Six discusses the (im)plausibility of the pedantic assumption.

CHAPTER ONE: INTRODUCTION

In this chapter I provide an overview of my project. In Sections 1.1 and 1.2, I compare and contrast egalitarianism to other moral systems. In Section 1.3, I consider and briefly respond to some objections that have been made against egalitarianism and the idea that equality is an intrinsic moral value. In Section 1.4, I discuss various sorts of questions egalitarians have focused upon, and distinguish the sort of question I am concerned with--which I call the comparative value question--from them. In Section 1.5, I discuss the comparative value question in more detail, as well as the methodology I use in investigating this question.

1.1 EGALITARIANISM VERSUS OTHER MORAL SYSTEMS

What is it to be an egalitarian? What distinguishes egalitarianism from other moral systems, such as utilitarianism? There seems to be an obvious answer, suggested by its very name--or better yet, its antiquated name, 'equalitarianism'--egalitarians value equality. But this answer is not sufficiently discriminating; it alone does not capture what is distinct about egalitarianism. Utilitarians can also be said to value equality, as they believe that an equal distribution of a fixed amount of a good (e.g., income or resources) is the best possible distribution.

There is a difference, however, between the utilitarian and the egalitarian in the sense in which they 'value' equality. The utilitarian who values equality does so because of some other beliefs he holds: (i) diminishing marginal utility (e.g., of income or resources), and (ii) the same utility function for all--that is, that all individuals are equally efficient 'utility machines'. Given these assumptions, it simply *follows* that equal distributions of a fixed amount of good are the best distributions, as equal distributions maximize utility. But

equality is not itself valued by the utilitarian; it is valued only as the means to maximizing utility, and utility is what he actually values¹. In other words, the utilitarian attaches only *instrumental* value to equality.

Further, the utilitarian attaches instrumental value to equality only in the case of certain kinds of goods; namely, instrumental goods. He values equal distributions of income or resources, because these distributions--given beliefs (i) and (ii) above--maximize utility. In other words, the utilitarian values equal distributions of instrumental goods because they maximize intrinsic goods. But he does not value equality with respect to intrinsic goods such as happiness or welfare; he wants to maximize their totals, regardless of their distribution among individuals. He has no preference between outcome **A** where I have 5 'utils' (units of utility: happiness, welfare, etc.) and you have 15, and **B** where each of us has 10 utils, since the total amount of intrinsic good--utility--is the same in both **A** and **B**.

The egalitarian values equality quite differently than the utilitarian, as she values equality for its own sake. That she values equality is neither a mere consequence of some of her other beliefs, nor does she value equality solely as means to something else. Further, the value of equality is not restricted to instrumental goods such as income or resources; she values equality with respect to intrinsic goods. For example, she prefers outcome **B** where each of us has 10 utils to **A** where I have 5 and you have 15.

In other words, she attaches *intrinsic* value to equality. She believes equality is valuable in itself, whether or not it maximizes utility. Thus, what helps to distinguish an

¹ Utility: happiness, welfare, desire-fulfillment, etc. or some combination thereof, is an *intrinsic* good for the utilitarian. See text below.

egalitarian moral system from others is the acceptance of equality as an intrinsic moral value².

What is equality? Equality is a relation between (the lives of) different individuals. A concern with relations between individuals also helps to distinguish egalitarianism from other moral systems. In making judgments about the goodness or badness of outcomes, the utilitarian, for example, does not look at the relations between individuals at all. In assessing the value or disvalue of the outcome as a whole, he looks first at each individual's life in isolation to determine how much utility it contains. He then sums these isolated utility scores to arrive at the outcome's total utility score. He attaches no *extra* value to the relations of equality in an equal distribution. Thus, what also helps distinguish egalitarianism is that it attaches value to relations between lives rather than merely to the content of lives.

It is worth noting, however, that not every moral system put forth under the rubric of 'egalitarianism' is of this type. Not every so-called 'egalitarian' writer has grounded his system upon the acceptance of equality as an intrinsic moral value, or is concerned with relations between individuals. Some have based their views upon a different moral idea: priority. Such individuals, whom I shall call 'prioritarians'³, believe that people who are

² As I shall discuss below, not all moral systems labeled 'egalitarian' in the literature accept equality as an intrinsic moral value. However, for the purposes of this thesis I reserve the term 'egalitarian' to a moral system which does so--i.e., a moral system which values equality "*over and above the extent it promotes other ideals*" (Temkin, p.7).

³ There are several different names for such individuals and their view(s) in the literature. Parfit dubs them "Priority Egalitarians", Temkin calls them "extended humanitarians", McKerlie speaks of "the priority view" version of egalitarianism, etc. I have chosen the term "prioritarian" as a parallel to "egalitarian": a distinguishing value of the prioritarians view is priority, just as a distinguishing value of the egalitarian's view is equality.

worse off should receive priority over those who are better off, that the claims or interests of the worse-off are of greater moral importance than those of the better-off. This special concern for the worse-off underlies the prioritarian's belief that a smaller benefit to a worse-off person can morally outweigh a larger benefit to someone better-off.

This belief goes well beyond the utilitarian principle of diminishing marginal utility (dmu). The utilitarian might also judge that a smaller benefit to a worse-off individual outweighs a larger benefit to a better-off individual, provided that (i) the benefits concern *instrumental* goods such as income or resources, and (ii) the former benefit, in accordance with dmu, yields more utility than the latter. But the prioritarian believes that the smaller benefit can outweigh the larger *even if* (i) the benefits concern an *intrinsic* good such as happiness or welfare, or (ii) the benefits concern instrumental goods such as income or resources, and the worse-off gains less intrinsic good from the smaller benefit of these instrumental goods than the better-off would from the larger benefit. More perspicuously, the prioritarian, but not the utilitarian, believes that a smaller gain *in utility* to a worse-off person can morally outweigh a larger gain *in utility* to a better-off person.

Unfortunately, many of the examples both egalitarians and prioritarians have employed to elucidate their views and distinguish them from utilitarianism conflate the ideas of equality and priority. These examples typically involve a choice between giving a worse-off individual a smaller benefit or giving a better-off person a larger benefit. Thomas Nagel, in his article "Equality", (*Mortal Questions*, p.123-24) offers just such an example. He imagines having two children: the first is "normal and quite happy", while the second "suffers from a painful handicap". He considers a choice between:

(i) moving to an expensive city where his handicapped child could receive "special medical treatment and schooling", or

(ii) moving to a suburb where his normal child "can have a free and agreeable life".

Since Nagel wants to use this example as "a test for the value of equality", he supposes that "the gain to the first child of moving to the suburb is substantially greater than the gain to the second child of moving to the city". He says that the "egalitarian decision" is to move to the city.

What is it that makes this an egalitarian decision? Nagel thinks that it is the value of equality, but it seems just as likely to be the value of priority. This example masks the distinction between them, as moving to the city both produces the more equal outcome--for moving to the suburb and benefiting the better-off child would further widen the gap between the children--*and* gives priority to the worse-off child.

But contrast this decision, whatever its basis, with the utilitarian's. The utilitarian simply measures the utility that would be had by each child in both the city and the suburb, and chooses to move to the location with the greater total utility. Since Nagel supposes that the gain to the healthy child of moving to the suburb is "substantially greater" than the gain to the handicapped child of moving to the city, the utilitarian would no doubt choose the former⁴.

⁴ It is perhaps confusing why Nagel adds the qualifier "substantially" in describing the possible gains to each child. This confusion depends upon what Nagel means by the term "gain". If "gain" is simply "gain in utility"--as it seems to be in the context of the passage--then the qualifier is redundant, as the utilitarian would choose the move with the greater gain in utility, simpliciter. But if Nagel intends "gain" as something like "gain in resources", the qualifier is important. For if the gain in resources for the healthy child in moving to the suburb were only *slightly* more than for the handicapped child in moving to the city, the utilitarian might endorse the supposedly "egalitarian decision" to move to the city. For given diminishing marginal utility, a smaller gain to the 'lower down' handicapped child might result in more utility than a slightly larger gain to the 'higher up' healthy child. Such a result is possible--though admittedly extremely implausible--even if the assumption

While examples like Nagel's are useful in distinguishing egalitarian and prioritarian moral systems from others such as utilitarianism, they are of little help in distinguishing them from one another. In giving a smaller benefit to a worse-off individual rather than a larger benefit to a better-off individual, the values of equality and priority do not conflict, though they can and do conflict in other, more complicated, cases. Since egalitarianism and prioritarianism are sometimes and easily confused, and since this thesis concerns only egalitarianism and not prioritarianism, it is important to be clear about the distinction between them.

1.2 EQUALITY VERSUS PRIORITY

One obvious difference between egalitarians and prioritarians, as I said earlier, is that the former accept equality as an intrinsic moral value whereas the latter do not; rather, they have a special concern for the claims and interests of the worse-off. However, this difference does not always (or even often) yield a difference in their judgments about a particular case. For example, both egalitarians and prioritarians will often endorse helping or benefiting the worse-off individuals, as in Nagel's handicapped child example. There are differences, however, in what underlies this judgment: prioritarians desire an outcome where the worse-off fare better, whereas egalitarians desire a more equal outcome.

In other words, the prioritarian and the egalitarian have different objectives. The former aims to improve individuals' *absolute* positions, whereas the latter aims to improve their *relative* position. The prioritarian desires improvements in how people fare, whereas the egalitarian desires improvements in how people fare relative to others, improvements

of the same utility function for all is rejected, as it probably should be in this case. A handicapped child is most likely a less efficient 'utility machine' than a healthy one.

which minimize the inequality between individuals. As these objectives are by no means equivalent, the egalitarian and the prioritarian do not always agree in their judgments.

Consider a society with some inequality between individuals. Suppose that by adopting a certain policy everyone's life would be improved with respect to some intrinsic good--i.e., raised in absolute position. But suppose that these improvements would not be equally distributed; specifically, that the better-off would gain *substantially*⁵ more than the worse-off. Since people would fare better in absolute position under the new policy, the prioritarian would endorse it. But the egalitarian, insofar as her concern is equality and not other moral values, would reject it⁶, because it increases the inequality between individuals even further.

Another difference between the egalitarian and the prioritarian which was mentioned earlier is that the egalitarian is concerned with relations between individuals, whereas the prioritarian is not. However, it might seem that the prioritarian is at least

⁵ This qualifier is important. For if the better-off would gain only *slightly* more than the worse-off, but the overall levels of both groups would change dramatically, the egalitarian might endorse the policy. For example, suppose the better-off have 100 units of welfare and the worse-off have 50, and by adopting the policy the better-off would have 1100 units of welfare and the worse-off 1000. Even though the better-off would gain slightly more than the worse-off (1000 vs. 950 units), the egalitarian might nonetheless endorse this policy if she accepts the view that inequality matters more 'lower down'. And this view does indeed seem intuitively plausible: the 50 unit gap in the first case represents the worse-off having only 50% of what the better-off do, whereas in the second case the 100 unit gap represents the worse-off having approximately 91% of what the better-off do.

⁶ She might endorse the policy "all-things-considered". Equality, though a defining value of egalitarianism, need not be the only moral value accepted by the egalitarian. See Section 1.3.

somewhat concerned with the *relative positions* of individuals. For after all, how can he determine *who* is to receive priority--that is, who comprises "the worse-off"--without considering individuals' relative positions? And the concern with *relations between individuals* and the concern with individuals' *relative positions* are generally taken to be one and the same. However, whether or not there is a distinction to be made here, it is clear that the prioritarian's concern with relative positions (relations between individuals?) is different from the egalitarian's concern about relations between individuals (relative positions?). The prioritarian's concern is not with the relative positions *themselves* but with determining who gets priority, whereas the egalitarian is concerned to assess the relations between individuals *themselves*, in accordance with her acceptance of equality as an intrinsic moral value. In other words, she is concerned with assessing the *extent* of inequality between individuals--i.e., *how much* worse some individuals fare relative to others--rather than merely noting, as does the prioritarian, *that* some individuals fare worse than others.

This difference again means that the egalitarian and the prioritarian disagree about some cases. Consider two societies **C** and **D**, where **C** is a society with some inequality between individuals, and **D** is a society identical in every way to **C**, except that the best-off are even better off in **D** than in **C**; in other words, **D** results from **C** when **C**'s best-off are raised in absolute position. For the prioritarian, improving the lives of the better-off has little or no effect; the worse-off are not any worse off in absolute position⁷. In contrast, it

⁷ For one type of prioritarian, let us call him the 'Relational Prioritarian', the worse-off are made worse off by the change, as the extent to which the worse-off are worse off than others is relevant to assessments of priority. (See text below for more on the variety of prioritarianisms). On this view, **D**'s worse-off have a stronger claim to priority than the worse-off in **C**. However, the Relational Prioritarian has a very different concern with the extent of inequality between individuals than does the egalitarian: like all prioritarians, he

makes a large difference for the egalitarian, since the extent of the inequality between individuals has increased.

One further difference worth noting between the egalitarian and the prioritarian is in the sorts of comparative judgments they make. The egalitarian compares different outcomes with respect to the moral value of equality--that is, she compares outcomes on the basis of how individuals fare relative to one another. For example, she would judge D to be worse than C in this respect. In contrast, the prioritarian compares outcomes with respect to a special concern for the worse-off--often comparing only the absolute levels of the worse-off in two (or more) outcomes. It is only with the sort of comparative judgment made by the egalitarian that I am concerned.

Some last words about prioritarianism. My discussion so far has been misleading, in that I have talked about "*the* prioritarian", as if all proponents of prioritarianism held exactly the same view. In fact, there are a number of different 'prioritarianisms', and the differences between these views are significant enough that their judgments sometimes disagree⁸. But for my purposes these differences are insignificant: none of these views attach intrinsic moral value to equality, and none of them are concerned with assessing or comparing outcomes with respect to relations between individuals. Since I am concerned with both assessing and comparing outcomes in precisely this way, my focus is on egalitarianism, and not prioritarianism.

is concerned to make judgments about priority. He merely considers the extent of inequality--how 'far behind' the worse-off individuals are--to be a relevant factor in these judgments. Unlike the egalitarian, he is not concerned with the extent of inequality *in itself*, as a point of comparison between outcomes. See Parfit's *On Giving Priority to the Worse Off*, chapter six, especially footnote 5.

⁸ See Parfit's *On Giving Priority to the Worse Off*, chapter six (p.4) for such an example, and a fuller discussion of the similarities and differences between the prioritarianisms.

1.3 EGALITARIANISM: OBJECTIONS AND REPLIES

Before describing my project in more detail, I shall make a few comments about the question of whether or not there even any *prime facie* plausibility to egalitarianism and its acceptance of equality as an intrinsic moral value. Some have objected that accepting equality as an intrinsic moral value leads to very implausible consequences, the most serious of which, and most often appealed to, is the so-called 'Levelling Down Objection' (discussed below). Those persuaded by these 'implausible consequences' of valuing equality may wonder why I am bothering with my project at all: why fuss about some particular issues about a moral system if the system itself is obviously untenable?

In this section I offer a rather brief answer to this query. However, it should be kept in mind that this thesis is not intended as a *defence* of egalitarianism and its tenets; rather, it is an exploration of some of the consequences of accepting equality--a relation between individuals--as an intrinsic moral value. Hence, my point in this section is only to argue that egalitarianism is not a view to be rejected out of hand. I am *not* saying that egalitarianism is (or is not) a viable moral view; I am saying that if it is unviable, it will be shown to be such only after close and careful consideration, and for more complicated reasons.

1.31 Benefits without Harms

Let us begin with some of the other 'implausible consequences' of valuing equality, leaving the most serious objection--Levelling Down--until later. One sort of objection appeals to the idea that the egalitarian, since she attaches intrinsic value to equality, would be opposed to some policies whereby there are benefits and no harms. Two such policies

are (i) benefiting some individuals and harming none, and (ii) benefiting everyone, though unequally so. "But would we *ever* reject such policies?", the objectors ask rhetorically. "Would we, for example, reject a policy by which everyone's life is improved, just because these improvements are not distributed equally?"

The egalitarian can, I think, answer this sort of objection by offering examples in which we might well reject such policies, thus undermining the rhetorical force of the objector's questions. And these examples do not need to be highly construed; our intuitions about some everyday examples seem sufficient to this task.

Consider poverty. There is wide-spread agreement that poverty is a bad thing, but less agreement about what to do about it. One proposal might be to ensure that the poor have some minimally acceptable standard of living: adequate food and housing, access to education and health care, etc. This proposal is concerned with improving the absolute position of the worse-off members of our society. But what if, though improving the standard of living of the poor, a certain policy would at the same time enormously improve the standard of living of the better-off? There seems to be something undesirable about such a policy. Improving the lives of the poor is important, but it alone is insufficient--extreme inequality between rich and poor is still objectionable. In other words, it is not just the absolute position of the poor that bothers us. We are also concerned with their position relative to the rest of our society, and hence a policy which improved only their absolute position, but not their relative position, would not necessarily be accepted.

Or consider inequalities of race or gender. Again, there is widespread agreement that the inequality in well-being between men and women or between individuals of different races is objectionable, and that improving the lives of those who are worse-off is important. But is improving their absolute position all that matters? Consider a societal policy that would increase everyone's well-being by 10 percent. This policy improves the

lives of its female and non-white members, but it also improves things for its white male members. And further, given the original inequality in well-being, such a policy makes this inequality even larger. For example, if white males typically have a well-being index of 100 units, whereas all others typically have a well-being of 60 units, the effect of the 10 percent policy is to raise the former's well-being by 10 units, and the latter's only by 6 units. The inequality in well-being, in absolute terms, would become even larger: originally, it was 40 units; after the policy it would be 44. Again, improving the lives of the worse-off would do nothing to alleviate the objectionableness of the inequality.

These examples raise doubts about the "obvious implausibility" of rejecting policies by which everyone benefits, though unequally so. But what about policies by which some benefit, and none are harmed? Again, the same sorts of examples suffice: giving the better-off an even higher standard of living, while not affecting the standard of living of the worse-off seems far from unobjectionable, as does a policy which would improve the well-being of only the white male members of a society. Further, it might be argued that such examples provide support for egalitarianism and its tenets, as they show that insofar as improvements are concerned, those of absolute position are not all that matter. Both utilitarianism and prioritarianism focus solely upon improvements in absolute position, and thus seem unsatisfactory or incomplete in this way. Of course, that we care about improving more than just absolute positions does not show that this 'more' is captured by egalitarianism. However, given its focus upon relations between individuals and relative positions, egalitarianism is at least a *possible* candidate for this 'more'.

1.32 Levelling Down: Harms Without Benefits

Let us turn now to the most serious and most popular 'implausible consequence' of valuing equality: the Levelling Down objection. What is this objection? It is that the

egalitarian, since she values equality intrinsically, thinks that it would be a good thing to 'level down' the better-off--to worsen the lives of the better-off--thus reducing or eliminating inequality. One such 'levelling down' policy, which the egalitarian would supposedly be in favour of, is one by which all better-off Canadians were made as badly-off as our worst-off members, thus achieving equality. In other words, the Levelling Down objection amounts to the claim that (i) the egalitarian would be in favour of some policies that harm some and benefit none; and (ii) that being in favour of such policies is implausible, if not outright objectionable.⁹

Although the egalitarian is hard-pressed to answer the Levelling Down simply by appealing to examples as she might have for the earlier objections, there are other responses available. First, she may point out that there is nothing about accepting equality as an intrinsic moral value that *requires* her to endorse policies which 'level down', as equality need not be the only value she accepts; she may--and should¹⁰--care about improving lives as well as equalizing them. She also has concern for the content of people's lives--a concern for 'aggregative values' such as utility. Further, there is no

⁹ There is an even stronger version of the Levelling Down objection, whereby *all* are harmed and none benefit--e.g., achieving equality (at some new, even lower level) in our society by worsening the lives of everyone, even our very worst-off members. Some have suggested that the Strong Levelling Down objection is an all-but-decisive argument against egalitarianism. Sikora, for example, in his review of Temkin's *Inequality*, says:

...consider (P2) the principle that, ceteris paribus, it is wrong to change a situation for the sake of any increase in equality, however great, if it involves any loss, however small, for the disadvantaged. Surely P2 is highly plausible...

(*Ethics*, Vol. 105, No. 3, April 1995, p.663)

¹⁰ If equality were her only concern she would have a *most* implausible view: equality can be achieved if everyone has nothing.

requirement that equality be the *dominant* value of egalitarianism. Caring about equality and about relations between lives are features which help to distinguish egalitarianism, but it by no means follows that distinguishing features must also be dominant ones. Given the above, then, it might be such that for every levelling down example, the loss in aggregative values such as utility outweighs the gain in equality. Hence, all-things-considered the egalitarian need not endorse levelling down.

This first response may not fully satisfy her opponents, however. They may concede that while all-things-considered egalitarianism need not endorse levelling down, it still says that there is *something* of value in levelling down. Though levelling down might not be thought to be an improvement *overall*, egalitarianism still says that it is an improvement in *some* respect--namely, with respect to equality. But, continue the opponents, how could levelling down be an improvement in *any* respect? One outcome cannot be better than another unless there is someone for whom it is better.

This argument rests crucially upon the premise of the final sentence: that one situation cannot be better (or worse) than another unless there is someone for whom it is better (or worse). This premise has been widely, and often uncritically, accepted. Temkin calls this belief "The Slogan". What exactly does The Slogan claim?

The Slogan claims (i) that the good of outcomes is dependent upon the good of individuals. It is a necessary condition of outcome X being better than outcome Y that there is an individual who is better off in X than she is in Y. And an individual is better off if, in terms of the content of her life, she possesses a higher absolute amount of either intrinsic or instrumental goods. For example, she is better off in X than in Y if she has more utility, or resources, or income, or well-being, etc. in X than in Y. This is The Slogan's second claim: (ii) value is dependent upon the *content* of lives. In other words, The Slogan asserts that (i) value with respect to *outcomes* depends upon value with

respect to *individuals*, and (ii) value with respect to individuals depends upon the *content* of lives.

Thus, responding to this *refined* Levelling Down objection¹¹ by questioning The Slogan upon which it rests, the egalitarian can take a couple of different tacks. She might question either or both of The Slogan's assertions that (i) value with respect to outcomes depends upon value with respect to individuals, and (ii) value with respect to individuals depends upon the content of lives. Or she might argue that The Slogan would support some implausible consequences of its own. Either approach would show that The Slogan, and the levelling down objection which rests upon it, are neither as obvious nor as uncontroversial as many have taken them to be.

Consider The Slogan's second claim, which in effect says that 'better for individuals' means 'better in content of lives'. It might be argued that this interpretation of 'better for individuals' is too narrow--or at least, *misleading*--assuming, as it does, that the only way to improve an individual's life is through a gain in absolute position of utility, or resources, etc. John Broome rejects this assumption¹². He argues that equality is something that makes lives--the very content of lives--better. Broome argues that even though equality is a *relation* between lives, it makes my life better in *content*, gives my life more value, if I am equal to others. Broome's view, then, does not so much reject The Slogan's second claim as refine it: it asserts that equality is an(other) item which contributes value to the content of a life.

Or consider The Slogan's first claim, that the good of outcomes is dependent upon the good of individuals. Temkin offers a rather detailed response to this idea¹³. He begins by distinguishing different 'theories of the good': there are "theories about *self-interest*,

¹¹ i.e., that levelling down cannot be an improvement in *any* respect

¹² John Broome, *Weighing Goods*.

¹³ *Inequality*, Chapter 9.

which tell us what is good or bad *for* someone, and theories about *outcomes*, which tell us about what makes an outcome good or bad" (p.258). He then surveys various theories of the good for individuals--i.e., theories of self-interest--and argues that none of these theories can adequately account for our judgments about the good of outcomes. Since The Slogan assumes that the good of outcomes depends upon the good of individuals, it is to be rejected.

As interesting as both Temkin's and Broome's arguments are, a full discussion of them would take me too far afield. As I have said, my aim is not to defend egalitarianism and its tenets; it is to explore the consequences of accepting these tenets. My question is, *What are the implications for one's judgments, principles, etc.--and in particular, the implications for what constitutes an acceptable measure of (in)equality¹⁴--if one accepts equality as an intrinsic moral value?*, and not, ***Should** one accept equality as an intrinsic moral value?*

Consider the other tack that might be taken by the egalitarian in undermining The Slogan. The Slogan implies a *very* strong claim: value cannot be dependent upon any relation whatsoever. But does this seem obviously unobjectionable?

Consider two societies which are identical in every way, save that in one there is a relation between how hard people work and how well they fare, whereas in other there is not. Isn't there *something* of value in these relations? Or consider our ideas about punishment. Isn't there *something* valuable about having an appropriate relation between the punishment and the crime, such that 'the punishment *fits* the crime'? Both of these examples appeal to desert, another moral value which is relation-based. Or consider a student who receives one A, one B, and one C in a particular course. Isn't it preferable that the student achieves the higher grades later in the term, and the lower grades earlier on? In other words, isn't a certain relation among the marks preferable--C/B/A is

¹⁴ See Section 1.5 for a discussion of '(in)equality'.

preferable to A/B/C--even if the marks add up to the same final grade? Thus, it seems that The Slogan's implication that value cannot be attributed to relations is simply false; among other things, it would rule out the very idea of a 'preferred ordering', an idea which is widely, and unproblematically, accepted.

There is yet one more response the egalitarian might make to The Slogan--namely, that it begs the question against egalitarianism. In claiming that the value of outcomes reduces to the value of individuals, and this in turn to the content of lives, The Slogan is no more than the *bare assertion* that all value is 'content-based', that is, that value cannot be 'relation-based'--i.e., that what has value or determines value cannot be a relation. The Slogan claims that the good, both of outcomes and individuals, depends only upon the content of lives. But the idea that value depends *only* upon content of lives is precisely what the egalitarian rejects; she attaches value to equality, a relation between lives, in addition to the content of lives. Thus it is no *argument* against egalitarianism or equality's status as an intrinsic moral value to merely *assert* that value depends solely upon content of lives; if equality, a relation between individuals, is to be a value at all, it will have to be a relational value. Thus, The Slogan's 'argument' that equality, a relation, cannot be a value because values cannot be relation-based, clearly begs the question against egalitarianism.

I have considered various lines of argument the egalitarian might use against the Levelling Down objection and its basis, The Slogan, as well as against other 'implausible consequences' of valuing equality. Note, however, that these arguments do not themselves appeal to any valuable *consequences* of equality. This sort of argument is sometimes made by others, but it is insufficient for the egalitarian as a defence of her view, as she values equality *in itself*. One such *consequentialist* defence was mentioned earlier: the utilitarian, in accordance with his other assumptions, values equality because it has the consequence of maximizing utility. Others might argue that equality is valuable because it has the consequence of fostering a better sense of community and fraternity, or helps eradicate

racist and sexist attitudes. Of course, the egalitarian can also point out these positive consequences of equality, but they are insufficient to defend her position that equality is an *intrinsic* moral value.

1.4 SOME QUESTIONS FOR EGALITARIANISM

I have offered some reasons why egalitarianism should not be dismissed as *prima facie* implausible. But as I have said, my intention is not to defend this moral view; it is to explore its implications, especially with respect to questions of measurement. What exactly is involved, then, in the egalitarian's position? What are the consequences of accepting equality as an intrinsic moral value?

One consequence is clear: there are a number of (often interrelated) questions for the egalitarian to answer. These questions can be classified into five main types: (i) the teleological-or-deontological question, (ii) the balancing question, (iii) the equality of_____ questions, (iv) the comparative value question, and (v) the justice question. All of these start from the same premise: *Given that equality is an intrinsic moral value,...*

(i) Teleological-or-Deontological

Is the egalitarian's concern for equality teleological or deontological? That is, is it equality of the *end result* that matters (teleological), or is it equality of *treatment* that matters (deontological)? Is her concern that people end up having equal standards of living, levels of happiness or welfare, etc.? Or is she concerned with 'treating people equally'--e.g., giving them equal access to resources, education, health care, etc., or equal opportunity for employment--whether or not this equal treatment results in individuals having an equal standard of living?

The distinction between deontological and teleological egalitarianism is important for my purposes, for I am concerned only with teleological egalitarianism. This is not because I believe it to be the 'stronger' view; nor, for that matter do I believe it to be 'weaker', or 'exactly as strong' as deontological egalitarianism. I wish to remain agnostic on this issue. Whether or not teleological egalitarianism is more plausible than deontological egalitarianism is not my concern.¹⁵ I am concerned only with *elucidating* egalitarianism--in particular, with elucidating teleological egalitarianism.

Consider the second sort of question: *Given that equality is an intrinsic moral value,...*

(ii) Balancing

How is it to be balanced against other moral values? For equality need not be the only value accepted by the egalitarian. Many have focused in particular on how to balance equality and utility. Is one of these values "dominant": do gains in equality always outweigh losses in utility, or gains in utility always outweigh losses in equality? Or what about balancing equality, utility, and priority? This is a somewhat complicated question to

¹⁵ Deontological egalitarians may defend their view through connection with (ii) the balancing question (discussed below). For to obtain equality in the *end result*, they argue, may require (objectionably) overriding other values--for instance, some people may *freely choose* their unequal position. But "treating people equally", they continue, gives each person equal opportunity to make their lives go as they wish, thus avoiding any conflict with autonomy. But as persuasive as this may seem at first glance, it seems even more persuasive that "treating people equally" cannot be the whole story. Some people have much greater needs than others. Surely some differential treatment, for example, providing the physically handicapped with more resources, is desirable.

answer because priority is sometimes thought of as a way to balance equality and utility, rather than as a distinct moral value¹⁶. Others have discussed how equality is to be balanced against free choice or autonomy. To update Robert Nozick's famous example: what is objectionable about the inequality that would be generated between Michael Jordan and the rest of the our society if everyone made the free choice to pay him \$25 to watch him play basketball?

Another moral value frequently mentioned is desert, although I have yet to come across an *explicit* discussion of how equality and desert are to be balanced. The egalitarian's concern for equality is sometimes characterized as stemming from the idea that "it is a bad thing (unfair or unjust) if some people are worse off than others through no fault of their own" (Temkin, p. 13); in other words, that *undeserved* inequalities are unjust or unfair. Others talk about inequality being objectionable when it when it is caused by factors beyond one's control or responsibility, such as the social class one was born into, or features which are 'the luck of the genetic lottery'. In other words, since we do not *deserve* the situations into which we are born, inequalities which arise from these situations are unfair or unjust. The relationship between equality and desert is both interesting and complex. On the one hand egalitarians appeal to desert in support of the idea that inequality is objectionable--i.e., *undeserved* inequalities are bad. On the other hand, egalitarians and desert-theorists seem to be in direct conflict, as equality and desert are competing principles of distribution. Unfortunately, a full discussion of this issue is well beyond the scope of this thesis.

¹⁶ Rawls, for example, endorses this idea in *A Theory of Justice*. He argues that by adopting the one simple value of priority, the prioritarian avoids 'intuitionism'--that is, he avoids needing to appeal to our intuitions about certain examples in balancing equality and utility, two values about which our intuitions often conflict.

Turning now the third group of questions. Recall the premise: *Given that equality is an intrinsic moral value,...*

(iii) Equality of _____

Which aspects of people's lives should be equal? This question comes in (at least) two varieties:

(I) the "*equality of what?*" question. Egalitarians want people's lives to go equally well, but in what respect? Should people have equal incomes, resources, welfare, happiness, standard of living, rights, etc.?¹⁷

(II) the "*equality of when?*" question. Egalitarians want people's lives to go equally well, in some respect or other: income, resources, welfare, etc. But between whom do we desire equality? Those who are presently living, or between those now living and future generations? And among those presently living, should equality obtain between everyone, or only between those whose lives overlap to a great extent?¹⁸

Further, when comparing my life to yours with respect to income, resources, welfare, etc., what exactly should be compared? Our complete lives, or only stages of our lives? If stages, which ones? Suppose I am twenty years your junior. Does the egalitarian want my life *right now* to go as well as your life *right now*, or my present stage of life, my

¹⁷ See, for example, Sen's "Equality of What?", reprinted in his *Choice, Welfare and Measurement*, p. 353-69, and Dworkin's "What is Equality? Part 1: Equality of Welfare" and "What is Equality? Part 2: Equality of Resources", *Philosophy and Public Affairs* 10 (1981): p 185-246 and p. 283-354, respectively.

¹⁸ There is also an analogous "*equality of where?*" question. Do egalitarians desire equality only within a sub-group of one society, or across an entire society, or across all societies?

"*young adulthood*", to go as well as your *young adulthood* went? These questions have obvious implications for issues about inequalities between age groups and future generations.¹⁹

As interesting and complicated as the "equality of _____" questions are, they are not my concern. I am concerned with a different sort of question. Again: *Given that equality is an intrinsic moral value,...*

(iv) Comparative Value

When is one outcome better (or worse) than another with respect to relations between individuals? This question is concerned with *comparing* different outcomes, and making *value* judgments about them. Pursued more extensively in economics, this issue is seldom discussed in the philosophical literature. And those economists and philosophers who have focused upon this issue have typically phrased the comparative value question in a slightly--though *very importantly*--different way: (iv*) *when is one outcome worse than another with respect to inequality?*²⁰

My concern, (iv) the comparative/value question, is different from the another sort of question discussed by many--namely, (v) the justice question. The philosophical literature is rife with (v) the justice question, which one must be careful not to confuse with (iv) the comparative value question. Again: *Given that equality is an intrinsic moral value,...*

¹⁹ See McKerlie's "Equality and Time", *Ethics* 99 (1989): p. 475-91.

²⁰ Given that the pedantic assumption should be rejected (recall Preface; see also Chapter Six, Section 6.2), this way of phrasing the comparative value question does not adequately capture the egalitarian entire concern for relations between individuals, nor for equality as an intrinsic moral value.

(v) Justice

When is an inequality justified? Though many answers have been offered to this question, answers which at first glance appear to be very different--some appeal to *consequences*, some to *causes*, of inequality--they can all be understood as having a common source: (ii) the balancing question. In essence, those concerned with the justice question argue that an inequality is justified if it is overridden by some other, more basic, moral value, and unjustified otherwise. For example, Rawls writes that an inequality is justified if it is to the benefit of the worst-off²¹--that is, if the worst-off are better off in absolute position with the inequality than without it. But this is just the claim that priority outweighs equality.

Rawls provides another, unfortunately conflicting, answer: an inequality is unjust only if it harms the worst-off.²² The difference between these two Rawlsian principles comes out in certain examples of Pareto improvements. Consider a society with only two groups. The worse-off members of this society suffer from a serious and untreatable disease, and the better-off suffer from a milder disease. Now suppose that only some of the better-off would be helped by treatment. Should they be given the treatment? According to Rawls' first principle, they should not, as it would create an unjustified inequality. The newly-created inequality between the better-off would not benefit the worst-off; they are no better off with this inequality than without it. But according to

²¹ Rawls makes many claims that support this view. For example, he writes: "The inequality in expectation is permissible only if lowering it would make the working class even...worse off" (p.78), and "Inequalities are permissible when they maximize, or at least contribute to, the long-term expectations of the least fortunate group". (p.151)

²² Parfit discusses these two different Rawlsian answers to the justice question in *Equality or Priority?*, p. 35-39

Rawls' second principle, the inequality is justified, as the newly-created inequality between the better-off does not harm the worst-off. This second principle again seems motivated by "the balance question": utility outweighs equality, at least in certain circumstances²³

Other answers focus upon causes of inequality. There is some consensus that inequalities based upon free choice are justified--i.e., that autonomy overrides equality. If I live in a smaller, more modest house than you because I choose to spend more of my money to go traveling there is nothing objectionable about the inequality of our living arrangements. And, as I mentioned earlier, there is wide-spread agreement that inequalities based upon social class and family background, such as being born into a poor family, and inequalities based on 'the luck of the genetic lottery', such as being born handicapped, are unjustified. Why? Because we do not *deserve* what we are born with. Inequalities which arise from undeserved or 'morally arbitrary' factors are unjustified.

There is, however, much more dispute over whether or not inequalities stemming from developed talents or efforts are justified. Some argue that inequalities caused by effort are justified because free choice outweighs equality: is it not a matter of personal choice how much effort one expends? Although this position has some appeal, it cannot be the whole truth: surely the amount of effort one can produce depends, at least in part, upon morally arbitrary factors which derive from 'the genetic lottery'--e.g., one's stamina, tenacity, penchant to take risks. And what about inequalities caused by developed talent? Is the inequality in the standard of living between an NHL hockey player and the average person justified? Being a professional hockey player is a combination of both the luck of the genetic lottery and effort; one must expend the effort necessary to develop the skills

²³ Or, that *lexical priority* (which first wants to make the worst-off as well off as possible, and then the next-worst-off as well off as possible, and then the next worst-off...), but not *absolute priority* (which is only concerned with the very worst-off group) outweighs equality.

and potentialities one was born with. Which is the more morally significant fact: thousands of days getting up at 4 a.m. for practice, or one's "God-given abilities"?²⁴

However, it is important to make explicit the difference between my concern, (iv) the comparative value question, and (v) the justice question. For the question "*when is one outcome better (or worse) than another with respect to relations between individuals?*" may seem to arise and be answerable within the justice framework. One might answer that outcome X is worse than outcome Y when the inequalities in X are unjustified and the inequalities within Y are justified. But this answer is too simplistic, for it does not admit of comparisons between different unjustified inequalities. On the justice framework, a situation is either justified or unjustified; there is no middle ground. There is no possibility of comparing different outcomes, all of which contain unjustified inequality, and asking which outcomes are better or worse.

But perhaps the justice framework could provide grounds for some such comparisons. It might plausibly be argued that although inequalities based upon social class, the genetic lottery, developed talents, and effort are all unjustified, there is still room for comparison with respect to the *causes* of inequality. It might be argued that inequalities based upon social class or the genetic lottery are more objectionable than those based upon talents or effort; for example, that inequalities between men and women, whites and non-whites, are more objectionable than those between minor league and NHL hockey players. But is this sufficient? Don't we also want to make comparisons between different outcomes with the *same* cause of inequality?

²⁴ I have said nothing about the underlying problem of unjust institutions. If the institutions which reward effort and talent--perhaps rewarding certain kinds of efforts or talents more than others--are themselves unjust, then inequalities generated by developed talents or effort will be unjustified, regardless.

It seems that we make, and desire to make, such comparisons all the time. Consider gender-based inequalities. Don't we compare the inequality between men and women today with that of 50 years ago? Don't we also compare the gender-based inequalities of our society with those of other societies? And similarly for inequalities based upon race. But these sorts of comparisons require more than the justice framework: gender-based inequalities of 50 years ago were unjustified, as are those of today, but don't men and women fare *better* relative to one another today? Isn't there *less* inequality now? The justice framework does not allow for these sorts of comparisons where the cause of inequality is the same in both cases. Yet it is of practical necessity that we have a method or framework by which we can make such comparisons. Otherwise, how can we design policies to *improve* inequality between races or genders, to make them *more* equal?²⁵

1.5 MY QUESTION AND MY METHODOLOGY

I have argued that the justice question framework cannot account for some sorts of comparisons we often make--comparisons we *must* make in designing policies to improve or reduce inequality. Thus again the question I am concerned with is: *Given that equality is a moral value,...*

(iv) Comparative Value

When is one outcome worse (or better) than another with respect to relations between individuals? There is an obvious answer: one outcome is worse than another if it

²⁵ Notice that the justice framework, considering *only* the cause and not the size of an inequality, also may be too strict. Is any inequality based upon gender, no matter how small, worse than any inequality based upon talent, no matter how large?

contains *more* inequality, and better if it contains *less*. Since strict equality is surely an unattainable ideal, as not every inequality can be removed or avoided²⁶, what we want and need to know is whether a given outcome is closer to or further away from this ideal. And it seems plausible that the more inequality an outcome contains, the further it is from this ideal, and the worse it is with respect to equality and thus the worse it is with respect to relations between individuals..

Does (iv) the comparative value question, then, simply collapse into a question about *measuring* inequality--i.e., assessing whether there is more or less inequality in one outcome than in another, or which one is closer to and which further from the ideal of equality? Is there a difference between outcomes being *better* or *worse*, and their containing *more* or *less* inequality? I think there may well be a difference--and hence phrased my concern as (iv) the comparative value question rather than as a question about measuring--as follows:

First, it is not obvious that (iv), the comparative value question, *necessarily* reduces to a question about measuring. Isn't it possible for one outcome to be better than

²⁶ Strict equality is an unattainable ideal in two senses:

(i) In answering the '*equality of what?*' question and deciding in which respect equality is desired, inequalities are thereby required in other respects. This is due to what Sen calls the "diverse nature" of human beings: for example, we have different mental/physical abilities and differing conceptions of the good life. Thus, equality in one 'space' (e.g., satisfaction of basic needs) will entail inequality in other spaces (e.g., income or resources).

(ii) Having answered the '*equality of what?*' question, strict equality in that particular space is unattainable, simpliciter. It is a goal we may seek and approach, but never actually achieve.

another, even though they contain the same 'relativized'²⁷ *amount* of inequality? Consider two outcomes of the same size, **E** and **F**, each of which contains only two groups: the better-off and the worse-off. In **E**, there are many better-off individuals and few worse-off; in **F**, few better-off and many worse-off. Even if one judged there to be the same relative *amount* of inequality in both societies, one might judge that one society is better than the other with respect to relations between individuals. The outcomes certainly differ in the *distribution* of inequality, and perhaps one distribution is preferable to the other. Perhaps **E** is considered to be worse than **F** because the inequality in **E** seems more gratuitous: it would be both easy and fairly uncostly to the better-off to transfer some good from them to the worse-off thus eliminating the inequality; with many better-off and few worse-off only very little need be taken from each better-off individual. Thus it seems to me to be an open question as to whether or not something other than the relativized total amount of inequality might influence our normative judgments. Though it may in the end be the case that we judge 'better or worse' simply along the lines of 'more or less', I see no reason to make this assumption.

Second, I do not think our normative judgments about *relations between individuals* are adequately reflected by measuring *inequality*. Of course, inequality plays a part in these judgments: other things being equal, the more inequality an outcome

²⁷ I mean by this that any variation in population size between outcomes, if there is one, has been factored in to the calculation. For a little reflection shows that the assumption that 'the more inequality an outcome contains, the worse it is' likely needs refinement if we are to plausibly compare outcomes which vary in population size. For the *total amount* of inequality may not be the whole story; it may also matter *how many people* are in the outcomes under comparison. For example, a two-person world with 100 units of disvalue of inequality may seem worse than a hundred-person world with this same total amount of disvalue of inequality.

contains, the worse it is. But I do not think that measuring the relations of *inequality* between individuals is the whole story about assessing and comparing outcomes with respect to relations between individuals. I think relations of *equality* between individuals also matter. However, as this is a rather controversial claim given the wide-spread acceptance of the pedantic assumption, and one that many of the arguments in this thesis have a bearing on, I will say no more about it here.

But even if measuring inequality is not the whole story for (iv) the comparative value question, it is at least part--and a very important part--of the story. It is therefore vital to have a method by which to measure and assess relations of inequality between individuals. But measuring inequality is no easy task, as the variety of measures of inequality proposed in both the economic and philosophical literature attest. It is my project in the first part of this thesis--Chapters Two through Five--to survey and critique these various measures, on the basis of how well they reflect and articulate the (teleological) egalitarian's concern for inequality. It is not until Chapters Six and Seven that I consider issues about measuring or assessing (in)equality.

But first, a few words about the methodology I follow in this thesis.

1.51 Reflective Equilibrium

I employ the Rawlsian/Sidgwickian methodology that appeals to both our pretheoretical intuitions and considered judgments about various cases, as well as to our egalitarian principles and asks us to bring these in line with one another in 'reflective equilibrium'. There is discussion at the levels of both judgments and principles, and much discussion about the relationship between them. I am particularly concerned with the relationships between the fundamental egalitarian concern for relations between

individuals, the principle that equality is an intrinsic moral value, and our intuitive judgments about how different situations of inequality compare.

However, one might question this overall methodology, and especially the legitimacy of the normative status of its results, given that 'it starts from what we accept already'. But I do not think that such a question is necessarily worrying for my project. Much of my project involves drawing out the tensions between the egalitarian's concerns, principles, and intuitive judgments as characterized in the works of others. And many of these other writers themselves adopt the reflective equilibrium approach. Hence my use of this 'traditional' method is far from worrying; if anything it makes my arguments stronger, as I am thereby evaluating the views of proponents of this tradition according to an approach that they themselves recommend.

1.52 How to Interpret My Examples

As I said above, part of my methodology involves appealing to our intuitive judgments about particular cases. These cases involving comparing two (or more) outcomes, such as:

	a	b, b₂	c
A:	1	both 2	9
B:	1	both 5	9
C:	1	both 8	9

and are to be understood as follows:

(i) Bold-face capital letters--'A', 'B', etc.--refer to outcomes as a whole; there are three different outcomes in the example above. I sometimes speak of "situations", "worlds", or "societies" rather than "outcomes"; I use these terms interchangeably. I also speak of cases, e.g., 'the A/B case', as a shorthand for 'the case in which A and B are compared'.

(ii) Bold-face lower-case letters--"a", "b", etc.--refer to individuals within an outcome²⁸. I assume, unless noted otherwise, that a given letter refers to the *same*

²⁸ I have reason for focusing on individuals rather than groups; however, this reason is best not explained here. But it is important to note this difference in the way I have set up my examples from the way most others have. Others have typically accepted the following 'simplifying principle':

To rank outcomes...it is easiest if one assumes there is one person in each group and assigns an appropriate level to each person. Such an assumption greatly simplifies one's calculations, and does not affect one's ordinal rankings. (Temkin, p.57, fn.6)

Hence, most others would consider the worlds in the above example to represent any worlds of the form:

group:	a	b	c
size:	x	2x	x

providing the levels the individuals are at (i.e., the numbers) remain the same.

I argue in Chapter Seven that this belief 'simplifying principle' is problematic for the egalitarian. However, at this stage I neither want to beg the question on this issue nor

individual in the different outcomes. I sometimes use subscripts to indicate that an individual is at the same level as another: in the above example, individual **b₂** is at the same level as individual **b**. However, despite grouping such individuals together, it should be emphasized that these individuals are to be considered *as individuals* in an outcome, not as a *group*.

(iii) The numbers refer to absolute levels of whatever it is the egalitarian wants to compare--I typically assume its utility--had by the individuals in the outcome. These numbers are, in effect, measures of *x*, where *x* is the answer to the '*equality of what?*' question. Thus, in outcome **A** above, individual **a** is at level 1, or has 1 unit of *x*, individuals **b** and **b₂** are both at level 2 (both have 2 units of *x*), and **c** is at level 9 (has 9 units of *x*).

Note also that in comparing such outcomes with respect to the egalitarian concern for relations between individuals, the only moral value to be considered is that of equality (and thus inequality is the only disvalue). I am not concerned with how such outcomes compare with respect to other moral values such as utility, nor with how they compare all things considered. One way to affect this is to stipulate--as I am now doing--that all the individuals in the outcome are equally morally worthy and morally responsible: the worse-off (better-off) do not somehow *deserve* to be worse off (better off), nor are the better-off somehow accountable for the worse-off being worse off. In other words, I assume in my examples that other values do not interfere with or affect the egalitarian's judgment. And of course, once we are clear about these abstracted general cases, our claims about other cases can be adjusted or restricted as the particulars of the case warrant; we may then

to be misleading, and for this reason I have avoided talking about 'groups' at all. In so doing the issue of the simplifying principle does not arise.

consider which other values might override our judgments about equality and inequality, when they do so, and to what degree²⁹.

²⁹ Some may think that my very abstracted approach is misguided. Sen, for example, has argued that certain features cannot be 'factored in later' in assessing equality:

human diversity is no secondary complication (to be ignored, or to be introduced 'later on'); it is a fundamental aspect of our interest in equality (*Inequality Re-examined*, p.xi)

He also suggests that trying to isolate the concern for equality in order to evaluate it is misguided:

...the import of the concept of equality cannot be adequately understood without paying *simultaneous* attention to aggregative considerations (*ibid.*, p. 8)

the evaluation of inequality has to take note of both the plurality of spaces in which inequality can be assessed, and the diversity of individuals...Inequality is measured for some *purpose*, and the choice of space as well as the selection of particular inequality measures in that space have to be made in the light of that purpose (*ibid.* p. 88)

However, even if it is true that ultimately in making our all-things-considered judgments we need to consider the concern for equality simultaneously with other concerns and other factors, it does not follow that clarifying this concern and the judgments made with respect to it in isolation is misguided or unimportant.

1.53 (In)equality and Inequality

It is important for my purposes to distinguish between the egalitarian concern about (in)equality and the concern about inequality. By '(in)equality', I mean the concern for relations between (the lives of) individuals, which values equality and disvalues inequality. Thus '(in)equality' is a useful shorthand: it is much easier to refer to the fundamental egalitarian concern as "(in)equality", than as "the concern for relations between (the lives of) individuals".

I have another reason for using the locution '(in)equality'--it is a useful ambiguity. Most writers have spoken about inequality only, and have considered this concern to be more or less equivalent to the concern about (in)equality. Thus, those who propose or consider different measures of inequality do so because assuming that how outcomes compare with respect to inequality fully captures how they compare with respect to (in)equality. This idea follows from their acceptance of the pedantic assumption. In contrast, I reject the pedantic assumption and want to talk about the value of equality *in addition to* the disvalue of inequality. But in the first part of the thesis, I restrict my concerns about different inequality measures to how well they reflect the egalitarian's concern for inequality--a part of the concern for (in)equality--as there is much to be said about them on this basis alone. It is not until later that I consider issues about (in)equality and how to measure it.

CHAPTER TWO: DEVIATION

In this chapter I consider one of the simplest and most intuitively obvious types of inequality measures: deviation measures. The idea behind all deviation measures is to assess a given outcome of inequality by assessing how far it deviates from equality. Typically, this is done by assessing how much the level of each individual in the given outcome deviates from (the level of) equality, and then summing these differences together.

In Section 2.1, I explain the primary intuition behind deviation measures, an intuition which leads to a difficulty. In Section 2.2 I consider this particular difficulty in more detail. In Section 2.3 I discuss further difficulties with deviation measures for the egalitarian, difficulties stemming in part from the way in which these measures do not accurately represent the fundamental egalitarian concern. In Section 2.4, I discuss the importance and significance of deviation measures: among other things, that they are a fairly simple introduction to some of the more complicated ideas that appear throughout this thesis.

2.1 INTUITIVE PLAUSIBILITY

Deviation measures are a natural first attempt at measuring inequality. They assess 'how far' a given outcome is from what is desired--that is, how much the outcome deviates from equality. These measures seem intuitively plausible in part because of the common assumption that equality and inequality stand in an inverse or reciprocal relation to one

another. As Temkin puts it, "it seems almost tautological that the less a situation deviates from absolute equality the better it is regarding inequality" (p.42)¹.

But taking such an approach, it is not long before one encounters a difficulty.

2.2 ARBITRARINESS

How is this simple idea of assessing inequality by measuring a world's deviation from perfect equality to be cashed out? No doubt one compares the given unequal world to one of perfect equality, but *which* perfectly equal world? There are infinitely many such worlds. This is but the first problem with deviation measures: since there is no *unique* world of perfect equality², it seems in some sense arbitrary from which of these worlds deviation is measured.

But perhaps this is not such a great problem. For though there are an infinite number of perfectly equal worlds, surely we do not think that we should measure deviation from any of them--there must be some intuitive plausibility in picking the world we do. Consider world A, and assume that we are to assess its inequality according to deviation:

¹ Recall that Temkin, given that he accepts the pedantic assumption, also means that it seems almost tautological that the less a situation deviates from absolute equality the better it is regarding (in)equality. Recall as well that I am here concerned only with inequality, and how well deviation measures capture the egalitarian's concern for inequality.

² For example, worlds where all individual are at level 1, or level 6, or level 26, etc. are all worlds of perfect equality.

	a	b, b₂, b₃	c
A:	1	all 2	8

According to one intuitive idea we have about measuring deviation from equality, A's inequality index is 7. That is, we assess A's deviation from the perfectly equal world where individuals **a**, **b**, **b₂**, **b₃**, and **c** are at level 2, and not its deviation from other perfectly equal worlds. This idea is of assessing deviation from the *median*.

But according to another intuitive idea we have about measuring deviation from equality, A's inequality index is 10. That is, we assess A's deviation from the perfectly equal world where individuals **a**, **b**, **b₂**, **b₃**, and **c** are at level 3. This idea is of assessing deviation from the *average*. These two different ideas of assessing deviation--deviation from the median, and deviation from the average--have different underlying intuitions, as follows:

2.21 DEV MED

In measuring deviation from the median (hereafter DEV MED) a world is compared to its 'closest'³ equal world:

in determining how much a given world deviates from absolute equality, it seems reasonable to compare that world with the closest possible world that is perfectly equal...Now it can easily be shown that for any world *w*, the closest

possible world to *w* that is perfectly equal will be that world where everybody is at *w*'s median level. (Temkin, p. 43)

³ 'Closest' in the sense that we obtain the smallest inequality index possible, insofar as we are considering only deviation measures.

In other words, by comparing a world w to the world w_{med} where everybody is at w 's median level, DEV MED obtains the smallest inequality index possible for w ; if deviation were measured from any other perfectly equal world, a larger⁴ inequality index would result. This is the sense, then, in which DEV MED compares unequal worlds to their 'closest' equal world.

2.22 DEV AVE

In measuring deviation from the average (hereafter DEV AVE), a world w is compared to its "fair counter-factual" equal world--that is, the world that *would have* resulted if w 's total good had been fairly/equally distributed (or the world that would result were the total good fairly/equally redistributed). If A's 15 total units of good had been fairly/equally distributed, all individuals would be at A's average level: level 3. Thus, DEV AVE's intuitive basis appeals to a different ideal than DEV MED. DEV MED measures how close a world comes to approximating the general ideal: a perfectly equal world. DEV AVE, in contrast, does not measure how far a world comes to approximating its closest perfectly equal world, but rather how close it comes to approximating the world that would have obtained had there been a fair/equal distribution of its good.⁵ And since

⁴ Or equal inequality index, as is possible when there is more than one median level. One such example can be found in Section 2.32, the A_2/A_5 case.

⁵ The closest equal world varies under different distributions of a fixed amount of good, since different distributions (or redistributions) can alter the median. In contrast, the average remains the same for all worlds which vary only in their distribution of a fixed amount of good. In other words, given a fixed amount of good (and fixed population size)

both of these ideas have some intuitive appeal, it seems arbitrary whether DEV MED or DEV AVE is chosen as our deviation measure of inequality.⁶

There are, however, a couple of responses a defender of deviation measures might make. On the one hand, he might argue that while the choice between DEV MED and DEV AVE is indeed arbitrary, this arbitrariness is insignificant. He may argue that these measures do more or less the same thing; they both assess deviation from some level or other. Choosing between them is required only because keeping both is redundant. But it does not matter which is chosen, as they both do the same thing.

On the other hand, he might argue that one of the deviation measures has a much stronger intuitive basis for the egalitarian, and hence that the choice between them is not arbitrary at all. He might, for instance, argue that DEV AVE is preferable because it rests upon the solid egalitarian footing of "fairness" and/or "fair shares". Is either of these responses sufficient to save deviation as a possible egalitarian measure of inequality?

It is clear that they are not. For one thing, the first--that the arbitrariness is insignificant--seems mistaken. DEV MED and DEV AVE do *not* do the same thing; they

there is only one average and only one fair/equal distribution, but many possible medians and closest worlds of equality.

⁶ Sen raises an analogous question about deviation from the average (mean): From which average should deviation be measured? He says:

in the standard statistical literature, the deviation is taken from the geometric mean [the n th root of n factors] rather than from the arithmetic mean [which I employed with DEV AVE, and will use throughout as it makes calculation easier], but in the income distribution literature using the arithmetic mean seems more common" (*On Economic Inequality*, p.29; brackets mine).

sometimes make different judgments as to which of two outcomes is preferable. Consider the following:

	a	b	c	
A:	1	5	9	(median 5 / average 5)
B:	1	2	9	(median 2 / average 4)

DEV MED judges **A** and **B** to be equivalent, both with an inequality index of 8. But DEV AVE prefers **A** to **B**, as **B**'s inequality index is 10 while **A**'s is only 8. Thus since it does make a difference to our judgments which measure is chosen, the arbitrariness of this choice cannot simply be dismissed.

As for the second argument--that the choice between deviation measures is not arbitrary since one of them stands on a more solid ground for the egalitarian--it too seems ultimately unsuccessful in saving deviation. For even if the egalitarian grants that, say, DEV AVE has a stronger intuitive basis than DEV MED, there are many other difficulties for DEV AVE--difficulties which apply to *all* deviation measures. Thus, even if DEV AVE can avoid the worry about arbitrariness, it nonetheless faces other difficulties. These difficulties arise, at least in part, because deviation measures do not accurately reflect the egalitarian's concern: there is a fundamental difference between what deviation measures focus upon and what egalitarians focus upon, as we shall see.

2.3 MISREPRESENTATION OF THE EGALITARIAN'S CONCERN

The difference in focus between deviation measures and egalitarian concerns is quite simple: deviation measures do not assess relations between individuals. Deviation measures focus instead on the relation between an individual and a 'level', such as the

median or the average. In this way deviation measures misrepresent the egalitarian concerns: egalitarians care about relations between individuals, how individuals fare *relative to one another*, and this concern is different from the concern about how people fare relative to a certain level. And because of this misrepresentation, deviation measures have consequences the egalitarian finds unacceptable⁷. I will consider two such unacceptable consequences, involving examples with (a) redistributions/transfers of the good, and (b) varying population size.

2.31 INSENSITIVITY TO REDISTRIBUTIONS

Deviation measures seem unacceptable to the egalitarian in that they are insensitive to certain redistributions or transfers of the good in an outcome--namely, those between individuals on only one side of the level (median or average) from which deviation is measured. But according to some of our fairly firm intuitive judgments, many of these redistributions seem to make a difference; they seem to make things better or worse with respect to inequality. Consider, for example, a ten-person outcome in which most individuals are at a level below average. Suppose that most below-average individuals fare only slightly worse than average, but that one unlucky individual fares *much* worse than average. **D** is one such outcome:

	a	b, b ₂ ,...,b ₇	c, c ₂	
D:	1	all 9	both 18	(median 9 / average 10)

⁷ No doubt she finds deviation measures' fundamental misrepresentation of her concerns unacceptable for its own sake as well.

Now suppose that there is a transfer of good to the worst-off individual from some of those better-off than she. Specifically, suppose that individual **a** receives one unit of good from each of individuals **b** through **b₇**. This transfer results in outcome **E**:

	a, b, b₂,...,b₇	c, c₂	
E:	all 8	both 18	(median 8 / average 10)

According to DEV AVE, such a transfer makes no difference: both **D** and **E** have an inequality index of 32. But surely **E** is better than **D**. DEV MED, on the other hand, makes the intuitively plausible judgment: it prefers **E** to **D**. But by changing the example slightly so that the transfer does not alter the median, DEV MED too will yield an implausible judgment, as follows:

Suppose that only individuals **b**, **b₂**, and **b₃** transfer good to individual **a**, and that they transfer two units of good to **a** instead of one. This would result in outcome **F**:

	a, b, b₂, b₃	b₄,...,b₇	c, c₂	
F:	all 7	all 9	both 18	(median 9 / average 10)

DEV MED is insensitive to this transfer: it judges **D** and **F** to be equivalent, both with an inequality index of 26. But, again, surely **F** is better than **D** with respect to inequality. Thus deviation measures, misrepresenting the egalitarian's concerns by focusing on the relations between an individual and a level rather than on relations between individuals, yield judgments about same-side transfers that the egalitarian finds implausible.

2.311 THE PIGOU-DALTON CONDITION

I have not expressed this first implausible judgment of deviation measures--i.e., the judgment about same-side transfers--in the way it is commonly seen in the literature. Many have noted that deviation measures are insensitive to redistributions or transfers from better-off to worse-off on one side of the level of equality. Whereas I said that deviation measures seem unacceptable because their judgments about such cases conflict with our (fairly firm) intuitive judgments, others put the point differently: they say that deviation measures are unacceptable because they 'violate the Pigou-Dalton condition', a condition thought by many to be something that any acceptable measure of inequality must meet.

What is this condition? The Pigou-Dalton condition states that any transfer from a worse-off to a better-off individual increases or worsens the inequality in an outcome, whereas any transfer from a better-off to a worse-off individual lessens or improves inequality⁸. Temkin challenges this condition (p.82-87) on the grounds that it depends upon what sort of transfer is involved, arguing that the Pigou-Dalton condition holds for even transfers, but not necessarily for uneven ones.⁹ For example, a highly efficient uneven transfer where the better-off lose very little and the worse-off gain a great deal may violate the Pigou-Dalton condition, e.g., if the worse-off gain so much as to become

⁸ This condition is perhaps better known in the way it is expressed in the economic literature, which uses the language of transfers between 'rich' and 'poor'--i.e., that transfers from rich to poor lessen or improve inequality, and transfers from poor to rich increase or worsen inequality.

⁹ An even transfer is one in which the 'gainers' gain exactly as much as the 'losers' lose: a one-for-one transfer. Uneven transfers come in two forms: (i) efficient transfers, in which the gainers gain more than the losers lose, and (ii) inefficient transfers, in which the losers lose more than the gainers gain.

far better off than the original better-off, resulting in an even wider gap between the two groups than existed originally.

I agree with Temkin that plausibility of the Pigou-Dalton condition depends upon the type of transfer involved, but I think there are even more grounds for the egalitarian to be suspicious of this condition. For one thing, it is not clear to me that all transfers from a better-off to a worse-off individual improve *overall* inequality, though they definitely improve the inequality (reduce the gap) between the individuals involved in the transfer. For another, if the Pigou-Dalton condition is also taken to imply that any transfer from better-off to worse-off improves not just inequality, but also (in)equality--as it no doubt is often taken given the widespread acceptance of the pedantic assumption--it again seems dubious. For given that the pedantic assumption is neither obvious nor uncontroversial, it cannot be taken that an improvement in inequality implies an improvement in (in)equality¹⁰. For these reasons, then, I chose to express the objection about same-side transfers using the language of "implausible judgments", rather than resting uncritically on the Pigou-Dalton condition.

¹⁰ Further, the uncritical acceptance of the Pigou-Dalton condition may be due, at least in part, to the not-always-acknowledged distinction between equality and priority. It seems uncontroversial that the prioritarian should endorse the Pigou-Dalton condition, at least for even transfers (the sort of transfers usually considered): a transfer from a better-off to a worse-off individual is always a transfer from someone granted less priority to someone granted more. Since the prioritarian thinks that the claims and interests of the worse-off are of greater moral importance, the loss suffered by the better-off in even transfers is always morally outweighed by the benefit gained by the worse-off. But this reasoning does not imply that the egalitarian should accept the Pigou-Dalton condition.

2.32 IMPLAUSIBILITY FOR VARIATIONS IN POPULATION SIZE

The second unacceptable consequence deviation measures have for the egalitarian--stemming, in part, from the misrepresentation of the egalitarian's concern--is seen in examples involving varying population size. Neither DEV MED nor DEV AVE have *any* principle that relativizes inequality to population size, and because of this they yield counter-intuitive judgments about some cases.

Consider world A:

	a	b	c	
A:	1	5	9	(median 5 / average 5)

According to both DEV AVE and DEV MED, individual **b** is irrelevant to the inequality in A. His existence or non-existence makes no difference to its inequality index; it is 8 either way. Thus world A is equivalent, according to deviation measures, to world **A₂**:

	a	c	
A₂ :	1	9	(median 5 / average 5)

But is individual **b** really irrelevant to A's inequality, such that A could be thought of as **A₂**? I think the egalitarian should have some reservations about this, as A contains three relations of inequality between individuals: **a/b**, **a/c**, **b/c**. In contrast, **A₂** contains only one such relation: **a/c**.

Note also that because DEV AVE and DEV MED are insensitive to **b**'s existence, it does not matter how many 'individual **bs**' there are. Deviation measures think that outcomes A and **A₂** are equivalent to outcome **A₃**:

	a	b b ₂ ,...,b _n	c	
A ₃ :	1	all 5	9	(median 5 / average 5)

So even if there were a million people in total in this outcome, where 999,998 of them were at the same level, while only two deviated from that level, then, according to deviation measures, this outcome would be no better (or worse) than A or A₂. Again, this judgment seems implausible. And further, I doubt the egalitarian would want to ignore individuals b₂ through b_n in assessing inequality: their existence does create many relations of inequality between individuals.

It might be objected that DEV MED and DEV AVE do not really *ignore* individuals who are right on the median or average. Rather, the relation between these individuals and the median or average is acknowledged, measured, and factored into the calculation: they merely have no effect on the resulting inequality index because this relation measures 0. But not affecting the result is not of itself objectionable. Individuals right at the average level of utility do not affect the result of the average utilitarian's calculations, for example, but the average utilitarianism does not *ignore* such individuals; they are factored into the calculation like everyone else.¹¹

While this may be correct, and deviation measures do not, strictly speaking, ignore individuals, it is still the case that these individuals do not affect the results: they do not affect the total inequality index. And it is this that the egalitarian finds implausible,

¹¹ Average utilitarians, as their name implies, are interested in the average utility per person in an outcome. Their calculations involve first adding the utility had by each individual, and then dividing this total by the number of individuals. Thus individuals who are right at the average level, though factored into the calculations, do not affect the results.

because, among other things, the existence of these individuals undoubtedly *does* alter the number of relations of inequality between individuals in the outcome, sometimes quite drastically¹².

Thus, this difficulty deviation measures have with varying population size is quite broad: adding people to an outcome--as various 'individual bs' were added to A above--means that inequality has at best stayed the same, and most likely gotten worse¹³. Because deviation measures have no principle which relativizes to population size, adding individuals at any level other than the median or average will thereby increase (or have no effect on) the inequality index.¹⁴ This is so even though these added individuals change the median or average from which deviation is measured.¹⁵ But surely the wide-ranging 'more

¹² Of course, the egalitarian should not be taken as saying that all outcomes of different size and/or different numbers of relations of inequality between individuals are distinct in the sense of having a unique inequality index; surely some of them are equivalent with respect to inequality (and (in)equality). But it also seems that for some cases, such as A/A₃, we have strong intuitions that the difference in size and number of inequalities is significant. Not that our intuitions are unambiguous: A₃ seems worse than A insofar as it has nearly two million more relations of inequality between individuals, while A₃ seems better than A insofar as 8 units of deviation among one million individuals seems better than 8 units of deviation among three.

¹³ An analogous objection will be raised against Temkin's Individual Complaints approach to assessing inequality, Chapter Five, Section 5.3.

¹⁴ When individuals added are right at the median or average level, there is no increase in deviation thus the inequality index remains the same. In some cases individuals added that alter the median have no effect on the total deviation.

¹⁵ A proof of this claim can be found in Appendix A.

people, equal or worse inequality' is not a consequence the egalitarian necessarily desires in an inequality measure.

Consider again outcome A, and compare it to A₄:

	a	b	c
A:	1	5	9
	a, a ₂	b, b ₂	c, c ₂
A ₄ :	both 1	both 5	both 9

According to DEV MED and DEV AVE, A₄ is the worse outcome: its inequality index is 16, twice that of A. But does this seem *obviously* correct, since A₄ exhibits the same 'pattern' as A? A₄ is merely a proportional increase of A.

Finally, consider again A₂, and compare it to A₅:

	a	c	
A ₂ :	1	9	(median 5) ¹⁶
	a	c, c ₂ , ..., c _n	
A ₅ :	1	all 9	(median 9)

According to DEV MED, these outcomes are equivalent, as both have an inequality index of 8. But does it not seem that a deviation of 8 units is worse in a two-person world like A₂ than in a much larger world like A₅? There is certainly far less 'inequality per person' in

¹⁶ Strictly speaking, the median for A₂ is any number between 1 and 9 inclusive.

A₅ than in A₂. It is this idea of inequality per person that partially underlies many of the economic measures of inequality that I consider in the next chapter.

2.4 DEVIATION'S IMPORTANCE: CLARIFICATIONS AND DISTICTIONS

Before moving on to consider some of the economists' measures, a few final--and important--words about the importance, for my purposes, of deviation measures. For my discussion DEV MED and DEV AVE may raise a question: why did I bother considering these deviation measures at all, since they are so obviously unacceptable to the egalitarian as measures of inequality? Three reasons:

First, deviation measures are rather simple and intuitively obvious, and as such are a natural starting-place. Their shortcomings are almost as quickly intuited as well, making what I do repeatedly in this thesis--raising different cases and noting the intuitive (im)plausibility of a measure's judgment--fairly easy to follow. Further, since deviation measures involve simple calculations, they can be employed in clarifying some of the more complicated ideas that appear time and again in this thesis. Three in particular are crucial to understanding much of the following discussion about different inequality measures:

(i) What I mean when I say that "outcome **X** is worse than outcome **Y**". Throughout this thesis, I consider **X** to be worse than **Y** when **X** is judged to be worse than **Y** according to some particular measure of inequality. I often speak of an outcome being worse (or better) than another *according to* some particular inequality measure. Recall the example from Section 2.22:

	a	b	c
A:	1	5	9
B:	1	2	9

I said that **B** was worse than **A** according to DEV AVE (or, to make the same claim with different words, 'DEV AVE prefers **A** to **B**'). This is the sort of judgment I am concerned with: judgments made across different outcomes using one and the same measure. Typically I do not consider about judgments about one and the same outcome across different measures; for example, judgments like "**B** is worse according to DEV AVE than DEV MED". In other words, I consider comparative judgments about different outcomes according to some *one measure*, some one criterion, but not judgments about some *one outcome* according to different measures/criteria¹⁷.

This leads to a second complicated idea:

(ii) the difference between ordinal and cardinal judgments. I consider only the ordinal judgments yielded by the measures, not any possible cardinal one. That is, I consider the preference ranking each measure assigns to different outcomes; I do not consider the cardinal extent of preference between outcomes--e.g., that **X** is "twice" as bad as **Y**. A given measure makes ordinal judgments by comparing the inequality indices it assigns to the different outcomes, and this is the only place where cardinality comes in for my purposes: the larger the inequality index--which is a cardinal number--the worse the inequality. The cardinal index only matters for my purposes insofar as it guides a measure's ordinal judgments.

Note also that a cardinal difference between measures is not necessarily correlated with an ordinal difference between them. Consider the following outcomes:

¹⁷ Part of the reason I typically do not consider such judgments is that they raise a host of issues about how to compare items from different value scales--an issue that is beyond the scope of this thesis.

	a	b	c	
A:	1	5	9	(median 5 / average 5)
G:	1	2	12	(median 2 / average 5)

Both DEV MED and DEV AVE prefer **A** to **G**, though they differ in the cardinal indices they assign to the outcomes. The distinction between ordinal and cardinal judgments is closely related to the third important idea:

(iii) What I mean when I say that "measure 1 and measure 2 disagree (or agree)". Measures disagree when they make different ordinal judgments about two (or more) outcomes--that is, when they rank outcomes differently. Measures agree about a case when they yield the same judgment--the same ordinal ranking. I do not consider measures to disagree if their *only* difference is cardinal--i.e., if they assign different cardinal inequality indices. In the above example, DEV MED and DEV AVE agree because they yield the same ordinal ranking: both prefer **A** to **G**. Of course, they differ cardinally--**G**'s inequality index is 11 according to DEV MED, 14 according to DEV AVE. But this difference is irrelevant for my purposes; it does not mean they disagree. In fact, two measures might well differ cardinally yet agree ordinally about every example, e.g., if they are linear transformations of one another.

Perhaps an analogy will clarify. Consider measuring the high temperature of two different days. There are different measures we might use for this purpose: e.g., Celsius or Fahrenheit. Suppose that the first day is rather warm with a temperature index of 28 Celsius / 82 Fahrenheit, and that the second day is rather cool with a temperature index of 10 Celsius / 50 Fahrenheit. It should be obvious that these measures, being linear transformations of one another, will never disagree ordinally, though they will differ cardinally every time.

Second, I considered deviation measures because they have some bearing on the pedantic assumption. I believe that the intuitions and reasonings underlying deviation measures are analogous to the intuitions and reasonings underlying the widely accepted belief that a measure of inequality is also a measure of (in)equality. Both rest on the assumptions--assumptions I challenge--that (i) equality and inequality stand in an inverse or reciprocal relation to one another, and thus (ii) the more there is of one (or the better it is with respect to one), the less there is of the other (the worse it is with respect to the other). I shall return to this analogy between deviation measures and the pedantic assumption in Chapter Six.

Finally, it is useful to keep the various difficulties faced by deviation measures in mind when evaluating other measures, such as the economic measures which I take up in the next chapter. For many of these measures can be usefully understood as responding to one (or more) of these difficulties.

CHAPTER THREE: ECONOMIC MEASURES

In this chapter I consider three different sorts of economic measures of inequality. I begin with some of the simplest: the so-called statistical or summary measures. I then turn briefly to what was at one time one of the more popular measures in economics: Atkinson's measure. I conclude by considering a 'complex' measure: Sen's Intersection Approach. Again, my concern is to ask whether or not any of these measures are acceptable to the egalitarian as measures of inequality--i.e., whether or not they accurately capture her concern for inequality.

Before proceeding to the statistical measures, let me forestall a potential misunderstanding. Though I raise a number of objections to economists' measures, my criticisms do *not* imply that if a measure is unacceptable to the egalitarian, it is therefore unacceptable, period. Economists do not necessarily have--and indeed likely do not have--the same agenda as egalitarians; among other things, they are not likely to be concerned that a measure gives expression to the idea that equality is an intrinsic moral value. And the differences between economic and egalitarian objectives can greatly influence whether or not and to what degree a particular inequality measure is endorsed. Egalitarians who share my theory-oriented concerns to accommodate and explain our complicated intuitive judgments about a wide variety of examples, both real and imaginary, may endorse a fairly complicated measure of inequality. Economists' concerns, on the other hand, may be more practical; they may want to apply these measures to a wide variety of groups, societies, countries, etc., in which case more importance may be placed on a measure's simplicity¹.

¹ I am not, of course, saying that egalitarians' concerns are purely theoretical, nor economists' purely practical. But it seems to me that in general economists do not pay as

The question I am asking, then, is whether or not the egalitarian could accept some of the inequality measures offered by economists--that is, whether or not she could utilize the proposals from this other field. My question about the economic measures is 'Are they acceptable *to the egalitarian?*', not 'Are they acceptable, period?'

3.1 STATISTICAL / SUMMARY MEASURES

I shall consider six statistical measures: Relative Mean Deviation, Variance, Coefficient of Variance, Standard Deviation of Logarithms, Range, and Gini Coefficient.² I have tried to keep my discussion as brief as possible, first explaining the measure, then noting its connection to some of the difficulties encountered by deviation measures. I do not, however, rehearse in detail what these difficulties are--the reader should refer back to the relevant sections of Chapter Two if necessary. Only when a measure encounters a difficulty not experienced by either DEV MED or DEV AVE have I given a fuller exposition.

3.11 Relative Mean Deviation (M)

According to Relative Mean Deviation (hereafter M), the inequality index of an outcome is equal to the sum of the absolute values of the gap between each individual and

much attention as philosophers do to imagined problem cases, and that these cases are much more troubling for theory than for practice.

² My discussion of these statistical measures follows that found in Chapter 2 of Sen's *On Economic Inequality* (p.24-34) and Chapter 5 of Temkin's *Inequality* (p.118-135).

the average (the arithmetic mean, denoted by μ), divided by the product of the average and the population size (n), or:

$$|(\mu - y_i)| / (\mu n), \text{ for each individual } y_i, \text{ all summed}$$

M's numerator, summed for each individual y_i , is simply DEV AVE; the differences between M and DEV AVE lie in M's denominator. What effect do division by μ and division by n have? It is important to understand the reasoning underlying these divisions, as many other statistical measures also incorporate at least one of them.

(i) Division by μ

Division by μ has the effect of making inequality at generally lower levels count for more--that is, it makes inequality matter more in a society that is generally poorly-off than in one that is generally better-off. Dividing by μ also respects some plausible intuitions about 'relative deviation'.

The idea of relative deviation seems to depend upon something like looking at the deviation or gap as a percentage of the mean in that outcome. So, for example, **K** has a much greater relative deviation than **J**, where:

	a	b	c	
J:	91	100	109	(average 100)
K:	4	10	16	(average 10)

because the gaps in **K** (of 6 units) are a much larger proportion of its average--60%--than **J**'s gaps (9 units) are of its average--9%. This explains the force of the qualifier 'Relative' in this measure's name: Relative Mean Deviation.

(ii) Division by n

Division by n has the effect of making the same total amount of inequality matter less in a larger society than in a smaller one. This sort of reasoning was alluded to earlier in the discussion of deviation measures and their implications for examples with varying population size. It was said that the same amount of inequality may seem more objectionable in a smaller world than in a larger world. Dividing by n relativizes an outcome's inequality to its population size--in effect, it yields an outcome's 'inequality per person'.

Though the intuitions underlying division by μ and division by n are interesting, I shall say no more about them here. I shall consider division by n again in Chapter Six when I discuss various principles of relativizing to population size which an inequality measure might incorporate. But I shall not consider the question of whether or not division by μ is a plausible or acceptable component of an inequality measure. I leave open questions about (i) inequality mattering more in a generally worse-off society, and (ii) 'relative deviation' being a legitimate concern.

Thus, M avoids one of the difficulties deviation measures had with examples involving varying population size: the same amount of deviation (i.e., $|\mu - y_i|$, for each individual y_i , all summed) has more significance in smaller outcomes. But M is no better with respect to the other problems. It (i) is insensitive to (even) transfers between individuals on one side of the average, and (ii) misrepresents egalitarian concerns by

focusing on relations between an individual and the average rather than on relations between individuals.

3.12 Variance (V), Coefficient of Variance (C), Standard Deviation of Logarithms (H)

Though these measures differ in the precise way in which they assess inequality, I consider them together because they all can be understood as attempting to avoid a most serious shortcoming of DEV MED, DEV AVE, and M--namely, that redistributions on one side of the median/average make no difference. They do so by incorporating a weighting principle, whereby the inequality involving individuals further away from (and/or further below) the median/average is accorded extra weight. These measures differ, sometimes significantly, in the precise weighting principle employed.

(i) Variance (V)

Variance (V) measures inequality similarly to Relative Mean Deviation, with two important differences: (i) V first squares the gap between each individual y_i and the average, and (ii) V involves division by n only; there is no division by μ . Thus V is expressed by the formula:

$$(\mu - y_i)^2/n, \text{ for each individual } y_i, \text{ all summed}$$

The first difference between V and M, the squaring feature, has the effect of giving extra weight to deviations further away from the average. Thus, unlike DEV AVE and M, V is not insensitive to redistributions on one side of the average, since

being 10 units worse off than the average would count for more than simply twice being 5 units worse off than the average, as the former would increase the variance by 100, whereas the latter would increase it by 25 (Temkin, p.123).

The second difference, not dividing by μ , means that V does not imply that inequality matters more in worlds that are generally worse-off. It also means that there will be examples, like the J/K comparison earlier, where the outcome with much greater relative deviation (K) has the lower inequality index. Many find this consequence unacceptable, and prefer instead Coefficient of Variance.

(ii) Coefficient of Variance (C)

Coefficient of Variance (C), as should be evident by its name, builds on Variance, with an eye to solving the 'relative deviation' problem. It accomplishes this by incorporating, as M did, division by μ . According to C, the inequality index of an outcome is equal to the square root of V, divided by the average, or:

$V^{1/2}/\mu$, or:

$[(\mu - y_i)^2/n]^{1/2} / \mu$, for each individual y_i , all summed

As division by μ , which speaks to relative deviation, seems to be the only significant difference between V and C³, I shall say no more about C and move on to Standard Deviation of Logarithms.

(iii) Standard Deviation of Logarithms (H)

Standard Deviation of Logarithms (H) is represented by the formula:

$$[(\log \mu - \log y_i)^2 / n]^{1/2}, \text{ for each individual } y_i, \text{ all summed}$$

Though similar to both V and C, H has one major difference: it incorporates a second weighting principle. Like C and V, H involves a squaring procedure, but weights deviations even *before* doing so. This pre-squaring weighting principle is one of logarithmic transformation: H compares the logarithm of each individual's level to the logarithm of the average and then squares these, rather than squaring the actual levels involved as C and V do.

It is important to note that this logarithmic weighting has a rather different effect than the squaring, for two reasons. First, they differ mathematically: logarithmic transformation attaches (proportionately) greater weight to smaller numbers, whereas squaring attaches greater weight to larger numbers. Second, they are applied to different features of an outcome: the logarithm is taken of the actual levels involved (each individual's level and the average level), but it is the difference between these levels (or

³ Taking the square root of V is not a significant difference for my purposes: it is a transformation (albeit not a linear one) that alters only the cardinal numbers involved. It does not alter ordinal ranking.

between the logarithms of these levels for H) which is squared. These differences mean that squaring attaches greater weight to deviations the further they are from the average, whether below or above the average, whereas logarithmic transformation attaches greater weight only the further below average--i.e., the lower or smaller the level of the individual.

One final point about H: like V, it does not involve division by μ ; there is division by n only. But because of H's logarithmic transformation, one effect of which is to attach greater weight to inequality at generally lower levels--that is, involving smaller numbers--division by μ as well would seem redundant.

Thus V, C, and H avoid insensitivity to redistributions on one side of the average, and insofar as they do so they seem to be a definite improvement over DEV AVE, DEV MED, and M. But in solving this one difficulty, they may have created another: Why should these particular weighting principles--squaring and logarithmic transformation--be adopted, rather than some others? Are our intuitions and judgments about inequality accurately captured by such precise mathematical transformations? As Temkin puts it, (following Sen, p.28-29) squaring and logarithmic transformation are "arbitrary" ways of reflecting the views "that large deviations should be given extra weight" (p.123), and "that extra importance should be attached to transfers at the low end of the scale" (p.126), respectively.

Also, these three measures are no improvement over earlier measures in that they too seem to have the wrong focus, again on the relations between an individual and a level, rather than on the relations between individuals. Thus V, C, and H, along with DEV MED, DEV AVE, and M, misrepresent egalitarian concerns. As Sen puts it, V, C, and H share "the limitation of taking differences only from the mean" (*On Economic Inequality*,

p.29), a level "which might not be anybody's income whatsoever" (*ibid.*, p.28).⁴ Why not instead take the differences between individuals directly--that is, the differences in how individuals fare relative to one another? The final two statistical measures I consider--Range and Gini Coefficient--do precisely this.

3.13 Range (E)

Range (E), the simplest of all the statistical measures, is based on comparing an outcome's extremes: its very worst-off and very best-off individuals. E assesses an outcome's largest inequality--the difference or gap between the levels of the very best-off and very worst-off--and then divides this difference by the average.

In other words, E expresses an outcome's greatest gap as a ratio of its average, or:

$$(\text{Max}_i y_i - \text{Min}_i y_i) / \mu,$$

where $\text{Max}_i y_i$ is the maximum level of an individual in the outcome, and $\text{Min}_i y_i$ is the minimum level

There is no doubt that E is unacceptable as a measure of inequality, and not just for the egalitarian; Sen goes so far as say that it is obvious that E is more or less a non-starter (*On Economic Inequality*, p.31). E's main shortcoming is glaringly obvious: it ignores the inequalities in between the extremes. But doing so yields some counter-intuitive results.

Consider the following outcomes:

⁴ In the economic literature, income is commonly taken as the answer to the 'equality of what?' question.

	a	b, b₂,...,b₈	c
A:	1	all 5	9

	a	b, b₂,...,b₄	b₅,...,b₈	c
B:		all 2		all 8

...(M)ost would probably say that B's inequality was worse than A's, since in B one-half of the population is much worse off than the other, whereas in A the vast majority of the population is perfectly equal... (Temkin, p.120)

But E says that **B** is better than **A** with respect to inequality, because A's largest gap (between 1 and 9) is bigger than B's largest gap (between 2 and 8). Thus, "(b)y concentrating on the extreme values only, the range misses important features of the contrast" (Sen, *On Economic Inequality*, p.25).

There are further difficulties for E stemming from the fact that it ignores, so to speak, what goes on in the middle:

(i) E is insensitive to certain redistributions--namely, those between individuals in the middle. But we have strong intuitions that many such transfers make a difference (e.g., (even) transfers from a better-off to a worse-off individual).

(ii) E is insensitive to some variations in population size. E is just as insensitive as DEV AVE to individuals right at the average; they affect neither extreme ($\text{Max}_i y_i$ or $\text{Min}_i y_i$), nor the average level (μ) of the society, and therefore do not factor into E's calculations at all. Further, according to E any individual between the extremes matters only to the extent that he raises or lowers the average.

(iii) E is guilty, I think, of at least partially misrepresenting egalitarian concerns. I said that all of the previous measures misrepresent egalitarian concerns because they focus on relations between an individual and a level rather than on relations between individuals. Insofar as E considers relations between individuals, it seems preferable to DEV MED, DEV AVE, M, V, C, and H. But E focuses on only one of these relations: that between the very best-off and very worst-off. But since the egalitarian thinks that equality is intrinsically valuable, she also thinks that *any* inequality is disvaluable. How, then, could she possibly adopt a measure that considered only some--in fact, only *one* of these disvaluable relations between individuals? What justification could she offer for not considering *all* inequalities?

One final comment about E. Though E is clearly unacceptable as a measure of inequality for the egalitarian, I think she should not be too quick to dismiss the ideas behind E altogether. For there does seem to be *something* to the idea of comparing the extremes, though it is obviously not the whole story about an outcome's inequality. Time and again we encounter statistics comparing how the worst-off and best-off fare relative to one another. Such is the focus, for example, of the article "The Wage Gap: The Rich Get Richer, the Poor Get Pummelled"⁵ on income inequality. In this article, evidence is offered in support of the idea that inequality is worsening, because "the gap between the haves and have-nots is widening", including⁶:

The gap between the highest-paid and the lowest-paid is greater than at any time since 1886.

⁵ *The Globe and Mail*, December 17, 1994.

⁶ Some of this evidence is taken from Andrew Glyn's and David Miliband's *Paying For Inequality*. Glyn and Miliband's findings are based upon British society.

The richest 1 per cent of the population own 129 times as much marketable wealth as the bottom 50 percent of the least wealthy.

The bottom 10 per cent of the population pay 43 per cent of their income in tax while the top 10 per cent pay 32 per cent of their income in tax.

There is also a chart of the "ratio of income of the richest 20% households to the poorest 20%, latest year available" for 13 different countries--including The United States, Canada, and Britain--showing that:

In 1992, the wealthiest 20 per cent of Americans received 11 times more after-tax income than the bottom 20 per cent. In Canada that year, the fortunate 20 per cent received 7.4 times as much as the bottom 20 per cent. In Britain, the top 20 per cent made seven times as much.

It is notable that we find such statistics both persuasive and important: we seem to pay special attention to how the worst-off and best-off fare relative to one another when assessing inequality. I think this special attention explains the attraction, very limited though it is, of E as a measure of inequality. Of course, there are some differences between E and the above statistics in terms of focus: E's focus is more narrow, considering only the *very* worst-off and *very* best-off individuals, rather than the more general 'worst-off x% and best-off y% of the population'. But nonetheless both E and these statistics have a kindred spirit.

In other words, I think it important to be clear about E's status for the egalitarian. E is an unacceptable measure of inequality, but not *simply* because it considers the inequality between the best-off and worst-off to be important. Rather, E is unacceptable because it treats this inequality as if it were the *only* important feature of an outcome.

3.14 Gini Coefficient (G)

The Gini Coefficient (G) has been and continues to be "very widely used to represent the extent of inequality" (Sen, *On Economic Inequality*, p.29); "at one time, (it) was perhaps the economists' most popular measure of inequality" (Temkin, p.129). There are two common ways of representing G: (i) in terms of the Lorenz curve, and (ii) in terms of the relative mean difference. Though the former is probably the more common way of approaching G, I shall consider only the latter. I do so because such a characterization brings out what I think is important about G, whereas the Lorenz curve characterization obscures this.⁷

G's numerator is equal to one-half of the relative mean difference--that is, one-half of "the arithmetic average of the absolute value of the differences between all pairs" (Temkin, p.130), or:

$$1/2 |y_i - y_j|, \text{ for every individual } y_i \text{ and } y_j, \text{ all summed}$$

Characterized in this way, G's connection to the egalitarian concern about relations between individuals is more clearly seen: calculating the relative mean difference involves making pairwise comparisons between all individuals--that is, comparing how individuals fare relative to one another.

To calculate the relative mean difference each individual's level is compared to that of every individual in the outcome (including himself) to obtain the absolute value of the

⁷ Explanation of the Lorenz curve characterization of G can be found in Sen, p.29-30 and Temkin, p.129-30.

difference between these levels. These absolute values are then summed. The summed total of these absolute values is then divided by n^2 , which is the number of pairwise comparisons in a population of size n , thus yielding "the arithmetic average of the absolute values of the differences between all pairs".⁸

Consider a particular individual y_i . Each individual to whom y_i is compared must be either better-off, equally well-off, or worse-off than he. For those individuals who are as equally well-off as y_i , including y_i himself, the absolute value of the difference between their levels is zero. For each individual y_j better-off or worse-off than y_i , there will an identical component when individual y_j 's pairwise comparisons are made, as the absolute value of the difference between their levels is the same in both cases--i.e., $|y_i - y_j| = |y_j - y_i|$. Because of this double-counting for individuals better-off or worse-off than y_i , and since the value for pairwise comparisons to all others, including himself, is zero, calculating only *one-half* of the relative mean difference is sufficient, as it yields the same ordinal ranking as the relative mean difference itself⁹. In other words, G's numerator--one-half the relative mean difference--can be otherwise characterized as involving only the absolute differences between each individual and all those better-off than he.¹⁰

One final point about G: it involves division by μ , thus reflecting the idea that inequality matters more at generally low levels than generally high levels. G is expressed by the formula:

⁸ As we shall see momentarily, G also divides by μ , thus respecting the idea that inequality matters more 'lower down'.

⁹ One-half of the relative mean difference is a linear transformation of the relative mean difference. Recall Section 2.4.

¹⁰ This characterization has connection to the AP& ATBO aspect of inequality on the Individual Complaints framework. See Chapters Four and Five.

$1/2 [|y_i - y_j|, / n^2 \mu]$, summed for every individual y_i and y_j

G has many advantages over other measures:

(i) G does not misrepresent egalitarian concerns. It focuses on the relations between individuals, unlike DEV MED, DEV AVE, M, V, C or H, and unlike E, it considers *all* these relations.

(ii) G is sensitive to redistributions. Unlike DEV MED, DEV AVE, or M, transfers between individuals on one side of the median/average are not ignored, and unlike E, transfers between those 'in the middle' are at least somewhat acknowledged¹¹.

I say that G only somewhat acknowledges transfers between individuals 'in the middle', because not every such transfer will result in a different *total* inequality index. Some transfers, such as in the case below, will only affect the *components* which are summed to yield this total inequality index:

	a	b	c	d	e
C:	10	15	20	25	30

	a b c d	e
D:	all 15	40

¹¹ Recall that E focuses solely on the very best-off and very worst-off individuals. See Section 3.13.

D results from **C** when individual **c** transfers 5 units to a worse-off individual, **a**, and **d** transfers 10 units to a better-off individual, **e**. **G** ranks these two outcomes as equivalent, as follows:

Since **C** and **D** involve the same total of good (100 units), and are the same size (5 individuals), the values of n and μ are same in both outcomes. Thus the only possible differences between **C** and **D** will be in **G**'s numerator. But the summed total of the absolute value of the differences between each individual and all those better-off than he is the same in both outcomes: 100 units. Thus though these transfers are not noted in the totaled inequality index, they are noted in the components summed to yield this total. **C**'s inequality index is yielded by summing *many smaller* differences:

$$(5+10+15+20) + (5+10+15) + (5+10) + 5 = 100$$

for **a** for **b** for **c** for **d**

Whereas **D**'s index results from adding *few larger* differences:

$$25 + 25 + 25 + 25 = 100.$$

a **b** **c** **d**

I discuss the plausibility of **G**'s judgment about this case later on. In effect, I argue that the egalitarian need not be persuaded by the idea that **C** and **D** are *exactly* equivalent.

(iii) **G** is not insensitive to population variations. Most of the other statistical measures--**M**, **V**, **C**, and **H**--also avoid **DEV MED/DEV AVE**'s complete insensitivity to the number of individuals right at the median/average level, by dividing by n .¹² By dividing

¹² Recall Section 2.32.

by n^2 , G also avoids this insensitivity.¹³ But G goes beyond the other statistical measures in its degree of sensitivity to variations in population size as it does not consider the different values of n to be the only significant factor.

Consider the following outcomes:

	a	b	c
A:	1	5	9
	a	b, b ₂ , ..., b _{999,998}	c
A ₂ :	1	all 5	9

DEV MED and DEV AVE (and E) consider these outcomes to be equivalent, despite the fact that A₂ contains nearly one million more individuals and nearly two million more relations of inequality between individuals! M, V, C, and H consider A to be worse than A₂. Their preference arises solely because A₂ has a larger population, and dividing by a larger n results in a smaller, and therefore better, inequality index. But these measures do not acknowledge the nearly two million extra relations of inequality between individuals in A₂ at all.

G, in contrast, does acknowledge these extra relations as it makes pairwise comparisons between *all* individuals: the absolute values of the differences involving these added individuals are factored into A₂'s inequality index. Of course, A₂'s larger n also

¹³ In fact, division by $n^2\mu$ (G's denominator) is equivalent to division by $n(y_1+y_2+\dots)$, and so G too can be understood as involving division by n . Since μ is equivalent to $y_1+y_2+\dots/n$, G's denominator can be represented as $n^2(y_1+y_2+\dots) / n$, or $n(y_1+y_2+\dots)$.

affects G's calculations. And since the positive effect of dividing by the much larger n in A_2 outweighs the negative effect of its extra inequalities, G also prefers A_2 to A.

Thus, if the egalitarian considers these extra relations of inequality to be relevant to the comparison between A and A_2 --over and above the extra people, or larger n , of A_2 --she will be more pleased with G than any other measure so far considered. It seems to me that the egalitarian, with her belief that equality is an intrinsic moral value--and therefore her belief that *all* inequalities are disvaluable--should prefer an inequality measure such as G which acknowledges a greater difference between outcomes such as A and A_2 . For these outcomes differ wildly in the number of relations of inequality between individuals--there is more of a difference between them than is captured by dividing by a larger n .

In sum, then, G avoids the three most serious difficulties faced by the other measures: (i) it does not misrepresent egalitarian concerns, not even partially, as it focuses on all relations between individuals; (ii) it is not insensitive to redistributions, and even where the redistribution is not acknowledged in the total inequality index it is at least acknowledged in the components which make up that total; and (iii) it is not insensitive, and in fact is even *more* sensitive, to variations in population size. Does it follow, then, that G should be accepted and endorsed by the egalitarian?

The best answer, I think, is 'not necessarily'. Though G avoids the three most worrying difficulties encountered by other measures of inequality, it is not beyond reproach. Both Sen and Temkin raise worries about it; I shall offer my own (sometimes related) worries as well. There are two sorts of worries one might raise, involving either (i) G's implausible judgments, or (ii) G's methodology. I find the latter sort of worry to be much more interesting and important, as well as more persuasive than appealing to any implausible judgment yielded by G, largely because constructing examples in which G's

judgment seems *obviously* implausible is exceedingly difficult, since G does not suffer from any of the three most worrying shortcomings of the other measures¹⁴.

What are these methodological worries about G? Consider for a moment what measuring inequality according to G involves, ignoring complications about n and μ .¹⁵ G's numerator involves two principles: (i) *pairwise comparisons between all individuals* in an outcome--that is, considering the differences between all individuals, and (ii) summing the absolute values of these differences by a *straight additive principle*. The egalitarian can, and indeed should, endorse (i), but I see no reason for her to endorse (ii).

In other words, G's first step, focusing on all relations between individuals, is agreeable to the egalitarian. Her worries stem from what G does next: totaling the absolute differences between individuals by simply adding them together. Doing so has implications that the egalitarian might not want to accept.

¹⁴ Nonetheless, one might still try to show that G yields implausible judgments about some cases. Temkin has suggested that when comparing an outcome with five distinct groups to an identical outcome save that "one *significantly* raises the best-off group" while "an even larger second-best off group has been *significantly* lowered towards the level of those worst off" (personal correspondence) many people will judge that the inequality is worse in the second outcome. Yet G might well yield--depending upon the precise figures chosen--the opposite judgment. I find myself, however, without clear intuitions about this case, and hence without the sense that G's judgment is obviously implausible.

¹⁵ In effect, I am considering only G's numerator, and ignoring G's denominator. I remind the reader that I remain agnostic about the implications of dividing by μ (recall Section 3.11), and will discuss division by n in Chapter Six.

First, it implies that it is the summed *total* of inequality that matters, and not the *components*. Yet there are many different ways to arrive at the same total index of inequality. Should the egalitarian endorse the idea that as long as the total index of inequality is the same--no matter if there are great differences in the components summed to yield the total index--the outcomes in question are equivalent with respect to inequality? Isn't this like saying that the *total* of inequality is all-important, but the *distribution* of the inequality does not matter not? And doesn't this seem like more of a utilitarian than an egalitarian principle?

Consider again the comparison between C and D:

	a	b	c	d	e
C:	10	15	20	25	30

	a b c d	e
D:	all 15	40

G judged these outcomes to be equivalent, both with an inequality index of 100. Yet these outcomes differ significantly in the components summed to yield this total: C involves many smaller gaps, whereas D involves fewer larger gaps. And though it may be uncertain which outcome the egalitarian ought to prefer, I see no reason for her to accept G's judgment that these outcomes are *exactly* equivalent--i.e., that their difference in components is entirely irrelevant. Of course, in some cases the egalitarian might well judge two outcomes with the same inequality index to be equivalent despite differences in their components. But this is no argument that the egalitarian must *always* judge such outcomes to be equivalent, that differences in components (when not affecting the total) are *always* irrelevant.

This worry about G has connections to the other worries about it that I shall consider, but it is nonetheless distinct: this first worry is about focusing on *totals* rather than *components* of totals. There are other, distinct, worries about the precise procedure--the straight additive principle--used in obtaining this total inequality index. It is possible to agree with G that it is the *total* inequality index that matters, not the *components*, and yet disagree with using a straight additive principle to obtain this total. For a straight additive principle (SAP) has other questionable implications for the egalitarian:

(i) SAP implies that many small gaps exactly equal few large gaps--to be precise, that one gap of x equals two gaps of $1/2x$, equals three gaps of $1/3x$,...equals n gaps of $1/nx$. But should the egalitarian endorse this idea? I do not see any conclusive reason why she should. And if the egalitarian has the intuition that bigger gaps are more significant and should be given extra weight (e.g., that a gap of 10 units is more than twice as significant as two gaps of 5)--or if she simply is suspicious that our judgments about inequality obey strict mathematical principles--she has reason to question SAP (and G as well).

(ii) SAP implies that it is the gap between individuals that is important, irrespective of their actual levels. In other words, SAP implies that inequalities 'lower down' have no more significance than those 'higher up'. For example, outcomes **R** and **S**

	a	b
R:	5	10
S:	100	105

have, in this sense, the same amount of inequality--an absolute difference between individuals of 5 units. But does this seem plausible, since this 5-unit gap in **R** is equivalent to 100% of what the worse-off individual (**a**) has, whereas in **S** it is only 5%?¹⁶

(iii) SAP implies that all inequalities between individuals have the same significance; that no particular gap should be accorded any special weight or consideration. But does this accurately reflect our judgments about inequality? Recall my comments about Range¹⁷: I suggested that E's limited plausibility may arise from the *special* concern we seem to have for the gap between the very worst-off and best-off individuals. G, insofar as we consider only its straight additive principle, does not assign this particular gap, nor any other, any special weight.

This last implication of SAP raises a question about *how* special weight might be assigned. Suppose that we do have a special concern for the inequality between the very worst-off and best-off individuals. If a measure of inequality is to reflect this special concern, there are (at least) two options: (I) some sort of weighting principle, or (II) a

¹⁶ This worry about SAP does not transfer into a worry about G, however, as G involves a principle which respects this idea about inequality mattering more 'lower down': division by *mu*. Because G divides by *mu*, G would, in fact, judge **R** to be worse than **S**. My point here is about SAP only, not about G: according to SAP, the gap of 5 is summed into the total inequality index in exactly the same way, whether it occurs between individuals at levels 5 and 10, or levels 100 and 105. This point about SAP appears again later, in considering the Individual Complaints approach to inequality.

¹⁷ See Section 3.13.

complex, or multi-faceted measure¹⁸--that is, a measure which assesses outcomes according to each different concern we have--and then 'combines' these assessments to arrive at a final judgment about inequality. Which of these options is preferable?

The difficulty with (I), a weighting principle, was discussed already in conjunction with V, C, and H¹⁹: *which* weighting principle should be employed? It is in some sense arbitrary which precise principle is employed, as there are several different mathematical transformations which can attach more significance to (i) inequalities 'lower down', and/or (ii) 1 (large) inequality of x than n (smaller) inequalities of $1/nx$, and/or (iii) the inequality between the very worst-off and best-off.

It is only the latter option of assigning extra weight to particular gaps, (II) a complex measure, that I shall consider in detail, both in this chapter with Sen's Intersection Approach, and in Chapters Four and Five with Temkin's Individual Complaints framework. But I should by no means be taken as suggesting that complex or multi-faceted measures of inequality are beyond reproach. There are difficult questions here as well: Which 'facets' should be involved in a multi-faceted measure? And how are the judgments yielded by these different facets to be combined to yield a judgment about overall inequality? As we shall see, Sen and Temkin answer these questions in very different ways. But first, I offer a few comments about a very different sort of inequality measure.

¹⁸ See the discussion of Sen's intersection approach (below) and Temkin's Individual Complaints framework (Chapters Four and Five) for more on the difference between 'complex' and 'simple' measures of inequality.

¹⁹ Recall Section 3.12.

3.2 ATKINSON'S MEASURE

The reader may wonder why I have not so far considered what was at one time "one of the most widely accepted measures of inequality" (Temkin, p.135), namely, Atkinson's measure. Atkinson built on the work of Hugh Dalton, who "measured inequality in terms of social welfare loss" (Sen, *Inequality Re-examined*, p.95)--that is, the 'cost', in terms of lost social welfare, of an unequal distribution of incomes²⁰. Dalton's measure "followed directly from the utilitarian framework" (Sen, *On Economic Inequality*, p.37):

the same utility function was taken to apply to all individuals, and this fact, along with diminishing marginal utility from income, ensured that for any given total income to be distributed among people, an equal distribution would maximize social welfare. (Sen, *Inequality Re-examined*, p.95)

Dalton's measure, then, depends on comparing the actual social welfare/aggregate utility to the maximal social welfare--that is, the total utility that would obtain under an equal distribution of this fixed amount of income. Specifically, his measure is the ratio of the former to the latter.

Atkinson's measure has a slightly different focus. It depends on comparing the amount of unequally distributed income used to generate the actual social welfare/aggregate utility to the amount of income needed to generate the same level of social welfare under an equal distribution. As Sen puts it,

²⁰ Recall that 'income' is often taken by economists as the answer to the 'equality of what?' question.

It requires judgments of the kind: 'A 22 per cent smaller total income, if *equally* distributed, would be just as good for the society as the present (higher) income distributed as (unequally as) it in fact is.' (*ibid.*, p.96)

I have not considered Atkinson's measure, or any other normative measure of inequality, because it does not capture the egalitarian concern of valuing equality--and/or disvaluing inequality--for its own sake. I agree with Sen (*Inequality Re-examined*, p.97-101) that it is misleading to call Atkinson's measure an "inequality measure" as such, as it is not a measure of "*inequality per se*"; it is the "inefficiency in generating social welfare that the Atkinson index really measures".

Further, Atkinson's measure, under certain assumptions, yields very implausible judgments about inequality. The plausibility of this measure relies entirely on accepting, as many economists do, two principles of utilitarianism: (i) diminishing marginal utility from income, and (ii) the same utility function for all individuals. But it is possible to question either or both of these assumptions, and in so doing the implausibility of this measure as a measure of inequality becomes obvious.

Consider the following outcomes²¹:

	a	b
A:	0	10
B:	5	5

²¹ Unlike most of my examples, I here assume that the numbers refer to income levels.

Suppose one rejected (i), and adopted instead a non-diminishing utility function which was simply a linear transformation of income levels. Under such an assumption, **A** and **B** "have precisely the same Atkinson measure of inequality. However, it would seem absurd to describe the two as being equally unequal" (Sen, *On Economic Inequality*, p.38).

Or suppose, using the same example, that **a** is severely handicapped, and **b** perfectly healthy. One might claim, contrary to (ii) the second utilitarian principle, that **a** is a less efficient "utility machine" than **b**. Under such an assumption, Atkinson's measure says that **A** is not just as "equally unequal" as **B**; it says that **A** is in fact *better* than **B** with respect to inequality, as there is less inefficiency in generating social welfare if the healthy individual has all the income. But surely the judgment that **A** is better than **B** with respect to inequality is completely implausible.

In sum, because Atkinson's measure "identifies the social welfare-loss *from* inequality with inequality *itself*", (Sen, *Inequality Re-examined*, p.97-98), and crucially depends upon a utilitarian framework for its plausibility, it is not an acceptable measure of inequality for the egalitarian.

3.3 A COMPLEX MEASURE

3.31 Sen's Intersection Approach

Earlier I suggested a possible motivation for a complex or multi-faceted approach to inequality: to reflect any special concerns we may have about particular relations of inequality in an outcome, such as the relation between the very worst-off and very best-off. This, however, does not seem to be much of a motivating force behind Sen's Intersection Approach, though it is perhaps an important motivator of Temkin's Individual

Complaints framework.²² But before considering the motivation behind Sen's Intersection Approach in detail, let me explain the Approach itself.

Sen's Intersection Approach involves taking an intersection of the judgments of different measures of inequality, such as some subset of the statistical measures. If there is unanimity among the measures--e.g., if all the measures judge that **X** is worse than **Y** with respect to inequality--then we confidently endorse their judgment. But if unanimity does not obtain, and there is disagreement among the measures as to which of the outcomes being compared is preferable, our judgment is suspended, and we deem the outcomes non-comparable.

Consider again the following outcomes:

	a	b	c	d	e
C:	10	15	20	25	30

	a b c d	e
D:	all 15	40

Suppose that the measures involved in the intersection are **M**, **V**, and **E**. According to all three measures, **C** is better than **D**. We therefore judge confidently that **C** is preferable.

But suppose **DEV** **MED** were also included in the intersection. **DEV** **MED** disagrees with **M**, **V**, and **E**: it prefers **D** to **C**. In such a case our judgment is suspended, as there is no longer unanimity among the different measures.

Note that a slightly different result would follow had **G** been added to the original intersection instead of **DEV** **MED**. **G** also disagrees with **M**, **V**, and **E**, though not as

²² Again, see Chapters Four and Five.

strongly: G judges C and D to be exactly equivalent with respect to inequality. Though, strictly speaking, there would again fail to be unanimity among the intersection's measures, we could--and probably should--judge C to be 'at least as good' as D, rather than deeming them non-comparable.

Of course, there is nothing about the Intersection Approach itself that requires the use of statistical measures. But as Temkin has noted, Sen "seems to presume that [the intersection] will be derived from some of the standard measures of inequality" (p.145). The idea behind the Intersection Approach, however, is quite general: the intersection is to involve some subset or other of acceptable inequality measures.²³

Thinking about the question of what constitutes an acceptable inequality measure, it is not difficult to see one source of motivation of the Intersection Approach. Sen, recognizing that a number of different inequality measures have been offered, most of which seem plausible for some cases and implausible for others, wanted to circumvent the problem of which *one* measure to endorse; which *one* measure seems most plausible. The Intersection Approach "has the advantage of avoiding exclusive reliance on any particular measure" (*On Economic Inequality*, p.72), particular measures which we know (or strongly suspect) yield implausible judgments about some cases.

But there is another, even stronger, motivation for Sen and his Intersection Approach, stemming from his belief that "inequality as a notion does not have any innate property of 'completeness'" (*ibid.*, p.47). In contrast, the statistical measures "are all 'complete' measures in the sense that every pair of distributions can be compared". As Sen puts it,

²³ There is a related and important issue as to what constitutes an acceptable measure--that is, a measure to be used in the intersection. See text below.

If we take any two distributions X and Y ...then according to any of these criteria either X will be more unequal than Y , or vice versa, or both will be equally unequal. The possibility of non-comparability is not at all entertained. In fact, to each distribution X there is attached--under any of these measures--a real number $I(X)$ which is supposed to represent the degree of inequality of X . While various ways of arriving at $I(X)$ have been presented (e.g.,...measures such as the coefficient of variation, or the standard deviation of logarithms, or the Gini coefficient...) each way leads to the conversion of the set of distributions X, Y, Z , etc. into a set of corresponding inequality numbers $I(X), I(Y), I(X)$, and so on. And since any two numbers are comparable, i.e., either $I(X) > I(Y)$, or $I(X) < I(Y)$, or $I(X) = I(Y)$, there is never any gap in the picture of comparative inequality.

As Sen sees it, the problem with the statistical measures is not simply that the judgments they yield about some cases seem implausible. He also thinks it is implausible that they yield judgments about *all* cases. For Sen these two ideas are intimately related:

It is arguable that each of these measures leads to some rather absurd results precisely because each of them aims at giving a complete-ordering representation to a concept that is essentially one of partial ranking. (*ibid.*, p.48)

If Sen is correct that inequality is in this sense incomplete; or if some of our judgments about inequality do not fit snugly into 'better than', 'worse than', or 'exactly equal to' categories (e.g., A and B are *roughly* equal, or A seems *better* than B in some respects, *but worse* than B in others) then there is a real advantage for the egalitarian in using a complex measure of inequality, such as the Intersection Approach.

But Sen's measure, though no doubt preferable to relying exclusively on *one* particular statistical measure, also has defects. Some of these are quite obvious, and involve the relationship between the judgments yielded by the Intersection Approach and our intuitive judgments.²⁴ First, by demanding strict unanimity among the different measures, this approach may not yield judgments in a number of cases in which our intuitive judgments are quite firm. Second, it may yield a judgment which we firmly believe to be false--e.g., if the measures in our intersection yield a judgment about a particular case which seems implausible, and are unanimous in doing so. Third, it may yield a judgment though we feel most uncertain that *any* judgment should be yielded about this case at all. Of course, whether or not these worries *actually* obtain will depend upon the precise measures employed in the intersection. But this leads to a deeper problem for this approach: how to determine *which* measures to accept and employ in the intersection.

Sen offers little help here. From his comments it seems both M and E, which he calls "obvious non-starters" (*On Economic Inequality*, p.31), would be excluded, though he does not offer a full explanation of why they are 'non-starters'. Perhaps they are excluded because they violate the Pigou-Dalton condition²⁵. But this, at best, gives us a criterion for *rejecting* measures, not for *accepting* them. We might reject any inequality measure which violates the Pigou-Dalton condition, without thereby wanting to include every measure which respects it in our intersection. For as we have seen, all the statistical measures seem to some degree questionable, and most yield judgments about some cases which intuitively seem implausible. Why should measures which suffer such defects, although respecting the Pigou-Dalton condition, be employed in the intersection at all?

²⁴ See Temkin's discussion of these worries, p.143-45.

²⁵ They are, in fact, the only statistical measures that I have considered which violate this condition.

There is another serious difficulty for the Intersection Approach, having to do with how the judgments of the different measures are to be 'combined', rather than with the choice of the measures themselves. Quite simply, why should strict unanimity be required in order to yield a judgment? For example, what if **X** is deemed better than **Y** by the vast majority of measures in our intersection? Whereas we might want to judge that *on balance* **X** is better than **Y**, the Intersection Approach precludes our doing so. It seems both undesirable and implausible that the Intersection Approach yields no judgment at all about these outcomes and deems them non-comparable.

I said earlier that complex or multi-faceted approaches to inequality involve (at least) two distinct questions: Which 'facets' should be included in a multi-faceted measure of inequality? And how are their judgments to be combined to yield an overall judgment about inequality? As I see it, the two most serious worries about Sen's Intersection Approach center on his answers to these questions.

First, Sen does not analyze the choice of measures in any deep or systematic way; there seem to be no--or only very weak--unifying principles as to which measures should comprise the intersection. Of course, one expects all the accepted measures to meet some sort of minimum criteria, such as having intuitive plausibility or respecting the Pigou-Dalton condition, but such criteria may not be discriminating enough. Many measures can be constructed which meet such criteria and, presumably, the more measures included in the intersection, the fewer cases in which a unanimous judgment will emerge.

Second, the unanimity requirement of the Intersection Approach may not be the best way to capture our actual judgments about inequality. By precluding 'trade-offs' between the judgments of different measures, this approach also precludes certain sorts of judgments, such as the judgment that one outcome is *on balance* better than another.

In contrast, Temkin answers these two questions quite differently: he both provides an in-depth analysis of the facets²⁶ of his multi-faceted approach, and allows trade-offs between them. I consider his complex Individual Complaints approach to assessing inequality in the next chapter.

²⁶ He calls them 'aspects'. See Chapter Four.

CHAPTER FOUR: INDIVIDUAL COMPLAINTS

In this chapter I consider Larry Temkin's fairly novel approach to assessing and comparing inequality: the "Individual Complaints" framework.¹ According to this framework, measuring the badness of an outcome's inequality involves (i) considering the inequality "from the standpoint of particular individuals", and (ii) assessing each individual's "complaint" about the inequality. The fundamental idea seems to be the following:

for any situation where some people are better off than others, we can say that the best-off have nothing to complain about while the worst-off have the most to complain about (regarding inequality). (p.19).

Section 4.1 is purely expositional: I explain how to assess inequality according to Individual Complaints, and apply it to a simple example. In Section 4.2, I compare this approach to measuring inequality with the measures I considered earlier in Chapters Two and Three, focusing in particular on how Individual Complaints compares with the

¹ The Individual Complaints framework is the center of his 1993 book, *Inequality*. Though the way in which he explicates his framework--i.e., by asking three fundamental questions (discussed below)--may make it seem like a completely novel and distinct approach to measuring inequality, closer consideration reveals several connections to both the statistical measures and Sen's Intersection Approach. I discuss some of these connections in Section 4.2.

All page references in this chapter are to *Inequality*.

economist's statistical measures. I save a more detailed analysis of the strengths and weaknesses of Individual Complaints until Chapter Five.

4.1 INDIVIDUAL COMPLAINTS: THREE FUNDAMENTAL QUESTIONS

In order to compare different situations and answer his version of the comparative value question²--"When is one situation *worse* than another regarding inequality?" (p.3)--Temkin proposes assessing the inequality of different situations in terms of the complaints of particular individuals in those situations. He motivates and explains his Individual Complaints proposal by appealing to three different questions: (1) *who* has a complaint about inequality? (2) *how large* is their complaint? (3) *how* are different individuals' complaints *to be combined* in assessing the inequality of the overall outcome?³

Temkin notes that there are no easy or uncontroversial answers to these questions; one may endorse any number of distinct--and even competing--plausible positions. But he does not find this complexity or competition worrying. Quite the contrary; he thinks that the lack of simple answers and the plausibility of competing answers reveals an advantage of the Individual Complaints framework. This is because Individual Complaints does not *require* that a choice be made between different plausible answers to the three

² Recall Chapter One, Section 1.4, and my version of the comparative value question: when is one outcome worse than another with respect to relations between individuals (i.e., (in)equality)? Because Temkin explicitly endorses the pedantic assumption (p.7), he also considers himself to be answering my version of the comparative value question. However, I shall not deal with the adequacy of Individual Complaints as a way of assessing (in)equality until Chapter Six.

³ See especially Chapter 2 of *Inequality*, p.19-52.

fundamental questions of (i) who has a complaint, (ii) how large it is, and (iii) how complaints should be combined. His approach reflects the plausibility of different, and even competing, answers to these three fundamental questions, and accepts that the intuitions underlying these different answers may--justifiably--be influencing our judgments about inequality.⁴ Lest this seem *prima facie* nonsensical and incoherent, let me try to clarify the general nature of this complex approach to measuring inequality.

4.11 The Complex Nature of Individual Complaints: An Analogy

Temkin's approach to understanding and measuring inequality, the Individual Complaints framework, involves competing--and sometimes conflicting--answers to three fundamental questions. But according to Temkin, the egalitarian's task is not to search for the *one, true* or *most plausible* answer to these questions; rather, it is to investigate how, when, and to what degree the different answers influence and underlie our judgments about inequality. Temkin's Individual Complaints framework involves combining these competing/conflicting answers to form a number of different 'aspects'. Each aspect can be thought of as a *partial* or *incomplete* measure of inequality. In order to *fully* or *completely* measure the inequality of an outcome, the judgments yielded by the different aspects need to be somehow combined. And the judgments of different aspects may receive more or less weight in this combining process depending upon the particular outcomes being compared.

⁴ In other words, Individual Complaints, being itself a complex or multi-faceted measure of inequality, can elucidate the complex intuitions we have about inequality. I consider the issue of whether or not inequality is best thought of as a complex notion in Chapter Five, Section 5.1.

Though when described abstractly this approach may seem at best mysterious and at worst incoherent, it is not really all that different from other common approaches we take in making comparative judgments. Consider, for example, the approach we might take in order to compare different hockey players, and answer the analogous comparative value question: *when is one hockey player worse (or better) than another with respect to helping his team win?* Obviously, there are any number of different 'aspects' that may be taken into consideration--goals, assists, points, plus-minus rating, goals-against-average, penalty minutes, character, leadership, back-checking, fore-checking, penalty-killing, etc.--and we would probably, to keep our judgments simpler, settle upon some subset of these aspects to take into consideration in making comparative judgments between hockey players.

Now it is clear that the judgments yielded by these aspects will sometimes not just compete but *conflict with* one another: one player may score more goals but lack leadership; another may score only rarely but play in a 'gutsy, full-of-heart' way that is a source of inspiration to her teammates. Thus according to the 'goal-scoring' aspect the former is judged to be the better player, but according to the 'leadership' and/or 'character' aspects, the opposite judgment is made. It is also clear that the judgments yielded by the different aspects may be given different weight depending upon the particular players being compared: the judgment yielded by the 'leadership' aspect may be given more weight than that of the 'goal-scoring' aspect when comparing a veteran and a rookie, for instance. Of course, this analogy is not entirely satisfactory because, unlike the aspects of inequality, the aspects of hockey players are not *in and of themselves* contradictory: it is the *judgments yielded* by the 'goal-scoring' aspect and the 'leadership' aspect that are contradictory. But nonetheless, I think this analogy helps to clarify the underlying spirit of the Individual Complaints approach to measuring inequality.

So how does Individual Complaints work? Recall that there are three fundamental questions to be answered: (i) *who* has a complaint about inequality? (ii) *how large* is their complaint? (iii) *how* are different individuals' complaints *to be combined* in assessing the inequality of the overall outcome?

4.12 *Who* has a complaint about inequality?

Consider the first question that needs to be answered on this framework: *who* has a complaint about inequality? Temkin says that there are two plausible answers: (i) only those who are worse off than average have a complaint about inequality, and/or (ii) all but the very best-off individual--i.e., anyone who is worse-off than someone--has a complaint about inequality.⁵

Each of these answers does indeed seem at least intuitively plausible, and can be defended as follows:

One might argue for the first answer, that (i) only those worse off than average have a complaint about inequality, by appealing to "fair shares":

In a world of n equally deserving people the fairest distribution would be for each person to receive one n th of the total, since among equally deserving people a fair share is an *equal* share. Those who receive less than one n th of the total would thus have a complaint, since they are receiving *less* than their fair share. Moreover, they are the only people who have a complaint, since those who receive one n th or

⁵ Right off the bat we have a case where the answers do not just compete but conflict. It cannot, upon pain of inconsistency, be the case that both *only* those below average have a complaint *and* all but the very best-off individuals have such a complaint.

more of the total are *already* receiving their fair share or *more* than their fair share. But in a world of n people one n th of the total...is the average level...Hence, all and only those below the average have a complaint. (p.20)

In contrast, one might argue for the second answer, that (ii) all but the very best-off individual have a complaint about inequality, by appealing to what Temkin takes as the fundamental egalitarian principle: "it is bad--unjust and unfair--for some to be worse off than others through no fault of their own"⁶ (p.13). All but the very best-off individual are worse off than others; even the second best-off individual is worse off than another, as he is worse off than the very best-off individual.

To put the same point another way, if what an egalitarian objects to is the relation of inequality between individuals, then she should object to *all* such relations--those involving people *above*, and not just people *below*, the average. This does not, of course, require that she object *to the same degree* to every relation of inequality. She may still hold that inequality matters more 'lower down', for example, that the inequality between **a** and **b** (below) is more significant than that between **c** and **d**⁷:

⁶ Temkin assumes that the individuals in an outcome are "equally skilled, hardworking, morally worthy, and so forth, so that those who are worse off than others are so through no fault of their own" (p.17).

⁷ Temkin's defense of this second answer that all but the very best off have a complaint is different, and in my opinion, worse, as it appeal to the *size* of an individual's complaint--in other words, to the second fundamental question, which has yet to be addressed. See p.23-25.

	a	b	c	d
A:	5	10	100	105

To sum up: according to Individual Complaints, there are two different grounds for having a complaint about inequality: (i) having less than one's fair share, in which case only those below average have a complaint, and (ii) being the worse-off person in a relation of inequality between individuals, in which case all but the very best-off individual have a complaint.

4.13 *How large* is their complaint?

The second fundamental question about individual complaints is how to assess the *size* or *strength* of a complaint. Temkin translates this into the slightly different question, *To what level* should an individual's level be compared in assessing the size of her complaint? He considers three possible answers. The size or strength of an individual's complaint may depend upon how she fares relative to (i) the average level, (ii) the level of the best-off person, or (iii) the levels of all those better off than she.

We are now in a position to ask about a given situation of inequality: *who* has a complaint *of what size*? We need only combine each of the two possible answers to the first fundamental question about Individual Complaints with each of the three possible answers to the second. However, as Temkin acknowledges, not every combination of answers seems plausible. Rather, a given answer to the first fundamental question as to *who* has a complaint about inequality seems to constrain which of the answers to the second question about the *size* of their complaint can plausibly combine with it. For example, if one answers the former question with the view that (i) only those without their fair share--i.e., only those worse off than average--have a complaint, would one be

inclined to answer the latter with the view that (ii) the size of an individual's complaint should be determined by comparing her level to the level of the best-off person? Surely not. Instead, if one accepted the view that (i) only those below average have a complaint about inequality, "it would be natural to determine the size of someone's complaint by comparing her level to the level at which she would cease to have a complaint" (p.25)--that is, by comparing her to the average.

In other words, on the view that only those below average have a complaint, the size of an individual's complaint should be equal to the difference between her level and the average level. But according to the other answer to the question about who has a complaint there is a choice to be made about how to assess the size of these complaints. This choice is illuminated by noting the alternative formulations of this second answer to the question of who has a complaint. One formulation is as the view that *all but the very best-off* have a complaint, which seems, according to Temkin, to suggest that the size of an individual's complaint should be calculated by comparing her level to the level of the best-off person. Yet the other formulation of the view, that *anyone who is worse off than someone* has a complaint, suggests that the size of an individual's complaint is equal to the *summed* differences between her level and the level of all those better off than she. As Temkin puts it, "if it is bad to be worse off than one person through no fault of your own, it should be even worse to be worse off than two people through no fault of your own" (p.26).

In sum:

One might plausibly maintain that only those below the average have a complaint and the size of their complaint depends upon (1) how they fare relative to the *average*...Alternatively, one may claim that all but the best-off have a complaint and the size of their complaint depends either upon (2) how they fare relative to

the *best-off person*...or upon (3) how they fare relative to *all those better off* than they. (p.26; italics mine).

I shall, following Temkin, hereafter refer to these ideas as AVE, BOP, and ATBO respectively.

4.14 Combining Complaints

Having determined the possible answers to the question of *who* has a complaint of what *size*, let us turn to the third fundamental question: how are the complaints of different individuals *to be combined* in assessing the inequality of the overall outcome? Temkin considers three possible answers, which he refers to as "principles of equality": (i) a simple additive principle; (ii) a maximin principle; and (iii) a weighted additive principle. Following Temkin, I shall refer to these ideas as AP, MP, and WAP respectively. How, then, do these three different 'principles of equality' combine the complaints of different individuals?

4.141 AP -- A Straight Additive Principle

According to AP, once it has been determined which individuals have complaints and how large these complaints are, the complaints of different individuals are simply added together to yield a total inequality index⁸. On this view, each individual's complaint is given equal weight irrespective of how badly off he may be; a complaint of 5 units, for

⁸ By 'inequality index' here I mean the inequality index according to some one aspect of inequality, not the inequality index for the overall judgment.

example, is added into the sum total in the same way, whether the individual with the complaint is at level 5 or level 100.⁹

4.142 MP -- A Maximin Principle

According to MP, the complaints of the worse-off are considered to be of higher moral importance; in fact, they are considered to be *most* important, and are given absolute priority over the complaints of other individuals. In other words, this view 'combines' complaints of different individuals by lexically ranking these complaints in terms of their moral importance, where the complaints of the worst-off are granted the highest moral importance. According to this view, comparing the inequality of different situations amounts to comparing the complaints of their worst-off members: outcome X is worse than outcome Y regarding inequality if the complaints of the worst-off members in X are larger or stronger than the complaints of the worst-off individuals in Y. MP also involves a tie-breaking clause:

If the level of complaint of the worst-off group is the same in both worlds, then that world will be better whose worst-off group is smallest; if the two worst-off groups are the same size, then the next worst-off groups are similarly compared [i.e., first compared for size of *complaint*, and only if again tied then compared for size of *group*], and so forth¹⁰. (p.34, brackets mine)

⁹ I discussed this implication of a straight additive principle in connection with Gini Coefficient, Chapter Three, Section 3.14.

¹⁰ Although the application of MP's tie-breaking clause seems very straight-forward, Temkin is not clear about what *grounds* or *underlies* this process. Are we to consider and

4.143 WAP -- Weighted Additive Principle

The third principle of combining complaints, WAP, is best understood as an attempt to combine the plausible elements of AP and MP¹¹. According to WAP, the complaints of different individuals are to be summed together to yield a total, after

first attaching extra weight to them in such a way that the larger someone's complaint is the more weight is attached to it. Such a principle gives expression to both the view that we should be especially concerned with the worst-off and the view that we should be concerned with all complaints. (Temkin, p.41)¹²

compare the next worse-off groups because they are, in absolute terms, the next worse-off, or because they are the group with the next largest complaint? I return to this ambiguity in Chapter Five, Section 5.2, where I discuss the implausibility of MP&AVE as an aspect of inequality.

¹¹ Temkin says:

an additive principle [AP] might seem preferable to a maximin principle insofar as it is concerned with the complaints of *all* those who have a complaint...yet a maximin principle [MP] might seem preferable insofar as it is concerned with the *distribution* rather than merely the sum total of complaints...a principle that plausibly combined these two elements [i.e., WAP] would have great appeal. (p.41, brackets mine)

¹² Notice the assumption that being especially concerned about larger complaints (thus assigning them extra weight) is equivalent to being especially concerned with the complaints of the worst-off. Without this assumption the plausibility of WAP is in doubt. Again, I return to assumption in Chapter Five.

WAP is thus in agreement with AP that *all* complaints, not just those of the worst-off, matter in assessing the inequality of an outcome. And it is in agreement with MP that the complaints of the worse-off are *more morally important*, an idea that AP does not capture. But unlike MP, WAP does not give the worst-off *absolute* priority. Whereas MP cares *first* about the complaints of the worst-off--and *only if* these complaints are equivalent in the outcomes being compared, then about the size of the worst-off group, and then *only if* again equivalent about the complaints of the next worst-off group, etc.--WAP cares about the complaints of *all* individuals from the beginning.

We have seen, then, the six basic ideas involved in the Individual Complaints framework. Three address the issue of *who has a complaint of what size*: AVE, BOP, and ATBO. The others--AP, MP, and WAP--address *how to combine* the complaints of different individuals. These six ideas combine to form the different 'aspects' of inequality. Temkin combines each view about individual complaints--AVE, BOP, ATBO--with each combinatorial 'principle of equality'--AP, MP, and WAP.

Thus, there are nine different aspects of inequality; they are: AP&AVE, AP&BOP, AP&ATBO, MP&AVE, MP&BOP, MP&ATBO, WAP&AVE, WAP&BOP, and WAP&ATBO¹³. Each of these nine aspects can be understood as an *incomplete* measure

¹³ The reader of Temkin's book will also notice that I have not considered *all* the aspects of inequality that he does. I have not considered "Deviation"--which is what I called DEV MED in Chapter Two--"Gratuitousness", or "Social Inequality". The intuitions underlying Gratuitousness involve how "pointless and unnecessary" an inequality is--i.e., how easy it would be and how much it would 'cost' the better-off to eliminate the inequality through (even) transfers of the good (p.35-36). The intuitions underlying Social Inequality involve considering inequality from the perspective of institutions in a society (p.48-51). I do not consider these three aspects because I am *only* concerned with assessing inequality

of inequality, as each yields a (partial) judgment about how outcomes compare with respect to inequality. Overall judgments about how outcomes compare with respect to inequality involves first assessing and comparing the outcomes according to all nine of the Individual Complaints aspects, and then--somehow--balancing these nine judgments against one another¹⁴.

Consider what Individual Complaints says about the following rather simple comparison:

	a	b	c	
A:	4	5	9	(average 6)
B:	1	5	9	(average 5)

according to individual complaints, as this seems to me to be the most interesting and illuminating part of Temkin's approach to measuring inequality. Neither 'Deviation', 'Gratuitousness', nor 'Social Inequality' are motivated by this framework, and in some cases are in direct conflict with it.

¹⁴ Temkin does not attempt to provide a hard and fast principle by which to balance or 'trade off' the aspects' judgments against one another, but this is not a serious defect. First, it is not clear that we *should* use a hard-and-fast balancing principle, nor that we *do*, in fact, do so. Second, the individual complaints framework is illuminating even without such a principle, as our judgments about inequality, such as that X is "definitely worse", "somewhat worse", or "slightly worse" than Y is often nicely correlated with the number of aspects--all, most, or some--which endorse this judgment.

According to all nine aspects of inequality, **B** is worse than **A** with respect to inequality. The calculations, tedious though they are, are as follows:

AP&AVE

According to this aspect, only those worse off than average have a complaint, and the inequality index is the straight sum of these complaints, where the size of an individual's complaint is equal to the absolute difference between his level and the average level.¹⁵

A: The average is 6. The inequality index is $(6-4)+(6-5) = 3$.

B: The average is 5. Thus, the inequality index is $(5-1) = 4$. Since **B** has a larger inequality index than **A**, **B** is worse than **A** with respect to inequality.

AP&BOP

According to this aspect, all but the best-off person have a complaint, and the inequality index is the straight sum of these complaints, where the size of an individual's complaint is equal to the difference between his level and the level of the best-off person.

A: The inequality index is $(5+4) = 9$.

¹⁵ It should be noted that Temkin, in tension with the way in which he outlined Individual Complaints, also assigns complaints to those *above* average--or, more specifically, assigns complaints to us, the readers, *on behalf of* those above average (p.45-47). As I consider this issue at length in Chapter Five, Section 5.2, I shall say no more about it here. In my calculations, however, I keep to the way in which Individual Complaints was motivated, and assign complaints only to those *below* average.

B: The inequality index is $(8+4) = 12$. Thus, **B** is worse.

AP&ATBO

According to this aspect, again all but the very best-off person have a complaint, and the inequality index is the straight sum of these complaints, where the size of an individual's complaint is equal to the sum of the differences between his level and all those better off than he.

A: The inequality index is $(1+5)+4 = 10$.

B: The inequality index is $(4+8)+4=16$. Thus, **B** is worse.

MP&AVE

According to this and all other aspects involving MP, the inequality is assessed by comparing the complaints of the worst-off members of each society, where the society with the smaller complaint is better, (and *only if* they should be tied does the tie-breaking clause come into effect). According to this aspect, the size of the worst-off's complaint is equal to the difference between his level and the average level.

A: The inequality index is $(6-4) = 2$.

B: The inequality index is $(5-1) = 4$. Thus, **B** is worse.

MP&BOP

According to this aspect, the size of the worst-off's complaint is equal to the difference between his level and the level of the best-off individual.

A: The inequality index is $(9-4) = 5$.

B: The inequality index is $(9-1) = 8$. Thus, **B** is worse.

MP&ATBO

According to this aspect, the size of the worst-off's complaint is equal to the sum of the differences between his level and the levels of all those better off than he.

A: The inequality index is $(1+5) = 6$.

B: The inequality index is $(4+8) = 12$. Thus, **B** is worse.

WAP&AVE¹⁶

According to this and all other aspects involving WAP, the judgment yielded by this aspect depends upon the judgments yielded by the corresponding AP and MP aspects.

¹⁶ A few words about aspects involving WAP. Temkin nowhere settles the question of exactly *how much* weight larger complaints (or complaints of the worse-off) should be given. But since WAP is characterized as a compromise between AP and MP, it is safe to assume that when both of the corresponding AP and MP aspects agree, the WAP aspect yields the same judgment. For example, if both AP&AVE and MP&AVE prefer **X** to **Y**, WAP&AVE also prefers **X** to **Y**. If the judgments yielded by the corresponding AP and MP aspects disagree, I *sometimes* leave the judgment of the WAP aspect undecided (and indicate this by a question mark); in other cases it is (reasonably) clear which outcome the WAP aspect prefers. It should be noted that Temkin himself sometimes leaves the judgments yielded by WAP aspects undecided. See, for example, p.63, Case II (WAP&AVE and WAP&ATBO undecided); p.67 Case II, (WAP&AVE and WAP&ATBO undecided); p. 75 (WAP&AVE undecided).

A/B: Since both AP&AVE and MP&AVE judge that **B** is worse than **A**, WAP&AVE judges that **B** is worse than **A**.

WAP&BOP

A/B: Since both AP&BOP and MP&BOP judge that **B** is worse than **A**, **B** is worse.

WAP&ATBO

A/B: Since both AP&ATBO and MP&BOP judge that **B** is worse than **A**, **B** is worse.

4.2 INDIVIDUAL COMPLAINTS VERSUS OTHER INEQUALITY MEASURES

How does Individual Complaints compare to the other approaches to measuring inequality I have considered: deviation measures and economic measures? This way of measuring inequality seems promising when considered in this light. It avoids the three big difficulties encountered by deviation measures and some of the statistical measures: it does not misrepresent egalitarian concerns¹⁷; it is not insensitive to redistributions, as any

¹⁷ It might be better to say that Individual Complaints does not *completely* misrepresent egalitarian concerns, as most--but not all--of its aspects focus on relations between individuals. There is still an issue to be decided as to whether or not every part of a complex measure of inequality (e.g. AP&AVE) needs to reflect this fundamental concern; though unquestionably if the part were offered as a complete measure of inequality it would need to do so.

transfer of the good will be 'registered' in at least the AP&ATBO aspect if not others; it does not ignore any relations of inequality between individuals in an outcome (in fact, most of these relations are considered in more than one aspect). Further, Individual Complaints allows for any intuitions we might have that pay particular attention to how the very worst-off and very best-off fare relative to one another, as these intuitions are captured by the MP&BOP aspect.

Individual Complaints also seems preferable to the other complex measure I considered, Sen's Intersection Approach, in two ways. First, it does not demand strict unanimity among the aspects' judgments in order for an overall comparative judgment to be yielded; it allows 'trade-offs'. This seems to me a desirable feature, as allowing trade-offs means allowing for judgments of the sort that 'X is, *on balance*, better than Y'. We certainly make this sort of comparative judgment about other things--e.g., we might judge that *on balance* individual **a** is a better hockey player than individual **b**--and I see no reason why our judgments about inequality, at least for some comparisons, might not be of this type.

Second, Temkin has at least attempted to provide an over-arching system by which to understand the aspects or 'facets' of his multi-faceted approach¹⁸; all nine individual complaints aspects have the same underlying structure. They all are the conjunction of two components: (a) a view of individual complaints--that is, a view about who has a complaint of what size, and (b) a combinatorial 'principle of equality'.¹⁹

¹⁸ As I shall argue in Chapter Five, Section 5.2, I think there are some serious worries about the methodology Temkin employed in laying out his Individual Complaints framework.

¹⁹ As I said earlier, the other three aspects--Deviation, Gratuitousness, and Social Inequality--are not motivated by this Individual Complaints framework. They are not

Not only does Individual Complaints seem to be an improvement over these other measures, it can also provide an explanation of why these other measures were considered in the first place. In other words, Individual Complaints can provide a framework by which to understand the intuitive plausibility of some of these measures. Temkin argues (p.133), that each of the statistical measures can be understood as reflecting an aspect of inequality--that is, as reflecting one of the combinations of intuitively plausible answers to the three fundamental questions about Individual Complaints: Relative Mean Deviation is responding to the same intuitions as those underlying AP&AVE; Variance, Coefficient of Variance, and Standard Deviation of Logarithms are all formulations of WAP&AVE, differing only in the weighting principle--i.e., the WAP--employed; Range rests upon the intuitions underlying MP&BOP; and Gini Coefficient upon those underlying AP&ATBO.

Each of the statistical measures, then, can be usefully thought of as a *partial* or *incomplete* measure of inequality, responding to certain intuitions we have about the nature of inequality, but insufficient if offered as the whole story about inequality. In this light, the Individual Complaints framework does not seem quite so novel. It is, at least in part, built out of the same ideas and intuitions as the statistical measures.

This connection between the intuitions underlying Individual Complaints and the statistical measures raises the issue of whether or not inequality is best understood as a complex or multi-faceted notion. According to Temkin, Individual Complaints does not so much show that the statistical measures are to be rejected as measures of inequality as that these measures are too simplistic and incomplete. I consider the issue of inequality's complexity in Chapter Five, Section 5.1.

composed of two such parts; rather, they are more of a concession to some powerful and influential intuitions that many so-called 'egalitarian' writers have expressed.

Two other issues are raised from Temkin's comparison of Individual Complaints and the statistical measures. First, Temkin takes the analogous intuitive bases of some of the statistical measures and some of the Individual Complaints aspects as providing "indirect" support for his approach in general (p. 132)--an idea which, I think, betrays the most serious difficulty of Temkin's methodology: that of confusing parts and wholes²⁰. Even if, for example, Range is best understood as reflecting the intuitions underlying MP&BOP²¹, and relative Mean Deviation is best understood as reflecting the intuitions underlying AP&AVE, this does not necessarily confer support upon other Individual Complaints aspects--e.g., MP&AVE--made by recombining their parts.

Second, it may be wondered, since Temkin seems concerned to show that the intuitions underlying the statistical measures are also reflected on his Individual Complaints framework, why he is only concerned that Individual Complaints reflect *some* of these intuitions. Most of the statistical measures involve a principle which relativizes inequality to population size, yet Individual Complaints involves no such principle. I consider both of these issue in the next chapter.

²⁰ I refer to this confusion of parts and whole as the confusion between conjuncts and conjunctions. See Chapter Five, Section 5.2.

²¹ There is some tension between the ideas behind these two measures. For one thing, the MP&BOP aspect includes a tie-breaking clause (MP's tie-breaking clause), and idea which does not feature in Range at all.

CHAPTER FIVE: INDIVIDUAL COMPLAINTS EVALUATION

In this chapter I consider the three issues raised by Temkin's comparison of the Individual Complaints framework and the statistical measures of inequality mentioned at the end of Chapter Four. In Section 5.1, I consider the question of whether or not inequality is a complex or multi-faceted notion. I argue that inequality is usefully thought of in this way, and that a complex approach to assessing inequality has many advantages. However, even if a complex approach to inequality seems best, it does not follow that Temkin's particular complex approach--Individual Complaints--is beyond reproach.

In Section 5.2, I turn to the Individual Complaints framework itself. I consider what is perhaps the most serious problem with the methodology Temkin employed in motivating and explaining Individual Complaints: a confusion of parts and wholes, or, as I shall refer to it, a confusion of 'conjuncts' (e.g., AP, MP, AVE, BOP, etc.) and 'conjunctions' (e.g., MP&AVE, AP&BOP, etc.). I also consider other confusions in his motivation/explication of Individual Complaints: (i) assigning complaints, according to AVE, to us on behalf of those above average, and not just to those below average; and (ii) whether it is the worst-off's being worst off in absolute position, or their having the largest complaint that underlies MP (and WAP to the extent that it reflects MP). I then argue on the basis of these confusions that at least one Individual Complaints aspect--MP&AVE--should probably be rejected, and that there is room, especially given the very wide-ranging nature of the confusion about conjuncts and conjunctions, to be suspicious of other aspects as well.

In Section 5.3 I discuss the issue of varying population size, and raise a problematic example for Individual Complaints. I argue that it is a great defect of this approach to inequality that it has *no* principle which relativizes inequality to population size, as it all but entails a consequence that is by no means obvious or uncontroversial. The

Individual Complaints framework all but entails 'more people, worse inequality', and--more to the point--given Temkin's acceptance of the pedantic assumption, it also entails 'more people, worse (in)equality', a consequence that I think the egalitarian has good reason to reject.

5.1 THE ADVANTAGES OF COMPLEXITY

The Individual Complaints approach to inequality differs in a number of ways from the other approaches I have considered. According to Temkin, these approaches¹ are "thoroughly misguided", as they consider inequality to be "simple, holistic, and essentially distributive". In contrast, the Individual Complaints framework treats inequality as "complex, individualistic, and essentially comparative" (p.5).

It is the first of these theses, that inequality is complex, that I shall consider in this section². Temkin thinks that one strength of Individual Complaints is that it can (and does) reflect the complex nature of inequality. But my concern in this section is more general: the idea that inequality is a complex notion. I will not, until later, consider how successful the Individual Complaints framework is in reflecting this idea and in reflecting the egalitarian's intuitive judgments and principles.

¹ Temkin's point here is really only about the statistical measures of economics, but the same comment applies to deviation measures as well.

² It is arguable that most egalitarians do--and should--endorse both the individualistic (rather than holistic) and comparative (rather than distributive) theses, given the fundamental egalitarian concern: how *individuals* fare *relative to*--i.e., *compared with*--one another.

In other words, I am here asking the general question, *Is inequality complex?*, and not the specific questions, *Does Temkin's individual complaints framework adequately capture inequality's complexity? And is it an acceptable measure of inequality for the egalitarian?*. In this way I aim to consider the broader issues surrounding complexity separately from the more specific issues surrounding Individual Complaints. For they are by no means the same issue. One may accept the claim that inequality is complex, without accepting Temkin's Individual Complaints approach to inequality. And one may reject the Individual Complaints framework, or some parts of it³, without rejecting the claim that inequality is complex. What, then, does Temkin mean when he says that "the notion of inequality is complex" (p.5)?

In saying that inequality is a complex idea, he means that it is a *multi-faceted* idea. He believes that inequality has a number of different facets or, as he calls them, aspects, and that these aspects play a role in our judgments about inequality. In contrast, all the other measures of inequality I considered--except Sen's Intersection Approach--treat inequality as a simple or unified idea. They assess an outcome's inequality only according to one dimension or 'facet'. For example, DEV MED and DEV AVE assess inequality according to the one dimension of how far a given outcome is from a state of perfect equality; Range only in terms of how the very worst-off fare relative to the very best-off; Gini Coefficient only in terms of the sum of how individuals fare relative to one another. Such measures can be considered 'simple' or 'unified' measures of inequality, in contrast to

³ I argue at length in Section 5.2 that these are just the sort of tacks one should adopt. I argue that there *are* some serious difficulties with Temkin's argument for Individual Complaints, and thus reasons to revise (or reject) the framework accordingly. But I also think that these difficulties with his specific approach do not necessarily undermine his general argument for the thesis that inequality is complex.

'complex' (multi-faceted) measures, such as Individual Complaints or an Intersection Approach.

5.11 TEMKIN'S ARGUMENT FOR COMPLEXITY

Let us now turn to Temkin's argument for the thesis that inequality is complex. His argument depends upon the complicated intuitive judgments we make when comparing different outcomes of inequality. In what way are our judgments about inequality complicated?

According to Temkin, our judgments about inequality are complicated in at least two senses. First, and quite obviously, people often differ in their conclusions when asked to compare situations of inequality. Second, and perhaps more importantly, their judgments vary in their *degree of conviction or certainty*. Sometimes, as in the example in Section 4.1:

	a	b	c
A	4	5	9
B:	1	5	9

we are *absolutely certain* that **A** is better than **B** with respect to inequality, but for many other cases we are not. Consider instead the following:

	a	b, b₂, b₃, b₄	
F:	1	all 6	(average 5)

	a	b, b ₂ , b ₃	b ₄	
G:	2	all 5	8	(average 5)

Here, we are much less certain about how these outcomes compare with respect to inequality. Our uncertainty has (at least) two possible explanations: in some cases, we may judge that the outcomes being compared are very 'close', very similar, but that one outcome is, nonetheless, preferable. The uncertainty we feel in such cases is an epistemic uncertainty: the two outcomes are so similar that it is much more difficult to tell which one is preferable than it is when comparing two other, more dissimilar, outcomes. In other cases, however, the uncertainty may be due to contrary 'pulls' or 'tugs' we feel--that is, we may feel that one outcome is better than another in some respects, and worse in others. In the above example, we may judge that *on balance* F is better than G, but nonetheless feel a tug that G is better than F in some respect or other. We feel, as Temkin often puts it, "pulled in the other direction". It is important to note that closeness and tugs are two very different explanations of the source of our uncertainty.

5.12 Temkin's Argument for Complexity: Complicated Intuitive Judgments

Recall that there are two ways in which people's intuitive judgments about inequality are complicated: people's judgments (i) *differ* or *disagree*, and (ii) *vary in degrees of certainty*. These two complications form the backbone of Temkin's argument for both the complexity thesis and Individual Complaints. Specifically, he argues that these two sorts of complications can be explained by the varying degrees of agreement among the aspects of inequality. I will consider Temkin's argument about the latter complication, that people's judgments vary in degrees of certainty, at more length, as I consider it to be a

much stronger argument for the complexity thesis. But let us begin with his discussion about the disagreement among people's judgments.

5.121 Disagreement Among Our Intuitive Judgments:

Temkin's arguments for inequality's complexity have as their basis actual answers from actual people to a *very* limited poll he conducted: only 10 of 40 people responded. He asked his subjects to make intuitive judgments about how different outcomes compared with respect to inequality, and his empirical results showed a wide range of responses. For some cases⁴, there was unanimity among respondents as to which outcome was preferable. For example, all ten respondents said that **S** was better than **A** in the following comparison:

	a	b	c	d
S:	1000	800	600	400
A:	1000	800	600	200

And, correspondingly, all the aspects (AP&AVE, AP&BOP, etc.) agree that **S** is better than **A**. In other cases, for example:

	a	b	c	d
C:	800	600	400	400
D:	800	600	600	400

⁴ The three following examples, **S/A**, **C/D**, and **S/B**, are from the cases discussed on p.55-57 of *Inequality*.

most of the respondents felt that **C** was worse, though some judged them to be roughly equivalent, and some made the opposite judgment and said that **D** was worse than **C**. And again, correspondingly, most of the aspects⁵ judge **D** to be preferable. In still other cases, for example:

	a	b	c	d
S:	1000	800	600	400
B:	1000	1000	800	400

there was wide-spread disagreement among people's responses. Three judged **S** to be worse than **B**, four judged **B** to be worse than **S**, one judged them to be roughly equivalent, one said that they had no feelings about the comparison at all, and one did not even answer. How do the aspects judge these outcomes?

⁵ Though it does not say so in the chart on p.57, seven of the nine individual complaints aspects prefer **D**, and two prefer **C**. The MP&ATBO aspect prefers **C**, not **D** as on the chart, and AP&ATBO prefers **D** rather than considering the outcomes to be tied. These calculations can be easily verified:

MP&ATBO **C:** $200 + 400 = 600$ **D:** $200 + 200 + 400 = 800$

Since **D** has a larger inequality index, MP&ATBO prefers **C**.

AP&ATBO **C:** $200 + 400 + 200 + 400 + 200 = 1400$

D: $200 + 200 + 400 + 200 + 200 = 1200$

Since **C** has a larger inequality index, AP&ATBO prefers **D**.

	Preferred Outcome
MP&AVE	S
MP&BOP	B
MP&ATBO	S
AP&AVE	T (tied)
AP&BOP	B
AP&ATBO	T
WAP&AVE	S or T
WAP&BOP	B
WAP&ATBO ⁶	S

That there is widespread disagreement among the aspects comes as no surprise to Temkin, who summarizes his argument as follows:

...there was a striking correlation between the extent of agreement among poll respondents and the extent of agreement among ...(the) aspects. For example,

⁶ Although the corresponding MP and AP aspect disagree, WAP&ATBO prefers **S** to **B** for presumably something like the following reason:

Inequality Index for **S**: $200+400+600+200+400+200 = 2000$

Inequality Index for **B**: $400+600+600+200+200 = 2000$

S and **B** have the same total amount of inequality, and some identical components make up that total (two 200 unit components, one 400 and one 600). What remains, in terms of differences in their components, is that **B** has one 600 unit component and **S** one of 200 and one of 400. Since larger complaints receive extra weight, **B** is the worse outcome and WAP&ATBO prefers **S** to **B**.

where there was virtual unanimity among poll respondents, there was also unanimity among ...(the) aspects, and where there was almost no agreement among respondents, the aspects, too, were sharply divided.

Together these facts supported (or strongly suggested) two conclusions. First,...the notion of inequality is complex rather than simple. Second, since people may be influenced by different aspects to varying degrees, together...(the) aspects can accommodate and explain the pretheoretical intuitions of egalitarians across a wide range of cases. (p.87-88)

While this argument from explanation is plausible, it is by no means necessary: inequality need not be a complex idea⁷ in order to account for disagreement among people's judgments. Perhaps inequality is merely a confused or complicated idea, but not a complex one in the sense of being multi-faceted or having a number of aspects. The divergence of people's judgments would then be explained on other grounds--e.g., that inequality is such a confused idea that different people do not apply it in the same way, or that it is so complicated that people simply make mistakes. For these reasons, I think that Temkin's arguments about the varying degrees of certainty of our judgments about inequality--and in particular his claims about pulls and tugs in contrary directions--form a stronger basis for the complexity thesis.

⁷ Nor, if inequality were complex, need it be complex in terms of the particular aspects of the Individual Complaints framework.

5.122 Complication: Varying Degrees of Certainty

How does the complexity thesis, in conjunction with Individual Complaints, account for the complication that our comparative judgments about inequality vary in degree of certainty and conviction? Consider the following outcomes⁸:

	a, a₂, a₃	b	c	d	
A:	all 1	5	7	9	(average 4)
B:	all 3	5	7	9	(average 5)

	a	a₂, a₃	b	c	d	
C:	1	both 4	5	7	9	(average 5)

Preferred Outcome:

	A/B	A/C
MP&AVE	B	A
MP&BOP	B	C
MP&ATBO	B	A
AP&AVE	B	C
AP&BOP	B	?

⁸ In this section I use my own examples rather than those Temkin employed in arguing for the complexity thesis (and Individual Complaints). I do so for two reasons: (i) to assuage any begging-the-question type worries about citing examples *he* constructed to support *his* thesis that inequality is complex, and (ii) to further *test* the complexity thesis, rather than merely explain Temkin's argument for it.

AP&ATBO	B	C
WAP&AVE	B	?
WAP&BOP	B	C
WAP&ATBO	B	C

I think we are completely confident in our judgment that **B** is better than **A**; after all, **B** results from **A** when the worst-off individuals in **A** have been raised in absolute position. And all nine aspects agree that **B** is better than **A**.

But consider **A** and **C**. There is a certain sense in which the comparison between **A** and **C** may, at first glance, seem similar (or 'close') to that between **A** and **B**. After all, **C** also results from **A** when the worst-off individuals in **A** have been raised. But unlike **B**, in **C** only some--*but not all*--of the worst-off have been raised. And this seems to make a difference to our judgments: whereas we have no doubt that raising *all* of the worst-off unequivocally improves inequality, we may feel differently about raising only *some*. After all, in **C** the unimproved worst-off individual (**a**) is worse off than even *more* people than he was in **A**. He is also further behind the average in **C** than in **A**. But what effect does the difference between raising *all* and raising only *some* of the worst-off have upon our judgments?

While I think that we would judge **A** to be worse than both **B** and **C**, I also think that there would be important differences between these judgments. Specifically, I would argue that we are more confident in our judgment about the **A/B** case than about the **A/C** case. Temkin would argue that this uncertainty stems from inequality's complexity. We are certain about the **A/B** case because all the facets or aspects of inequality agree that **A** is worse than **B**, but in the **A/C** case two aspects strongly disagree with this judgment:

MP&AVE and MP&ATBO both judge **C** to be worse than **A**⁹; and two others--WAP&AVE and WAP&ATBO--are undecided.

However, while it is possible to explain this variation in certainty in terms of complexity and disagreement among aspects, it might also be possible to explain it without involving complexity at all. One such explanation is as follows:

We are indeed more certain about our judgment in the **A/B** case than in the **A/C** case, but this is due to 'closeness', not complexity. There is no question that raising the worst-off reduces or improves inequality, and, therefore, no question that raising *all* of the worst-off is a greater improvement than raising only *some*. Thus, our varying degree of certainty really reflects our judgment that **A** is worse than **B** *to a greater extent* than **A** is worse than **C**: **B** is *much much* better than **A**, whereas **C** is *much* better than **A**. Thus what we experience as uncertainty is really only a reflection of our judgments as to the *extent* to which one outcome is better than another.

Thus, the objection continues, complexity is not required to explain the varying certainty about our judgments in the **A/B** and **A/C** cases. Rather, we need only assess inequality along one dimension--such as the dimension of 'raising the worst-off'--and recognize that this dimension can vary in extent: the more worst-off people that are raised,

⁹ One must be careful not to grant Temkin too much here. While his individual complaints framework *can* explain the difference in our judgments between the **A/B** and **A/C** cases, it is not the *only* explanation possible. Recall that my concern in this section is more with the complexity thesis per se, rather than with Temkin's *particular* approach to it. At present, the question is not about which complex approach to assessing inequality best explains our complicated judgments; rather, it is whether or not complexity is the best explanation of these complicated judgments in the first place.

the better. It is the variation in extent along this one, simple, dimension which accounts for the variation in the certainty of our judgments.

Even if this line of argument--that any variation in certainty is really reflecting differences in extent--is an adequate and accurate explanation of our judgments in the **A/B/C** case, it runs into difficulty in other cases. Consider again outcomes **F** and **G**:

	a	b, b₂, b₃, b₄	
F:	1	all 6	(average 5)

	a	b, b₂, b₃	b₄	
G:	2	all 5	8	(average 5)

It is difficult to see how we might explain the uncertainty of our judgment as to how **F** and **G** compare by appealing to differences in extent along some one 'dimension' of inequality. Here, the idea of pulls and tugs seems more plausible: if we feel that **F** is better than **G**, or if **G** is better than **F**, we likely feel less certain about these judgments than about some others¹⁰, because we feel 'pulled in both directions'. In other words, we feel that **F** is better than **G** in some respects (e.g., its biggest gap, between 1 and 6, is smaller than **G**'s biggest

¹⁰ For example, if either **F** or **G** were compared to **H**:

	a	b	c	d	e	
H:	1	3	5	7	9	(average 5)

I think we would be quite confident in our judgment. Surely both **F** and **G** are better than **H** with respect to inequality. It is not clear to me that we feel *any* tug that **H** is better.

gap, between 2 and 8) and that **G** is better than **F** in some others (e.g., less deviation from the fair-counterfactual world that would have resulted had its good been fairly/equally distributed), and balance or 'trade off' these respects against one another to arrive at a judgment that the one outcome is, *on balance*, better than the other.

It seems to me that tugs and pulls do often play a part in our judgments about inequality. And it is difficult to see how these tugs might be as *plausibly* explained on a simple approach to inequality¹¹. For this reason I find a complex approach to inequality

¹¹ It might, nonetheless, be *possible* to explain tugs on a simple approach to inequality. For example, one might think that Gini Coefficient can explain tugs, as it considers all the gaps between people. In certain comparisons, such as the **F/G** case above, some of these gaps are reduced or improved while others are increased or worsened, while in others are increased or worsened; in other cases, such as **A/B**:

	a	b	c
A:	4	5	9
B:	1	5	9

there is only a reduction or improvement in these gaps. And in the **F/G** case we feel "pulled in both directions", whereas in the **A/B** case we are completely certain about our judgment that **A** is better than **B** with respect to inequality.

This account of pulls and tugs has some plausibility, but I think that there are some difficulties for it. First, it seems to me to be somewhat ad hoc: though it can explain tugs and pulls in some cases, I am not sure that it will seem plausible for all cases. Won't there be cases in which we do not feel pulled in the other direction, but nonetheless at least a

preferable. As Temkin puts it "the ambivalence and contrary pulls many feel within themselves about certain cases are difficult to plausibly account for if inequality is a simple notion" (p.88n.).

In sum: In this section I have argued, following Temkin, that inequality is a complex idea. I argued that a complex approach to inequality--assessing inequality according to a number of different aspects--provides a plausible explanation of our complicated intuitive judgments about inequality. While the complexity thesis may not, strictly speaking, be *necessary* in order to account for these complications, I believe it is a persuasive explanation. More specifically, I believe that at least in some cases, we feel pulls or tugs in contrary directions, and that these pulls and tugs are more plausibly explained if inequality is a complex notion. I believe that Temkin has provided a fairly convincing argument for the complexity thesis, and hence has added another insight into what was unsatisfying, for the egalitarian, about simple approaches to inequality such as deviation measures and the statistical measures of economics.

few gaps have increased or worsened? Second, why, if we are to consider each gap between individuals as a unique entity that can be larger or worse in one outcome than another, should we simply sum these gaps to arrive at an overall judgment about inequality? Third, why do all the gaps matter in this sense that they may form the basis for a distinct tug we may feel in comparing outcomes? On a complex approach there may be some plausibility in attaching special consideration to certain gaps, such as the gap between the very worst-off and very best-off (and so when this gap is larger or worse in one outcome than another, we feel tugged), but what is the motivation for being tugged by, e.g., that gap between the second worst-off and second best-off individuals? No doubt any increase in this gap matters for the egalitarian's overall judgment--it should minimally be 'factored in'--but why should she have a unique concern about this particular gap?

If one accepts that inequality is a complex notion, there is still a question to be considered: whether or not Temkin's particular measure--Individual Complaints--is the best way to reflect this complexity. But before turning to this question in Section 5.2, let me emphasize one key point in Temkin's argument for complexity, as it shall play an important role in later discussion.

5.124 The Connection Between Tugs and Aspects

One crucial premise of Temkin's argument, as I have characterized it, involves pulls or tugs in contrary directions. Some may object that this premise itself is most uncertain; it is impossible to establish, except by subjective report, that people do in fact feel tugs. However, I ask the reader to grant for the sake of argument the premise that we do feel tugs. For by granting Temkin this premise his Individual Complaints approach to inequality runs into difficulties. One of the difficulties I shall consider--how Individual Complaints yields implausible judgments about examples involving variable population size--depends in large part upon the relation between tugs and the Individual Complaints aspects of inequality. How does Temkin understand this relation?

Although he never *explicitly* says so, Temkin seems to accept the idea that if we feel a tug, then there is a corresponding aspect which judges in agreement with the tug. This is certainly suggested by his general argument about the complicated nature of people's intuitive judgments: when we are completely certain about a judgment--i.e., do not feel at all pulled in the opposite direction--*all* the aspects are in agreement. When we are less certain and feel *slightly* pulled in the other direction, as in the case of raising some but not all of the worst-off, only a *few* aspects reflect the pull in this direction. When we are most uncertain and feel *strongly* pulled in both directions, there is *great* disagreement among the aspects.

There is further evidence that Temkin accepts the view that a tug implies an agreeing aspect in his discussion of the following case:

	a	b	c	d
S:	1000	800	600	400
D:	1200	800	600	400

One of the poll respondents gave a response that Temkin found difficult to account for: "One person who indicated that S was better than D felt some pull in the other direction. The ambivalence is puzzling, since S is better than D according to every aspect..." (p.64, Case IV)

Temkin then goes on to ask whether or not this pull shows that the aspects need revision or supplementation¹². All of this suggests that Temkin accepts the idea that a tug is explained by a corresponding aspect. Thus, if one can construct a case in which this relation fails--where we feel a tug but there is no aspect in agreement--the onus is on Temkin to explain how this is possible. I offer one such example in Section 5.3.¹³

¹² Temkin decides against revision or supplementation on the basis of this particular response. I agree with his assessment that the response was unique, and "upon reflection...idiosyncratic and implausible". See p.64 and Appendix A of *Inequality* for further discussion.

¹³ It is important to note that Temkin seems to accept the relation between pulls and aspects in one direction only: *If there's a tug, then there's an aspect*, and not: *If there's an aspect, then there's a tug*. In some cases, the dissenting aspect may be either or both (i) the *sole* dissenting voice, and/or (ii) may make such a weak judgment (e.g., an MP aspect

5.2 COMPLEXITY AS REFLECTED BY INDIVIDUAL COMPLAINTS

Let us turn now to the individual complaints framework itself, and consider how successful it is as a measure of inequality, assuming that inequality is a complex notion. I remind the reader that the thesis that inequality is complex and the acceptability of Individual Complaints are different issues--and specifically, that accepting the former does not require accepting the latter¹⁴. My concern in this section, then, is the following: Assuming that inequality is a complex notion, does Temkin's individual complaints framework accurately and adequately reflect the nature of inequality? That is, does Temkin's individual complaints framework provide an acceptable measure of inequality?

I argue that there are many respects in which Individual Complaints is unsatisfactory. But unlike with the other measures I have considered, I argue in favour of *revisions to* this approach to inequality; I leave it up to the reader to decide whether or not my objections and suggested revisions are important and wide-ranging enough to warrant *rejecting* the framework entirely. I myself do not think that Individual Complaints should be rejected outright, for several reasons. First, as was argued above in Section 5.1, there are advantages to a complex approach to inequality, such as providing a more satisfying account of our complicated intuitive judgments than do simple measures. And Individual Complaints seems preferable to the other complex measure I considered, Sen's Intersection Approach, in that it does not demand strict unanimity among the aspects' judgments in order to yield a judgment--it allows 'trade-offs'.

5.21 Grounds for Evaluating Individual Complaints and Its Aspects

preferring an outcome only in virtue of the tie-breaking clause), that we might not feel any pull in that direction at all.

¹⁴ Recall Section 5.1.

However, in order to evaluate whether or not Individual Complaints is an acceptable measure of inequality for the egalitarian--and specifically in order to evaluate whether or not some of the Individual Complaints aspects should be revised or rejected--requires grounds other than that commonly appealed to in evaluating deviation and economic measures. In evaluating these measures appeal was made to our intuitive judgments, and these measures were often criticized and rejected because their judgments seemed implausible as they did not match our (fairly firm) intuitive judgments¹⁵. But the task here is to revise a complex measure by 'fine tuning' some of its parts, not to criticize and reject the *entire* approach to inequality. And one cannot use these 'appeal-to-intuitive-judgments' arguments against one *part* of a measure. An Individual Complaints aspect of inequality is not itself a *complete* measure, and there is no requirement that every aspect--every *partial* measure--yields a judgment that matches the overall judgment about the example.

Consider the analogy to hockey ability again. Suppose we are comparing two forwards, a and b, where a is the faster skater, better puck handler, better play-maker, better goal-scorer, etc., but b is the better body-checker. If one were to compare a and b with respect to hockey ability *solely* according to the 'body-checking' aspect, b would be--implausibly--judged to be the better hockey player. But this does not show that 'body-checking' is therefore an implausible aspect of hockey ability nor that it should be rejected.

Thus, that it is possible, for a given aspect, to construct examples where the judgment yielded by that aspect seems implausible is an insufficient ground for rejecting that aspect. It is this principle (though in a somewhat disguised form) that Temkin asserts on p.50:

¹⁵ Of course, the *explanation* of why their judgments seem implausible for some cases varies from measure to measure.

In suggesting that many different positions underlie and influence egalitarian judgments, I am *not* suggesting that each of these positions is equally appealing much less that everyone will find them so. But I do think that each represents certain plausible views that cannot easily be dismissed. Because these views often conflict, it may be possible, for each of the positions discussed, to construct examples where the judgment yielded by that position seems implausible.

This does *not* show that the various positions are not plausible, nor does it show that they are not involved in people's egalitarian judgments. What it shows is that each position does not *itself* underlie each such judgment.

The main point of this passage is that the implausibility of a judgment yielded by a position (i.e., an aspect) in certain cases does not show that the aspect itself is implausible, a principle that seems to me to be correct. But this principle is in disguised form; it talks of "positions", rather than aspects. But it is clear that, at least for his main point, "position" is a synonym for "aspect", since it is only aspects/conjunctions which "yield judgments"; a single conjunct (e.g., AP) does not.¹⁶

¹⁶ I do not think this is obvious *throughout* the passage, however. In other places, these terms seem ambiguous, in such a way that betrays Temkin's confusion of conjuncts and conjunctions (See Section 5.22 following). The "many different positions" which "underlie and influence egalitarian judgments" could be taken as referring to *either* conjunctions or conjuncts. The next sentence again blurs the distinction, and in a significant way. While each conjunct "represents certain plausible views" (i.e., as answers to questions about *who* has a complaint of what *size*, and *how to combine* complaints), views which "cannot easily be dismissed", I see no *argument* that the conjunctions themselves represent plausible views. They are no doubt *possible* views, but not necessarily *plausible* ones. Some aspects

A second reason for looking for evaluative grounds other than those involving our intuitive judgments is that it is difficult to find a case where *every* Individual Complaints aspect makes an implausible (counter-intuitive) judgment. For, to put it bluntly, given so many aspects at least one of them seems 'bound to get it right'--with enough complexity, at least one of them should yield the result we desire¹⁷. And provided that at least some aspects agree with our intuitive judgment, Temkin may point out that it is not just the "sheer number" of aspects that matters; perhaps some aspects are more important and hence their judgments are given more weight than others', or perhaps the few aspects agreeing with our intuitions have a *strong* preference between outcomes, whereas the many aspects disagreeing with our intuitions have only a *weak* preference¹⁸.

There are, nonetheless, other grounds upon which the egalitarian could evaluate and revise/reject some of the Individual Complaints aspects. I shall focus upon grounds

no doubt do represent plausible views, but this needs to be explicitly argued for, rather than assuming such.

Once one recognizes the ambiguity, one can see that although conjunctions are comprised of two plausible conjuncts--conjuncts which "cannot easily be dismissed" as they have at least *some* plausibility as views of individual complaints or combinatorial 'principles of equality'--it does not follow that *conjunctions* cannot be dismissed. The plausibility of the parts does not guarantee the plausibility of the whole.

¹⁷ Those less sympathetic to a complex approach may agree that indeed, a contradiction implies anything.

¹⁸ Such a defense would, of course, raise a host of other issues about how to compare relative strengths of different aspect's judgments. See Temkin's discussion of Case III, p.65-69 of *Inequality*.

stemming from the confused methodology Temkin employed in motivating and explaining his Individual Complaints.¹⁹

5.22 A First Confusion: Conjuncts and Conjunctions

The confusion of conjuncts and conjunctions, or parts and wholes, is certainly the most wide-ranging problem with Temkin's Individual Complaints approach to inequality, and perhaps the most serious.²⁰ The confusion arises in that Temkin argues for the

¹⁹ Temkin's comments suggest at least two other grounds for evaluating and criticizing aspects of inequality:

(I) There is an implausible conjunct within the aspect/conjunction, and hence the conjunct's implausibility 'transfers' to the aspect, making the aspect as a whole implausible. One can understand much of Temkin's defense of BOP, which he thinks people find the least intuitively plausible of the views of individual complaints, in this light--that is, as really being concerned to defend the aspects involving BOP from being rejected.

(II) The aspect is redundant, as its judgments always match those of some particular other aspect. One can understand Temkin's many comments of the form "aspect 1 disagrees in this comparison/case with aspect 2, though they agreed about all other cases" as being concerned to defend the aspects from the charge of redundancy

²⁰ By "conjunct", I mean the six different components of the aspects of inequality--the three views about individual complaints (AVE, BOP, and ATBO), and the three combinatorial 'principles of equality' (AP, MP, and WAP). By "conjunction", I mean the nine individual complaints aspects of inequality: AP&AVE, AP&BOP, etc. Each conjunction or aspect is comprised of two conjuncts.

plausibility of the conjuncts²¹, but takes himself as having argued for the plausibility of the conjunctions. However, the plausibility of the conjuncts does not 'transfer' to the conjunctions. That every conjunct is a plausible view about individual complaints or a plausible combinatorial 'principle of equality' does not entail that every combination of these answers is a plausible measure of inequality.

In other words, the plausibility of the Individual Complaints approach depends upon the questionable assumption that all nine *possible* combinations of conjuncts form *plausible* conjunctions/aspects. Nowhere does Temkin *argue* that each 'individual complaint conjunct' can combine with each 'principle of equality conjunct' to form a *plausible* aspect of inequality; he merely assumes such. Why he does so is rather puzzling, since it is in contrast with his earlier methodology.

Recall the first two fundamental questions about individual complaints: (i) *Who* has a complaint? (ii) How large is their complaint? Temkin considers two answers to the first question²², and three to the second²³. But he does *not* merely combine each answer to (i) with each answer to (ii) to generate a view about who has a complaint of what size. On the contrary, he argues that the answer to (i) *constrains* which of the answers to (ii) can

²¹ Recall Section 4.1. Each conjunct is an intuitively plausible answer to one of two questions: (i) who has a complaint of what size? or (ii) How are the complaints of different individuals to be combined?

²² That (i) all those worse off than the average, or (ii) all but the very best-off--i.e., anyone worse off than someone--have a complaint about inequality.

²³ That an individual's complaint is equal to (i) the absolute difference between his level and the average level, or (ii) the absolute difference between his level and the level of the best-off person, or (iii) the sum of the absolute differences between his level and all those better off than he.

combine with it to form a *plausible* view of individual complaints. Since Temkin recognized that not every *possible* combination of answers to (i) and (ii) forms a *plausible* view of individual complaints, it seems especially odd that in the case of conjuncts and conjunctions, he simply assumed that every possible combination was a plausible one. The plausibility of the parts does not guarantee the plausibility of the whole.²⁴

What specific difficulties, then, does this confusion of conjunctions and conjuncts raise for Temkin's Individual Complaints approach? Some may think his assumption that every possible combination of conjuncts forms a plausible conjunction/aspect of inequality is both (i) sufficiently unfounded--and more to the point--(ii) sufficiently wide-ranging, as to warrant rejecting the *entire* Individual Complaints framework. I, however, would disagree with such an assessment. I believe that some, perhaps even most, combinations of conjuncts form plausible conjunctions/aspects of inequality. And I do not object so much to Temkin's methodology of forming all *possible* conjunctions; this seems undoubtedly a good strategy for sake of completeness. Rather, I think it is a pity that, having formed all

²⁴ One place the confusion of the plausibility of conjuncts and conjunctions arises is in Temkin's discussion of the connection between the statistical measures of economics and different Individual Complaints aspects, which discussed briefly in Section 4.2. Temkin argues that the economic measures provide "indirect" (p.132) support for Individual Complaints. However, it seems clear that the statistical measures do not provide support for *every* conjunction. They might lend support to *some* conjunctions--e.g., Range to MP&BOP, Gini Coefficient to AP&ATBO--and the statistical measures *might* thereby support the conjuncts in these conjunctions. But even if the statistical measures do support conjuncts, this is where their support ends: they do not support upon the rest of the aspects. In other words, support to the whole might lend support to the parts, but *not* to new combinations of these parts!

possible conjunctions, he did not go on to consider whether or not each possible conjunction was a plausible conjunction. He could have done so by considering, among other things, whether the two conjuncts of the conjunction were in tension with one another.²⁵ One should also remember that although some of the reasoning Temkin employs in motivating and explaining the Individual Complaints framework might seem fallacious, it does not follow that the framework itself is misguided. And I find Temkin's reasoning not so much fallacious as incomplete: forming all possible aspects is the first step, but considering whether or not each of them is plausible is also required.

5.23 A Second Confusion: Motivation and Explanation of AVE, MP and WAP

Let us turn now to a second sort of confusion in Temkin's motivation and explanation of Individual Complaints: confused or ambiguous formulation of the AVE, MP, and WAP conjuncts. Both of these ambiguities were briefly mentioned earlier:

(i) AVE: Temkin assigns complaints to (us on behalf of) those *above* average, and not just those below; and

(ii) MP /WAP : it is unclear, on MP, what the intuitive basis is for caring about the worst-off: their absolute position, or the size of their complaint? Temkin assumes that the worst-off group will always have the largest complaint, but--when combined with the view of AVE that assigns complaints to those above average--these ideas are *not* co-extensive.²⁶ This ambiguity 'transfers' to WAP, since WAP, in part, gives expression to the

²⁵ I use just such a ground in my discussion of MP&AVE.

²⁶ Notice that these ideas are co-extensive when MP is combined with either BOP or ATBO. On the MP&BOP and MP&ATBO aspects, the worst-off individual is also the

intuitions underlying MP: is weighting assigned depending upon size of complaint, such that *larger* complaints are given more weight, or is weighting assigned depending upon one's relative position in society, such that the complaints of the worst-off receive the most weight, the complaints of the second-worst-off the second most weight, etc.²⁷ Temkin simply *assumes* that the very worst-off always have the largest complaint in a given outcome.

The problematic nature of these ambiguities and confusions is seen clearly in the two aspects formed by these conjuncts: MP&AVE and WAP&AVE. Under Temkin's characterization of AVE, which assigns complaints to (or on behalf of) those above average as well as to those below, MP&AVE and WAP&AVE conflict with what he takes as the basic egalitarian tenet, "it is a bad thing if some people are worse off than others through no fault of their own". They also conflict with the idea which seems to ground the intuitive plausibility of Individual Complaints in the first place:

for any situation where some people are better off than others, we can say that the best-off have nothing to complain about while the worst-off have the most to complain about (regarding inequality). (p.19).

individual with the largest complaint. The same is true of WAP: on WAP&BOP and WAP&ATBO, the worst-off individual is the one with the largest complaint.

²⁷ Note that an analogous ambiguity underlies the application of MP's tie-breaking clause. If two outcomes are equivalent with respect to the complaint of the worst-off (and the worst-off is the same size), are we to consider the complaint of the next-worst-off because (a) they are the next worst-off in absolute position, or (b) because they have the next largest complaint?

In other words, if one assigns complaints to us on behalf of those above average, there is no longer any plausible connection between how badly off one is and the size or significance of one's complaint about inequality.

5.231 AVE

Consider again the two possible characterizations of AVE: (i) complaints are assigned to us on behalf of those above average, as well as to those below, or (ii) only those below average have a complaint about inequality. Why does Temkin choose (i), and assign complaints to us on behalf of those above average? He says that there is an intuitive basis for doing so: that those above average seem to have been treated (by Fate) as more than the equal of their peers (p.44). He also says that by assigning complaints above average as well as below, ordinal ranking of outcomes will sometimes be affected (p.45). Let us leave aside the question about the intuitive plausibility of assigning complaints to us on behalf of those above average²⁸, and focus instead on the second claim--i.e., that doing so will sometimes affect ordinal ranking.

I think Temkin needs to rethink this idea of assigning complaints to us about those above average, as either (a) it does not, in fact, make a difference to our judgments, as is the case when AVE is combined with AP, or (b) it leads to confused and implausible judgments, as is the case when AVE is combined with MP or WAP. Let me explain.

²⁸ Note that this ground about people having been *treated* as more than equal by Fate, when cashed out, does not seem like a claim that the *teleological* egalitarian (recall Chapter One, Section 1.4)--that is, the sort of egalitarian that both Temkin and I are concerned with--should unquestionably accept.

5.2311 AVE combined with AP

Consider (a), that assigning complaints to us on behalf of those above average as well as to those below does not make a difference to our judgments. This is the case, though Temkin seems to think otherwise, when AVE is combined with AP. Temkin says, on p. 45:

...I think there is reason to invoke the conception of *our* complaints about those better off than the average given the basic intuitions underlying the relative to the average view of complaints²⁹, and...doing this will often affect the orderings generated by that view.

He then notes that while doing so does not affect the orderings of the case he is currently considering, it will in "many other cases" (*ibid.*, fn. 26). Later, when considering more complicated examples, he says:

recall that to measure a situation regarding AP&AVE one must decide whether on the relative to the average view of complaints deviations above the average should count as well as deviations below the average (p. 58, fn. 6)

and at this point informs the reader that he has assumed that "deviations above the average" do indeed count.

²⁹ This claim seems odd. The relative to average view of complaints, or AVE, was motivated in part by the idea of 'having less than one's fair share'. Those above average have their fair share and more (see Section 4.1).

It would seem odd, however, that one "must decide" whether or not to count our complaint about those above the average on AVE in the case of AP&AVE unless it would "affect the ordering generated by that view". For if it did not have any effect, why would this issue need to be resolved in the first place? But ordinal rankings of outcomes by AP&AVE remain unaffected no matter which version of AVE is employed, as is shown below.

According to the version of AVE which assigns complaints *only* to those below average, call it AVE₁, when combined with AP the inequality index of an outcome is equal to the summed total of the differences in the levels of all those below the average and the average. Suppose the inequality index of outcome X, according to AP&AVE₁, is of size n. A little mathematics reveals that on the other version of AVE which assigns complaints to us about those above *as well as* to those below average, AVE₂, the inequality index, according to AP&AVE₂, for outcome X is 2n. Since AP&AVE₁ and AP&AVE₂ are linear transformations of one another, choosing one rather than the other cannot affect the ordinal ranking of different outcomes³⁰.

Consider the following outcomes:

	a	b	c
A:	1	5	9
B:	1	6	11
C:	1	4	7
D:	2	6	10

³⁰ Recall Chapter Two, Section 2.3.

Inequality Indices		
	AP&AVE ₁	AP&AVE ₂
A:	4	8
B:	5	10
C:	3	6
D:	4	8

Whether one adopts AVE₁ or AVE₂, AP&AVE judges **A** to be better than **B**, worse than **C**, and equivalent to **D**. Further, a comparison of the inequality indices of the outcomes reveals the n to $2n$ relation: whatever the inequality according to AP&AVE₁, the inequality according to AP&AVE₂ is exactly twice that amount. Thus, at least when combined with AP, one need not decide whether or not AVE should count deviations above average as well as those below average, for ordinal ranking is not affected.

5.2312 AVE Combined With MP or WAP

Now consider the second claim, (b), that assigning complaints to us on behalf of those above average leads to confused and implausible consequences when AVE is combined with MP or WAP. In other words, unlike the case with AP, assigning complaints to us about those above average does make a difference, but not a difference we want or know how to interpret.

Recall the ambiguous formulation of MP: do the worst-off have priority because they are the worst-off relative to the rest of their society, or because they have the largest complaint about inequality? This ambiguity carries through to WAP, since WAP is, in part, articulating MP: what are the grounds for giving extra weight to a given complaint--how worse-off the individual with the complaint is relative to the rest of his society, or the size

of his complaint? Temkin's characterization of WAP makes it clear that he considers these two ideas to be co-extensive³¹--but this is *not* the case if complaints are assigned to us on behalf of those above average.

In other words, it is possible for an outcome assessed by AP&AVE₂ to have the *largest*, and hence most *weighted* and morally significant, complaint assigned to the very best-off person. But this is in direct conflict with both what Temkin takes to be the fundamental egalitarian principle, 'it is a bad thing if some people are worse off than others through no fault of their own', because the very best-off individual is not worse off than anybody. It is also in conflict with a fundamental idea about Individual Complaints, mentioned earlier:

for any situation where some people are better off than others, we can say that the best-off have nothing to complain about while the worst-off have the most to complain about (regarding inequality). (p.19).

According to this fundamental idea, which I think must be met in order for Individual Complaints to have plausibility, the worst-off under an inequality have the *most* to

³¹ Recall the characterization of WAP presented in Chapter Four:

According to WAP, the complaints of different individuals are to be summed together to yield a total, after

first attaching extra weight to them in such a way that the larger someone's complaint is the more weight is attached to it. Such a principle gives expression to both the view that we should be especially concerned with the worst-off and the view that we should be concerned with all complaints. (Temkin, p.41)

complain about. But according to AVE₂, we might well have the largest complaint, and this complaint would be about the very best-off individual being so far above average.

Perhaps it will be easiest to see the ambiguity in a concrete example. Consider Temkin's Case I, on p. 72-74, comparing A and S:

	a	b	c	d	
A:	900	900	600	400	(average 700)
S:	1000	800	600	400	(average 700)

I find Temkin's table of the aspect's judgments about this case to be among the most perplexing in the entire book. I am here only concerned about AVE's aspects (which for Temkin means AVE₂'s aspects). According to Temkin, AVE's aspects make the following judgments:

	Preferred Outcome
MP&AVE	T (tied)
AP&AVE	T
WAP&AVE	A

The first thing to note is the implausibility of this combination of answers: how could the aspect involving WAP have a preference, when (a) neither of the corresponding MP or AP aspects do, and (b) WAP is supposed to be a view which 'combines' the elements and intuitions underlying MP and AP? In this case it would seem that *whichever* underlying intuitions WAP is giving stronger expression to, AP or MP, WAP&AVE should agree with the judgment that the outcomes are tied.

From the *prima facie* implausibility of this set of judgments, one can, I think, safely assume that there is some sort of confusion or mistake in this example. I think there is, and it stems from the combination of (i) the ambiguity in the grounds of MP (and WAP to the degree that it articulates MP) and (ii) assigning complaints to us about those above average. Consider MP&AVE's judgment about **A** and **S** again: according to Temkin it has no preference between **A** and **S**. But does this seem correct, given that Temkin thinks deviations above, as well as below, the average count? I think MP&AVE, since AVE means AVE₂, should have a preference between these outcomes in virtue of MP's tie-breaking clause. However, the preference MP's tie-breaking clause makes when complaints are assigned to us about those above average seems both confused and implausible.

Consider the outcomes again:

	a	b	c	d	
A:	900	900	600	400	(average 700)
S:	1000	800	600	400	(average 700)

In both outcomes, the complaints of those below average are the same: 300 units for **d**, and 100 units for **c**. And there is no difference in the size of **c** or **d** either; hence MP&AVE, including the tie-breaking clause, has no preference between the outcomes insofar as it considers only those below average. But in considering our complaints about those above average, the case is different: the size of complaint differs. But what preference is yielded by MP's tie-breaking?

Recall that the tie-breaking clause says that we should proceed to the next worst-off 'group' and compare the size of their complaint, or, presumably in this case, our complaint about them. In **A**, the next worst-off group, consisting of **a** and **b**, we have a

complaint 200 about. In contrast, the next worse-off group in S, **b**, we have a complaint of only 100 about. According to MP's tie-breaking clause, S is the preferable outcome, a judgment that seems extremely implausible. After all, A results from S by transferring 100 units from better-off to worse-off (from **a** to **b**), a transfer we are quite certain *lessens or improves* inequality. It is easy to see where the confusion lies in applying MP's tie-breaking clause in this case: the next worse-off group, being closer to the average, is the group about whom we have *smaller* complaint.

As the above example showed, assigning complaints to us about those above average on AVE₂ jeopardizes the relationship between the three combinatorial principles of AP, MP, and WAP. WAP is supposed to be 'compromise' between AP and MP. As such, WAP's judgments should either (a) agree with those yielded by the corresponding AP and MP aspects when they agree; or, if the corresponding AP and MP aspects disagree, (b) agree with the corresponding AP aspect's judgment if WAP is understood as reflecting AP more than MP, or (c) agree with the corresponding MP aspect's judgment if WAP is understood as reflecting MP more than AP. In other words, the WAP aspect's judgment should agree with the judgments yielded by *at least one* of the corresponding MP or AP aspects. But by assigning complaints to us about those above average (on AVE₂) this is no longer respected. In the above case, WAP&AVE *weakly* disagrees with MP&AVE and AP&AVE, as it yields a judgment where the others do not. But it also is possible for WAP&AVE to *strongly* disagree: it is possible for both MP&AVE₂ and AP&AVE₂ to prefer X to Y, but for WAP&AVE₂ to prefer Y to X.

The following is one such case where strong disagreement is possible:

	a	b	c	d	e	
A:	9	4	3	3	1	(average 4)

	a	b	c	d	e	
B:	7	7	4	1	1	(average 4)

In this case, it is not just that WAP&AVE prefers one outcome to the other while the corresponding AP and MP aspects judge the outcomes to be equivalent; rather, WAP&AVE likely³² yields the *opposite* judgment than AP&AVE and MP&AVE, as follows:

According to AP&AVE, the inequality indices are: $5+0+1+1+3 = 10$ for **A**, and $3+3+0+3+3 = 12$ for **B**. Since **A** has a smaller inequality index, AP&AVE prefers **A** to **B**.

According to MP&AVE, the inequality indices are $4-1 = 3$ for **A**, and $4-1 = 3$ for **B**. However, since there are fewer worst-off in **A** than in **B**, MP&AVE prefers **A** to **B**.

According to WAP&AVE, the components of the complaints are as above for AP&AVE: 5,1,1, and 3 for **A**, and 3,3,3, and 3 for **B**. Provided that the comparatively much larger complaint of 5 is assigned enough weight compared with the weight assigned to a complaint of 3, WAP&AVE prefers **B** to **A**.

In sum: since assigning complaints to us on behalf of those above average is either unnecessary (when AVE is combined with AP), or leads to confusion (when AVE is combined with MP or WAP), I think that AVE should be revised and assign complaints

³² Of course, it cannot be said for certain that WAP yields this judgment until a precise weighting principle is decided upon. One weighting principle which would give the result that WAP&AVE prefers **B** to **A** is that of cubing.

only to those below the average. If complaints are assigned in this way--that is, only to those below the average--then the plausible, and in my opinion required, correlation between how well off one is and the size of one's complaint is respected. Both the fundamental idea of Individual Complaints, that the best off have nothing to complain about while the worst-off have the most to complain about, and what Temkin takes as the fundamental idea of egalitarianism, that it is a bad thing for some people to be worse off than others through no fault of their own, are respected.

5.24 Revise or Reject?

I have argued that minimally, some of the conjuncts, AVE, MP, and WAP--and hence the conjunctions/aspects formed from them--need to be revised, as Temkin's formulation of them is at best ambiguous and misleading, and at worst inconsistent and implausible. However, one might wonder if this takes things far enough. For given the wide-ranging nature of his confusion of conjuncts and conjunctions and his assumption that all possible combinations of conjuncts form plausible conjunctions³³, it should be possible to argue for *rejecting* and not merely *revising* a given conjunction.

I shall consider one such aspect in this light: MP&AVE³⁴. However, by focusing on this one instance of what follows from Temkin's confusion of conjuncts and conjunctions, I am not claiming that this is the *only* such instance. I am not arguing that MP&AVE is the only objectionable aspect, or that all the other aspects are perfectly

³³ Recall Section 5.2.

³⁴ Note that MP&AVE is not one of the aspects reflected in one of the statistical measures of economics, so there is no support to be had for it from on such grounds. The others in this category are AP&BOP, WAP&BOP, MP&ATBO, and WAP&ATBO.

plausible and defensible. Since one of the grounds for worries about MP&AVE--the confusion of conjuncts and conjunctions-- is very wide-ranging, it might well turn out, upon closer scrutiny, that other Individual Complaints aspects should also be rejected. I see no way of ruling this out the possibility of rejecting other aspects except by careful case by case examination, a task beyond the scope of this thesis.

5.241 MP&AVE

Let us assume that the difficulties to do with the confused formulation of AVE have been resolved, by stipulating that AVE assign complaints only to those below average. This will thereby eliminate the problem about the ambiguous grounds of MP--relative position or size of complaint--because it will always be the case that the worst-off have the largest complaint. But as we shall see, even with the resolution of these difficulties about the MP and AVE conjuncts, MP&AVE still runs into problems. Despite this resolution, MP&AVE still yields some very unusual and problematic judgments. For one thing, MP&AVE yields the judgment that adding even more worst-off people to an outcome is a good thing!³⁵

I said that this judgment is a very 'unusual and problematic' one. In what way is it unusual? It is unusual in that MP&AVE is the *only* individual complaints-type aspect that will yield this judgment, and in fact, it is the *only* individual complaints aspect that can

³⁵ MP&AVE yields this judgment because by adding even more worst-off people, the average is lowered, and hence the absolute difference between the worst-off and the average is also reduced. Note that this result is obtained by adding individuals at a level anywhere below average. I have chosen the example with adding *worst-off* people, as it is the extreme case, and therefore the one in which our intuitions are, I hope, most clear.

ever yield the judgment that adding people to an outcome makes things better³⁶. In other words, MP&AVE yields a *unique* judgment about this sort of case. There are, however, two different respects in which this judgment is problematic.

First, MP&AVE's judgment seems implausible, simpliciter. By adding more worst-off people, none of the gaps *between individuals* have decreased, only the gap between those worse-off than average and the average has decreased. But if none of the gaps between individuals have decreased, why should any individual complaints-type aspect make the judgment that things have gotten better?³⁷ Given that MP&AVE does make this judgment, why should we think that it is a plausible aspect of inequality?

However, it might be objected that we cannot reject an aspect just because it makes implausible judgments about some cases³⁸. But there is a second respect in which MP&AVE's judgment seems implausible: it seems to involve internal conflict. In essence, there seems to be a tension between thinking about inequality according to MP&AVE--i.e., thinking about inequality at least in part according to MP--and thinking that adding even more worst-off people makes things better.

In other words, insofar as one is thinking about inequality according to MP&AVE, one is at least in part caught in the grip of the intuitions that say that the complaints of the very worst-off are of the highest moral significance, that they have lexical priority, that

³⁶ This point is considered in more detail in Section 5.3. But the basic idea is that on Individual Complaints, added individuals make things worse as their existence adds complaints to the outcome.

³⁷ This again raises the question of whether or not all the aspects, or parts of a complex approach to inequality, should reflect the fundamental egalitarian concern about relations between individuals.

³⁸ Recall Section 5.21.

they are the very worst kind of complaint. Does it seem plausible, then, to think that adding even more people with these most-significant, lexically-prior, very-worst-kind complaint to an outcome is a good thing? MP says that the complaints of the worst-off are more--indeed *most*--important, yet MP&AVE judges that making more of these complaints is a good thing! This second sort of implausibility of MP&AVE's judgment about adding more worst-off people doesn't have as its source that overall we think that it is a bad thing for inequality to have even more worst-off people; rather, it's that this aspect's judgment seems in conflict with one of its conjuncts--that insofar as we accept MP, MP&AVE's judgment seems implausible.³⁹

I have argued that MP&AVE should be rejected. What about the other aspects? Are some of them also implausible as aspects of inequality? I think that there are reasons to be somewhat suspicious about some other aspects, especially given Temkin's confusion of conjuncts and conjunctions. For example, this confusion also seems to raise specific doubts about BOP and the aspects involving it. Temkin recognizes that BOP strikes many

³⁹ There *may* be a sense in which adding worst-off people is an improvement, but I do not think that this sense is captured by MP&AVE. Consider another of Temkin's aspects not motivated by Individual Complaints--namely, 'Gratuitousness'. With even more worse-off individuals the inequality seems less gratuitous, and therefore less bad. It is less gratuitous since eliminating the inequality in the larger outcome would be more difficult and at higher 'cost' to the better-off--each better-off individual would have to transfer a bit more of her or his good to the worse-off in order to eliminate inequality, as there are more worse-off individuals. But, unlike with MP&AVE, there is no internal conflict here. If one thinks of inequality according to the intuitions underlying 'Gratuitousness', one will simply think that adding more worse-off individuals makes things better, as the inequality is less gratuitous.

people as the least intuitively plausible view of individual complaints⁴⁰, and sometimes defends BOP by appealing to the aspects involving it. For example (p.61-64):

	a	b	c	d
S:	1000	800	600	400
C:	1000	1000	600	400

Temkin says:

...eight agreed that S is better than C, but five felt at least some pull in the other direction. Notice, however, that the *only* aspects supporting the judgment that C is better than S are those involving BOP. This suggests that insofar as one is pulled toward the view that C is better than S...one is (probably) being influenced by BOP. Thus, it seems clear that BOP is not a view that one can simply dismiss.

Temkin argues that since it is only the BOP aspects that make the dissenting judgment that C is better than S, these aspects are (all but) required to explain any tug we feel in this direction. Aside from the fact that this a rather strong claim to be based upon

⁴⁰ I think this is in part because BOP is a much better answer to the question *who* has a complaint than to the question *how large* is their complaint. In other words, it seems more plausible that all but the very best-off individual has a complaint about inequality, than that the size of their complaint is equivalent to the difference between their level and the level of the best-off person. Temkin, however, ends up collapsing these two questions into one: *who* has a complaint *of what size*?

an 'argument from explanation' as other explanations are always possible⁴¹, his argument betrays some confusion of conjunctions and conjuncts. One cannot infer that since all the dissenting aspects involve BOP that BOP is necessary. Consider MP&BOP's judgment that C is better than S--clearly it is MP's tie-breaking clause doing the work, not BOP!⁴²

5.3 TEMKIN'S PROJECT

So far I have argued for both revision and rejection of certain aspects. I have argued that, on the one hand, Individual Complaints is confused and should be clarified; on the other hand, that it is too complex--it has too many aspects--and should be simplified: some aspects should be eliminated. In effect, then, by questioning Temkin's ideas about the nature of inequality, I have taken up two parts of a project that he himself suggests in *Inequality*:

...one might claim I am mistaken about the nature of inequality. The extreme version of this claim would reject the very approach taken in this book...Not surprisingly, I am less than [sic] enthusiastic about this claim and feel the many arguments contained in this book militate against it. Alternatively, one might accept my general approach but argue that I've overlooked certain important

⁴¹ The view I put forward in Chapter Seven--that relations of equality between individuals should be assigned positive value--is one such alternate explanation.

⁴² We might also want to focus in particular on aspects involving AVE, since, as has been mentioned previously, this aspect does not seem to reflect the fundamental egalitarian concern about relations between *individuals*.

aspects or that some of my aspects should be rejected or revised. It seems to me likely that this is true and should be pursued... (p.67)

But what of the third project, that he has "overlooked" certain things? This is the idea that Individual Complaints is in some sense incomplete, that something still needs to be *added* to the framework. It is to this idea that I now turn.

5.4 POPULATION VARIATIONS

It seems to me that Individual Complaints does indeed lack something, and this is seen most clearly when one considers its judgments about examples with varying population size. Consider the following outcomes:

	a	b		a	b, b₁,...,b_n
A:	10	20	A_n:	10	all 20

A is a two-person world with inequality between its members, **a** and **b**. **A_n** is the many-person world that results from **A** when more and more equally well off better-off individuals (**b₁** through **b_n**) are added to **A**. What does Individual Complaints say about the comparison between **A** and **A_n**?

Individual Complaints says that **A_n** is worse than **A**; all of its aspects judge that **A_n** equal to or worse than **A**, as follows⁴³:

⁴³ AP&AVE: The average is being raised with the addition of each individual **b_i**. Since only those below average have a complaint according to (the coherent version of) AVE, and only individual **a** is below average, **A_n** is worse than **A**.

	Preferred Outcome
AP&AVE	A
AP&BOP	T (tied)
AP&ATBO	A
MP&AVE	A
MP&BOP	T
MP&ATBO	A
WAP&AVE	A
WAP&BOP	T
WAP&ATBO	A

AP&BOP: Since there is only one gap between the level of all those worse off than the best off--i.e., individual **a**--and the level of the best-off individuals, and this gap is of the same size (10 units) in both outcomes, the outcomes are tied.

AP&ATBO: Since there are more people better off than individual **a**, the sum of the gaps between him and all those better off than he is larger in **A_n**; hence **A_n** is worse than **A**.

MP&AVE: The same reasoning as for AP&AVE.

MP&BOP: The same reasoning as for AP&AVE. Note that MP's tie-breaking clause does not apply, as there is no next worst-off individual/group *with a complaint* to consider.

MP&ATBO: The same reasoning as for AP&ATBO

WAP aspects: all yield that same judgment as that yielded by the corresponding AP and MP aspects, since these aspects are in agreement.

But does this accord with our intuitive judgment about this case? Don't we think that, at least after a point in the series of additions, the larger world, A_n , is *better* with respect to (in)equality?⁴⁴ Don't we think that a world where almost everyone is equally well-off, while only one individual deviates from this, is better with respect to (in)equality than a world with no equality at all, with only one better-off and one worse-off?

Notice, however, that the claim about this example does not need to be as strong as this in order to generate difficulties for Individual Complaints. It need not be the case that A_n is better than A with respect to (in)equality *overall*; all that we require is that we feel at least a pull or tug that A_n is better than A in some way with respect to (in)equality. And surely we do feel at least a tug in this direction. And since not even one of the aspects judges that A_n is better than A , Individual Complaints cannot account for our intuitions.⁴⁵ In other words, Individual Complaints cannot account for even this weak version of this problem with the above example, as it cannot accommodate even the tug we feel that A_n

⁴⁴ The ambiguity of "(in)equality" is intentional here. Some may find the larger outcome better with respect to inequality, if they relativize to population size in some way; for one thing, A_n has 'less inequality per person' than A . But I also think, as I said in the Preface, that this very example breaks apart the 'pedantic assumption' that equality and inequality stand in an inverse/reciprocal relationship to one another--that they are two sides of the same coin--such that the more there is of one (better it is with respect to one), the less there is of the other (worse it is with respect to the other). Thus, it is *possible* to think that A_n is better than A with respect to (in)equality, while thinking that it is worse than A with respect to inequality. This is possible if one thinks that A_n is better than A --*much* better than A --with respect to equality.

⁴⁵ Recall that Temkin seems to accept the principle 'if there's a tug, then there's an aspect'. See Section 5.1.

is better than A , much less an overall judgment that A_n is better than A with respect to (in)equality. Thus, Individual Complaints seems to be lacking in some respect.

In what way(s) is Individual Complaints lacking? One way in which it seems lacking is in that it has *no* principle which relativizes inequality to population size. I said earlier⁴⁶ that it seemed odd that Temkin was concerned with showing that *some* but not *all* of the intuitions underlying the statistical measures are captured by Individual Complaints. In fact, there is a reason Temkin does not want his Individual Complaints framework to reflect the statistical measures' ideas about population size; he thinks their precise way of accommodating variations in population size is implausible⁴⁷. He argues that the ways in which statistical measures relativize inequality to population size--i.e., by dividing by n or by n^2 --implies that proportional increases in population size make no difference, and he finds this implication objectionable. However, just because he finds the divide-by- n and divide-by- n^2 principles of population size objectionable, it does not follow that there should be *no* such principle in an inequality measure. Individual Complaints involves no such principle, and because of this lack, Individual Complaints all but entails⁴⁸ 'more people, more/worse (in)equality'. This is so because each added individual is either a complainer (thus adding new complaints to the outcome), a complainees (thus adding to the complaints of individuals already in the outcome) or both. But this very wide-ranging

⁴⁶ Chapter Four, Section 4.2.

⁴⁷ Chapter 7 of *Inequality* is devoted to issues surrounding population size.

⁴⁸ 'All but' because MP&AVE may say, in the case in which the added individual is at a level below the original average, that things have improved with respect to inequality. However, if this aspect is rejected, as I have argued it should be, the Individual Complaints framework does entail 'more people, more/worse inequality'--and, given Temkin's acceptance of the pedantic assumption, 'more people, more/worse (in)equality'.

principle seems just as objectionable to the egalitarian, if not *more* objectionable, than the one Temkin sought to evade--namely, that proportional increases make no difference to inequality.

Thus, we might try to accommodate our intuitions about the A/A_n case above by adding a principle that relativizes to population size to the Individual Complaints framework. But as I shall argue in the next chapter, supplementing Individual Complaints in this way is not a satisfactory solution to the difficulty raised by this example. Rather, I think the difficulty raised by this example has far-reaching consequences--namely, that the egalitarian needs to fundamentally rethink what an acceptable measure of (in)equality will look like. Measures of inequality only simply won't do.

CHAPTER SIX: EQUALITY, INEQUALITY AND (IN)EQUALITY

I ended the previous chapter with an example which raises difficulties for Temkin's individual complaints framework. Recall: as more and more individuals are added to a two-person world with inequality, where those added individuals are all as equally well off as the original better-off person, it seems that at some point or other things have improved with respect to (in)equality. In other words, for some added individual b_n (see below), we judge that A_n is better than A with respect to (in)equality:

	a	b		a	b, b ₂ ,...,b _n
A:	10	20	A_n :	10	all 20

However, as I discussed earlier, Temkin's Individual Complaints framework cannot accommodate this intuition. It cannot accommodate even the weak version of this intuition--that we feel a tug that there is *some* respect in which A_n is preferable to A --much less the stronger intuition that *overall*, with respect to egalitarian concerns, A_n is preferable to A . *Not even one* Individual Complaints aspect prefers A_n to A .

I used this particular example, which I shall call the 'adding BOPs example', as a springboard to voice a larger concern about Temkin's Individual Complaints approach to (in)equality; it is not merely this one particular A/A_n case that is problematic for his approach. The Individual Complaints framework has difficulties with variations in population size in general, as the framework itself all but entails 'more people, more/worse (in)equality'. This global implication has its source in the fact that on the Individual Complaints framework each added individual increases the strength and/or number of complaints: he is either a new complainer (he has complaints against those better-off than he), a new complaineer (those worse-off than he have a complaint against him), or both.

The Individual Complaints framework contains no principle that acknowledges or accommodates differences in population size.

In this chapter I shall consider ways in which our intuitions about the adding BOPs example--i.e., that we feel at least a tug that A_n is preferable to A with respect to (in)equality--might be explained. It should be noted that while much of the following discussion takes Temkin's Individual Complaints framework as its basis, many of my comments can be applied in analogous ways to other measures, as we shall see.

Let us begin by considering the ways in which other measures of inequality might accommodate the intuitions above: unlike the Individual Complaints approach, many of the other approaches do involve a principle that relativizes inequality to population size.

6.1 ONE OPTION: RELATIVIZING TO POPULATION SIZE

All of the economic measures discussed in Chapter Three, with the exception of Range, involve means by which to deal with varying population size. They do so by dividing by n --that is, by dividing by the population size of the outcome. This method is employed by Relative Mean Deviation, Variance, Standard Deviation of Logarithms, Gini Co-efficient¹ and--arguably--Coefficient of Variance². According to this approach, the

¹ Recall that division by $n^2\mu$ (G 's denominator), since μ 's denominator is n , amounts to division by $n(y_1+y_2+\dots)$.

² Though Coefficient of Variance divides by the average, μ , and not by n in its own denominator, it is built from Variance and which does involve division by n .

summed/total inequality, however it is to be measured³, is divided by n to arrive at a figure that represents the 'average inequality per person' in the outcome.

It should be clear that this approach will give the desired result about the adding BOPs example and judge A_n to be better than A . As more and more individuals--and thereby relations between individuals--are added to the outcome, the effect of dividing by this larger denominator outweighs any effect on the summed/total inequality of the outcome in the numerator, thus lowering the inequality index. Consider the divide-by- n approach of, say, Relative Mean Deviation (M), and let, for sake of argument, individual b_n be the 998th individual added.⁴ According to M , the inequality index of A :

	a	b	
A:	10	20	(average 15)

$$\text{is } |[(15-10) + (15-20)]| / 15 \times 2; \text{ or } 10/30 \\ = \sim 0.33 .$$

³ Summed/total inequality will differ, obviously, depending upon which particular inequality measure is employed.

⁴ I have chosen individual b_n to be the 998th individual added for two reasons: (i) it makes for relatively simple calculation as the total population of the outcome is 1000; and (ii) it is (hopefully) entirely uncontroversial that we feel at least a tug that this thousand-person world is better than the original two person-world with respect to (in)equality. Note also that the same judgment about this case is yielded by any of the other measures involving the divide-by- n principle; I chose to employ M as it involves the simplest calculations.

whereas the inequality index of the outcome where b_n is the 998th individual added, call it A_{1000} :

$$A_{1000}: \quad \begin{array}{cc} a & b_1, \dots, b_{999} \\ 10 & \text{all 20 (average 19.99)} \end{array}$$

is $|[(19.99-10) + 999(19.99-20)]| / 19.99 \times 1000$; or $19.98/1999$
 $= \sim 0.01$.

Or consider the more complicated Gini Coefficient (G). According to G, the inequality index of A is:

$$1/2 \{|(10-20) + (20-10)| / (2 \times 2) \times 15\}; \text{ or } 1/2 (20/60)$$

$$= \sim 0.16$$

whereas the inequality index of A_{1000} is:

$$1/2 \{|999(10-20) + 999(20-10)| / (1000 \times 1000) \times 19.99\}, \text{ or } 1/2 (19980/19990000)$$

$$= \sim 0.0005.$$

Since B has a smaller inequality index than A, and hence is preferable to A, according to the divide-by-n method, it is clear that either of this approach can accommodate our intuitions about the adding BOPs example. However, there are still open questions as to whether or not this approach--though *able* to provide an explanation

of our judgments in this case--(i) makes implausible judgments about some *other* cases⁵, and (ii) provides a satisfactory explanation of our intuitions about this adding BOPs case. As I shall argue below, I do not think that our intuitions about the adding BOPs example are adequately captured by the idea that **A₁₀₀₀** contains less inequality 'per person'. But first, I shall consider one other--and quite different--approach to accommodating variations in population size.

This other approach⁶ involves comparing outcomes which differ in population size by 'converting' one or both of them into outcomes of the same size, and then measuring and comparing the inequality of these 'translated' outcomes. This process is something like the process of finding a common denominator of two fractions in mathematics: sometimes one must convert only one, sometimes both, denominators to do so. In finding a common 'denominator'--i.e., population size--of the outcomes under comparison, population size in effect 'drops out' of one's calculations: the outcomes no longer differ in size, and hence can now be compared without worrying about this issue.

How does one 'convert' outcomes according to this method? One converts outcomes according to their 'pattern' of inequality, in effect comparing the outcomes that *would have obtained* had the original outcomes been of the same size. I shall call this the 'counterfactual pattern' approach to relativizing to population size.

Consider again outcomes **A** and **A₁₀₀₀**:

⁵ Temkin, for example, thinks that both approaches should be rejected, as they lead to what he takes to be an unacceptable consequence--namely, that proportional increases do not affect inequality. See chapter 7 of *Inequality*.

⁶ This approach is also discussed by Temkin in Chapter 7 of *Inequality*.

	a	b		a	b, b ₂ ,...,b ₉₉₉
A:	10	20	A ₁₀₀₀ :	10	all 20

According to the counterfactual pattern approach, in order to compare A and A₁₀₀₀ we need first to convert A into a world of the same size as A₁₀₀₀. The pattern of inequality in A that would have obtained had A been a thousand-person world--that is, a world the same size as A₁₀₀₀--resembles A*:

	a, a ₂ ,...,a ₅₀₀	b, b ₂ ,...,b ₅₀₀
A*:	all 10	all 20

Now it is a simple matter to compare A* and A₁₀₀₀ with respect to any particular measure or individual complaints aspect of inequality. And it should (hopefully) be obvious seem intuitively plausible that A₁₀₀₀--with 999 equally well off better-off individuals and only one worse-off individual (or, to put it another way, with only one individual worse-off than 999 individuals)--is preferable to A* with 500 worse-off individuals *all of whom* are worse off than 500 better-off individuals. And indeed, all of the economic measures and all of the individual complaints aspects prefer A₁₀₀₀ to A*. And since A* is merely a conversion of A--the idea being that it just *is* A expressed in a different form--A₁₀₀₀ is preferable to A according to this counter-factual pattern approach.

But again, like the divide-by-n approach, it is still an open question whether or not the counter-factual pattern approach to relativizing to population size--despite its *ability* to provide an explanation of our intuitions about the adding BOPs example--either (i)

yields implausible judgments about some other cases⁷ and/or (ii) provides the *best*--or even an adequate--explanation of our judgments about the adding BOPs example. Let us turn now to this latter issue.

6.12 Problems with Relativizing to Population Size as a Solution to Adding BOPs

Both approaches to relativizing to population size that I considered can accommodate our intuitions about the adding BOPs example: the larger outcome (A_n for some individual b_n), with more equally well-off better-off people, is indeed preferable to the original two-person world (A). However, the different approaches--divide-by- n , counterfactual pattern--make this judgment for different reasons. These reasons are, respectively, that compared with A , A_n (i) has less inequality per person; (ii) it is a better 'pattern' of inequality. The question remains, as I have said, as to whether or not either of these possible explanations of our intuitions about the adding BOPs example provides an adequate explanation. To pursue this question, it will prove beneficial to examine this example in more detail.

Consider again the adding BOPs example, in which equally well off better-off individuals are added to a two-person world at a level equal to that of the original better-

⁷ Again, see chapter 7 of *Inequality*, especially Temkin's discussion of what he calls "The Standard View" about "proportional increases". Temkin rejects the counterfactual pattern approach as well as the divide-by- n principle, because both of them imply 'the standard view' that proportional increases in population size have no effect on inequality, an implication that Temkin rejects.

off person. Let us assume that the gap between the better-off and worse-off is of size x^8 . When the first better-off individual (b_2 , see below) is added to the original two-person world, it creates one more relation of inequality, so that the worse-off individual (a) is now worse-off than 2 people by x (or 'behind by $2x$ '). But adding this first individual, b_2 , also creates a relation of equality between him and the original better-off person (b):

	a	b		a	b, b₂
A:	$y-x$	y	A₂:	$y-x$	both y
	(inequality: x ; 0 relations of equality)			(inequality $2x$; 1 relation of equality)	

Adding another individual (b_3 ; see **A₃** below) to this three-person world (**A₂**), however, has a different effect on the relations in the outcome: it again creates one more inequality and makes the worse-off person (a) now worse off than 3 individuals by x (behind $3x$), but it creates *two* relations of equality, that between this added individual (b_3) and the original better-off person (b), and that between her and the first added person (b_2):

	a	b, b₂		a	b, b₂, b₃
A₂:	$y-x$	both y	A₃:	$y-x$	all y
	(inequality: $2x$; 1 relation of equality)			(inequality: $3x$; 3 relations of equality)	

And adding a ninth individual (b_{10}), thus yielding ten equally well-off better-off individuals, creates one more inequality than the previous situation--i.e., the ten-person world with nine equally better-off and one worse-off individual--so that the worse-off

⁸ According to the way I presented the adding BOPs example earlier this chapter (A/A_n ; A/A_{1000}), the gap in question was 10 units--i.e., $x=10$.

person is now 10x behind, but it adds *nine* more relations of equality. So in this eleven-person outcome, the worse-off individual is 10x behind, but there are a total of 55 relations of equality:

$$\begin{array}{ccc} & a & b, b_2, \dots, b_{10} \\ A_{10}: & y-x & \text{all } y \end{array}$$

(inequality 10x; 55 relations of equality)

And with the addition of the 999th individual, thus yielding 1000 equally well-off better-off individuals, the outcome contains 999 relations of inequality (*a* is behind by 999x), but 499,500 relations of equality!⁹

$$\begin{array}{ccc} & a & b, b_2, \dots, b_{1000} \\ A_{1000}: & y-x & \text{all } y \end{array}$$

(inequality 999x; 499,500 relations of equality)

Is it really plausible to say--as does the Individual Complaints framework--that this outcome, **A₁₀₀₀**, is *worse* with respect to (in)equality than the original (**A**)? Surely after a point, (the tenth?, thousandth?, millionth?, individual added), things are better with respect

⁹ For those interested in doing the math themselves, the formula I used for counting the number of relations of equality between the better-off is:

$$(n^2 - n) / 2, \text{ where } n \text{ is the number of better-off individuals.}$$

Note that in using this formula I am not double-counting (hence the division by 2), nor am I counting the relation between an individual and herself (hence the subtraction of *n* in the numerator).

to (in)equality than they were in the original outcome. For each added individual has a uniform and constant effect on the relations of inequality between individuals--adding exactly one more relation of inequality of size x , as each added individual makes the worse-off individual, a , worse off than one more individual by a gap of x --but a non-uniform effect on the relations of equality between individuals: the n th added individual adds n more relations of equality.¹⁰

As my concern at present is not with the implausible judgment made by Individual Complaints, but rather with two possible population relativization principles--divide-by- n and counterfactual pattern--I think it is particularly important to note the non-constant effects evidenced in the adding BOPs example. Notice that as more and more individuals are added, the number of relations of equality between individuals being added also increases. And it is in the later worlds, where a good number of individuals have been added, that we are most confident in our judgment that things have gotten better with respect to (in)equality. But this isn't exactly our judgment about the earliest worlds; indeed, aside from the difference in confidence level, we may even make the opposite

¹⁰ It is important to be clear about what exactly I find implausible about the judgment yielded by Individual Complaints. This framework, being focused solely upon relations of inequality, says that with the each added person things have worsened with respect to inequality. I have no quarrel with this: as the series progresses and more individuals are added, undoubtedly there are more and more relations of inequality (or, in Temkin's terms, the complaint of the worse-off person keeps increasing). What I object to is the claim that the larger outcomes are therefore worse with respect to (in)equality--i.e., worse with respect to the egalitarian's concern. I think that the created equalities, after a point, more than compensate for the additional inequalities, and thus the larger outcomes are, on balance, better with respect to (in)equality than the original.

judgment about these first worlds, and say that they are *worse* with respect to (in)equality than the original two-person world. Consider again the effect of adding the very first individual (**b₂**):

	a	b		a	b, b₂
A:	y-x	y	A₂:	y-x	both y
	(inequality x; 0 relations of equality)			(inequality 2x; 1 relation of equality)	

Here, we may well judge that things have gotten worse with respect to (in)equality *overall*, that doubling the inequality--making a's complaint about inequality stronger--(far) outweighs the slight compensating effect of the creation of only one relation of equality. However, both of the population-size principles I have considered do not allow for such a judgment. According to both views, the addition of individuals has a constant effect with respect to the overall judgment: things are always getting better, right from the get-go with this very first addition of individual **b₂**. These principles do not allow for the possibility that as the series of additions goes along, things first get worse and then get better.

To see this, consider again the sorts of calculations I did earlier for **A** and **A₁₀₀₀**, this time doing the calculations for **A** and **A₂**, again using the numbers 10 and 20 to represent the levels of the worse-off and better-off respectively:

	a	b	
A:	10	20	(average 15)
	a	b, b₂	
A₂:	10	both 20	(average ~16.66)

Recall that according to the divide-by-n approach, as exemplified by Relative Mean Deviation (M)¹¹, the inequality index of A is ~0.33. The inequality index of A₂, according to M, is:

$$| (10-16.66) + (20-16.66) + (20-16.66) | / (16.66) \times 3; \text{ or } 13.34 / 49.98 \\ = \sim 0.31$$

And recall that according to Gini Coefficient (G), the inequality index of A is ~0.16. The inequality index of A₂, according to G, is:

$$1/2 \{ | (10-20) + (10-20) + (20-10) + (20-10) | / 3^2 \times 16.66 \}; \text{ or } 1/2 \{ \sim 0.26 \} \\ = \sim 0.13$$

In both of these cases the inequality index of A₂ is only marginally smaller than that of A. But nonetheless it *is* smaller, showing that these views, though agreeing with our judgment that the later worlds in the series (where many individuals have been added) are indeed better than the original two-person world with respect to (in)equality, make this judgment right from the addition of the very first individual.

The case for the counterfactual pattern view is somewhat more complicated. Here, in order to compare A and A₂, we would first need to translate both of them into six-person worlds, as follows:

¹¹ Again, the same results--i.e., that things are getting better right from the addition of the very first individual, b₂, are yielded by all of the other measures which divide by n.

	a, a₂, a₃	b, b₂, b₃
A*:	all 10	all 20
	a, a₂	b, b₂, b₃, b₄
A₂*:	both 10	all 20

And it may be as difficult to compare A* and A₂* on the basis of patterns as it was to compare A and A₂ in the first place--though it is easy to compare them if we have a particular inequality measure in mind. However, I think there is nonetheless some tension between this sort of approach and the non-constant effect of added individuals that was evidenced in the close analysis of the adding BOPs example, as follows:

According to the counterfactual pattern approach, outcomes are translated or converted according to their pattern of *individuals*, and not, as we might have thought, according to their pattern of *relations* between individuals. Consider again outcome A, paying particular attention to the relations between individuals:

	a	b
A:	10	20

(1 relation of inequality; no relations of equality)

and compare it with a supposedly equivalent 'translation' of it, A*:

	a, a₂, a₃	b, b₂, b₃
A*:	all 10	all 20

(9 relations of inequality; 6 relations of equality)

As we can see, A^* is an equivalent translation of A only from the perspective of the pattern of individuals; it is not an equivalent translation with respect to the pattern of relations between individuals. Because this approach to accommodating population size looks only at individuals and the patterns among them, and not at the relations between individuals; and since, as we saw in the analysis of the adding BOPs example, there is no uniformity or constancy between the pattern of individuals and the pattern of relations between individuals, I think this approach too does not provide an adequate account of our intuitions about the adding BOPs case.

It is for the above reasons, then, that I think this first option of how to explain our intuitions about the adding BOPs example--that is, through some sort of principle that acknowledges and accommodates variations in population size--is fundamentally misguided. I do not think it will do to supplement, for example, Individual Complaints with one of these principles--the difficulties posed by the adding BOP example go well beyond the difficulties Temkin's framework has in dealing with issues of population size.¹² I think the real difficulty had with this example, a difficulty that is shared by all of the approaches to inequality I have considered, is that they do not consider relations of

¹² I am not saying that some principle that acknowledges and accommodates population size shouldn't be worked into his framework, anyway. I think the fact that his approach involves *no* such principle is worrying; there seems to be something, and something with (arguably) quite a strong intuitive basis (given the number of other measures that incorporate some such principle), lacking in his framework. However, I do not think that supplementing his framework in this way would adequately answer the adding BOPs example. I think that this example points to a much deeper problem with his approach to inequality, one shared by all the other approaches to inequality I have considered--namely, their assumption that an approach to inequality is thereby an approach to (in)equality.

equality between individuals, which, of course, has to do with their acceptance, implicit or explicit, of the pedantic assumption.

I think that we need to look for a better account of our intuitions about the adding BOPs example. Such an account should be both more in line with the variability in our judgment as the series progresses and more and more individuals are added--i.e., that things first get worse and then get better--and should also provide an adequate account of the principles underlying our intuitions about this case. I think that such an account is that of giving positive value to equality. In so doing, there is both the possibility of variability in our judgments, since the 'equality effect' gets stronger and stronger with each added individual. We may think that with the first few added individuals the increase in inequality is not compensated by the rather slight gains in equality, and hence that things are getting worse with respect to (in)equality. Later on in the series of additions we may make the opposite judgment--that things have gotten better with respect to (in)equality--as massive gains in equality are being made with only slight increases in inequality. It also can provide an account of the principles underlying our intuitions that seems to me to be more satisfactory: that we prefer A_n to A because there are a far greater number of relations of equality between individuals in A_n than in A . In other words, the idea of 'more equality between individuals', rather than 'less inequality per person', 'less inequality per relation', or 'a better pattern of inequality' is underlying our intuitive judgments.

6.2 GIVING POSITIVE VALUE TO EQUALITY: PRELIMINARY WORRIES

However, despite its plausibility for the adding BOPs example, there are some *prima facie* worries about the idea of giving positive value to equality. I shall consider but two such worries: one at the level of principles, and one at the level of judgments. The worry at the level of principles should come as no surprise given much of my previous

discussion; it is the worry about violating the pedantic assumption. Giving positive value to equality, rather than focusing solely on the disvalue of inequality, clearly rejects the wide-spread assumption that equality and inequality stand in a reciprocal/inverse relation to one another; that they are two sides of the same coin; that speaking about *both* the value of equality and the disvalue of inequality is merely pedantic, etc.

The second *prima facie* worry, this time at the level of judgments, is that giving positive value to equality seems to lead to implausible judgments about some cases--in particular, it seems to yield the result that a larger world of perfect equality is better than an analogous smaller world. For if relations of equality between individuals are given positive value, then, for example, a hundred-person world of equality will be judged to be better than a ten-person world of equality with respect to (in)equality. But, continues the worry, surely this is implausible: both worlds are worlds of *perfect* equality. Neither world could be made any *more* equal, as neither contains any relations of inequality whatsoever. How, then, can it be that the larger world is preferable with respect to (in)equality?

Let us begin with the worry at the level of principles.

6.21 At the Level of Principles: Violating the Pedantic Assumption

In order to consider how much of a problem it is that valuing equality positively violates the pedantic assumption, or even if it is a problem at all, it will prove instructive to examine the assumption itself in some detail, and ask the following sorts of questions:

(i) Why has it been made? Is there anything about our everyday concepts of equality and inequality that lend support to endorsing the pedantic assumption? Are there any 'clues' to its wide-spread acceptance to be found in the works of those who have written about equality and inequality?

(ii) Is it *entirely* uncontroversial? Or does it sometimes come into conflict with our intuitive judgments about particular cases, or with (other) egalitarian principles?

(iii) Given the answers to (i) and (ii) above, is the wide-spread acceptance of this assumption justified?

6.211 Why has the Pedantic Assumption Been Made?

I think there are (at least) two fairly obvious reasons why the pedantic assumption has been so widely accepted, reasons which stem from our everyday conceptions. First, and rather trivially, the words 'equality' and 'inequality' bear a striking resemblance, at least in English. They seem, etymologically, to be true opposites--meaning *equality* and *not-equality*. Second, and not nearly as obvious, is the influence of the idea of deviation in our thinking about equality and inequality. Recall that in Chapter Two I considered the idea of deviation measures of inequality in some detail; I began with these measures because they are a rather natural and intuitive starting place for most people beginning to think about how to assess inequality. And recall what lies at the base of deviation-type thinking about inequality: the idea that inequality is just a measure of how far we are from equality. And this idea, in turn, depends for its plausibility upon the pedantic assumption--i.e., that equality and inequality stand in an inverse/reciprocal relation to one another, such that the more there is of the latter, the further away we are from the former.

Do either of these reasons provide support for the pedantic assumption? It should be clear that they do not: neither our everyday understandings of 'equality' and 'inequality' nor their etymological analyses are strong guides to evaluating their use as philosophical concepts or principles. And given the shortcomings of deviation measures as we saw in Chapter Two, there is no reason to accept as uncontroversial a principle which rests on a very similar intuitive basis. Quite the contrary: there is reason to be suspicious.

In addition to these two fairly obvious explanatory bases for the pedantic assumption, there are other, more subtle, reasons stemming from the way in which egalitarian discussion of equality and inequality has typically been framed. This influence is clearly seen when one considers the sorts of cases typically focused upon in the literature's discussions of (in)equality--namely, cases involving transfers from a better-off group to a worse-off group (or vice versa) within a world of inequality. There are three different attributes of this 'typical example' with possible connections to the widespread and unquestioned acceptance of the pedantic assumption: (i) the examples involve transfers only--the population size remains constant; (ii) the examples involve only worlds of inequality; and (iii) the groups within these worlds are defined by *level*. How are these factors connected to the unquestioned acceptance of the pedantic assumption?

(i) Transfers

By focusing on examples of transfers *within* an outcome, the pedantic assumption seems fairly plausible. The key to its plausibility lies in the fact that population size does not change in such examples. Let me explain.

In any outcome, the total number of relations between individuals, both of inequality and of equality, is fixed according to the number of individuals in the outcome. One can easily calculate the number of relations with the following formula¹³:

¹³ Recall that my view neither double-counts nor considers the relation between an individual and himself. Hence, my formula differs from the standard mathematical formula of the number of pair-wise comparisons between entities which does both--i.e., n^2 --by including operations which reflect these differences: division by 2 and subtracting n from n^2 , respectively.

$(n^2 - n) / 2$, where n is the number of individuals

Now, given that the total number of relations between individuals is fixed for a given population size, and that there are only two sorts of relations possible--equality and inequality--it is easy to see how examples involving transfers seem to endorse the pedantic assumption. For such transfers will always be of the sort that any gain (loss) in the number of equalities will be accompanied by an exactly equal loss (gain) in the number of inequalities. Redistributions can effect the *proportion* of the number of relations of equality to inequality, but it cannot change the *total* number of relations. There is no way to gain *both* equalities and inequalities, for example; such a result would necessarily have to involve a different sort of case--specifically, one in which population size varies.

In sum: since the total number of relations between individuals is fixed according to population size, and since relations only come in two varieties--equality or inequality--it simply follows that in cases of mere transfers any gain in one is offset by an exactly equal loss in the other. And this fact might well lead one whose examples focus solely upon transfers to accept the view, whether explicitly or implicitly, that equality and inequality stand in an inverse/reciprocal relation to one another, such that the more there is of the one, the less there is of the other.

(ii) Worlds of inequality

By focusing exclusively on worlds of inequality, it is easy to confuse things that should be kept distinct, and thereby to implicitly accept the pedantic assumption. This exclusive focus is understandable, however: comparisons involving outcomes of equality seem both simple--such outcomes are *perfect*--and largely irrelevant to real world

concerns. We want and need to compare situations of inequality, and doing so is difficult and complex. But does it follow that we are only concerned about the relations of inequality within situations of inequality? Or is this to confuse our concern--(in)equality--with the domain in which this concern will be assessed--situations of inequality?

It seems to me that the exclusive focus upon outcomes of inequality has led to a blurring of the differences between the following egalitarian tasks:

- (a) comparing different situations of inequality
- (b) comparing situations with respect to inequality
- (c) comparing situations with respect to (in)equality

As I have said, the assumption has been that doing (c) is interesting only insofar as one does (a); comparisons involving situations of equality with respect to (in)equality seem trivial. The assumption then seems to have been that in order to do (c) and (a)--that is, in order to compare different situations of inequality with respect to (in)equality--one need only do (b)--that is, to consider only relations of inequality.¹⁴ In other words, the assumption has been that in order to compare different outcomes of inequality with respect to (in)equality, one need only consider the relations of inequality in those outcomes.

The connection to the pedantic assumption should now be clear. If one confuses the domain in which one assesses one's concern--outcomes of inequality--with one's concern itself--(in)equality--one has at least implicitly accepted the idea that inequality and (in)equality are one and the same. The mistaken assumption has been that just as there was

¹⁴ There is a connection to be made here to the near exclusive focus on *groups defined by level*, discussed below.

no need to consider outcomes of equality in assessing (in)equality, there is no need to consider relations of equality within outcomes when assessing them with respect to (in)equality.

(iii) Groups Defined by Level

As was the case with transfers, by focusing upon examples in which different groups are defined by level the pedantic assumption seems plausible. And here the key to its plausibility lies in the fact that groups defined by levels cannot stand in any sort of relation to one another *but* inequality. Again, let me explain.

A quick glance through some of the most influential literature on equality and inequality in the past 25 years confirms the prevalence of talk about 'groups' where these groups are defined by level. Rawls, in his highly influential *A Theory of Justice*, uses this language of groups defined by level; he speaks of the 'best-off group', 'worst-off group', 'second worst-off group' and so on. Several of the other most influential writers in this area--e.g., Nagel, Parfit--have followed Rawls and adopted this same sort of language.¹⁵

Now what is interesting about this language of groups-defined-by-level is that it makes it impossible for groups to stand in a relation of equality to one another, and hence impossible to talk about relations of equality between groups. This is completely unlike

¹⁵ The influence of this sort of language is seen even in Temkin, whose focus is upon individuals, not groups. He often speaks of the 'best-off individuals', 'the worst-off individuals', etc., though he does not, strictly speaking, *define* individuals by their level. However, the examples he uses in his text--the 'boxes'--lump individuals into groups depending upon their level; a 'box' is a group of individuals all of whom are at the same level.

what would be the case were groups defined by some other characteristic such as gender, race, socio-economic class, etc. On the groups-defined-by-level approach, there simply cannot be two groups that stand in a relation of equality to one another, as, ex hypothesi, these would in fact be one and the same group. This may in part account for the assumption discussed in the above section that in order to compare outcomes with respect to (in)equality one need only consider relations of inequality. When the focus is upon the relations between groups defined by level, inequality is the only sort of relation possible.

Summary

It should be clear that none of the explanations of the pedantic assumption discussed in (i), (ii) or (iii) above provide grounds for its acceptance. The 'typical example' used by those writing about (in)equality, while making the pedantic assumption seem quite plausible, by no means justifies this assumption: it is too restrictive a sample. As we have seen, other sorts of examples--such as those involving varying population size--raise questions about the 'uncontroversial' nature of the pedantic assumption.

One final comment here. Consider again the third feature of the 'typical example': that groups are defined by level. While I think that the language of groups defined by level has played an important role in (mis)shaping egalitarian discussion about how to compare outcomes with respect to (in)equality, as only relations of inequality are considered since any relations of equality between individuals are hidden *within* a group, I think that an individualistic approach requires a re-evaluation on this point. For if our focus is individualistic--that is, we focus on individuals rather than groups, and hence on the relations between individuals rather than the relations between groups--then it is very possible to have relations of equality between individuals. And ignoring these relations of equality in comparing outcomes with respect to (in)equality, if this is to be done at all,

requires an argument, and not merely the implicit and unquestioned acceptance of the pedantic assumption.

6.212 Is the Pedantic Assumption Entirely Uncontroversial?

Though the pedantic assumption seems uncontroversial insofar as one focuses only on the 'typical example' involving transfers, as I have said, there are other sorts of examples, such as population variations, in which this no longer holds. Recall the following--the adding BOPs example--which appeared in the Preface:

	a	b		a	b, b₂
A:	10	20	A₂:	10	both 20

But not all population variations are of the adding BOPs type. Another simple example in which there is varying population is adding worse-off people:

	a	b		a, a₂	b
A:	10	20	A₂*:	both 10	20

Both **A₂** and **A₂*** result from transforming **A**, a two-person world of inequality, into a three-person world, where this third individual is added at the level of the original better-off individual or the original worse-off individual respectively. Such additions, though creating another relation of inequality, also create a relation of equality. So how do these larger three-person worlds compare to the original two-person world? Isn't it plausible to say that **A₂** and **A₂*** contain *both* more inequality *and* more equality than **A**? Don't they then seem both better in some respects *and* worse in others (than **A**)--better

with respect to equality, yet worse with respect to inequality? And doesn't it seem that in order to determine whether A_2 or A_2^* are improvements over A with respect to (in)equality, the added equality relation (making things better) and the added inequality relation (making things worse) need to be balanced against one another?

It is clear, then, that very simple population variations such as A/A_2 and A/A_2^* are sufficient to call the 'obvious' and 'uncontroversial' nature of the pedantic assumption into question. Unlike with transfers, in these examples equality and inequality do not stand in a reciprocal relation to one another. It is not the case that the more there is of one the less there is of the other; rather, the larger outcomes, A_2 and A_2^* , contain both *more* equality and *more* inequality than A .

6.213 Is the Pedantic Assumption Justified?

It is clear that none of the possible reasons for making the pedantic assumption that I have discussed--neither the etymology of 'equality' and 'inequality', nor the influence of deviation-type thinking, nor the features of the 'typical example' in the literature--in any way justify endorsing this assumption. Further, our fairly firm intuitive judgments about certain population variation examples are strongly opposed to this assumption. It seems to me that the case to be made for the pedantic assumption is very weak, and particularly so for those espousing an individualistic approach to (in)equality. On this approach, there seems not only reason to be suspicious of the assumption, but reason to outright reject it.

6.22 At the Level of Judgments: Are Larger Equal Worlds Better?

I have argued that the *prima facie* worry at the level of principles about giving positive value to equality--that it violates the pedantic assumption--can be dismissed. But

what about the one at the level of judgments? Recall this *prima facie* worry: If positive value is assigned to relations of equality between individuals, then it seems that the larger an equal society is, the better. For example, wouldn't a hundred-person world of equality be vastly superior to a ten-person world of equality, for there are only 55 relations of equality between ten equally well-off people, but 4950 relations of equality with one hundred such individuals? But this seems very counter-intuitive, if not outright implausible. How can it be that the egalitarian strongly prefers the hundred-person to the ten-person outcome, since both worlds are worlds of perfect equality?

There are two different objections here: (i) that the larger equal world is judged to be *vastly* superior to the smaller with respect to (in)equality; and (ii) that the larger world is judged to be superior *at all*, since both worlds are *perfect* with respect to equality. The former objection can easily be dealt with by adopting a value scheme for equality that is asymptotic. The consequence that a larger equal world is *vastly* superior to a smaller is completely avoided if equality is assigned diminishing marginal value, such that the value gained by any additional relation of equality, after a point, is negligible--approaching, but never reaching, zero. In this way, the hundred-person world of equality would only be somewhat better than the analogous ten-person world, and a billion-person world of equality would only be slightly better than a million-person world.

However, the response the egalitarian might make to the latter objection--that the larger equal world is better *at all*, since both are worlds of perfect equality--is a bit more complex. She might argue, in effect, 'yes, it is a consequence of giving equality positive value that larger equal worlds are preferable to smaller such worlds, but *this consequence is not worrying*.' Or, taking an entirely different tack, she might argue, 'no, *it is not a necessary consequence* of giving equality positive value that larger equal worlds are preferable to smaller such worlds; whether or not this is so depends upon the precise way in which positive value is assigned.'

Consider her first sort of response. She might argue that the implication that larger perfectly equal worlds are preferable to smaller ones with respect to (in)equality only *seems* implausible, if we have not thought carefully enough about equality. The seeming implausibility of this objection rests on a 'holistic' conception of equality--a conception about the overall pattern of distribution. This is the sense in which it can be said that both worlds are worlds of *perfect* equality. But this is not the egalitarian concern about relations between individuals where equality is one such relation. Once we are clear that equality, like inequality, is a relation between individuals, there is nothing implausible about the result that larger equal worlds are better with respect to (in)equality than smaller ones. Understood individualistically, it clear that there is no such thing as *perfect* equality (in the sense that there couldn't possibly be any more of it), any more than there is a maximum inequality; there is no limit on the number of such relations may exist.¹⁶

Now turn to her second response, that it is not a necessary consequence of giving positive value to equality that larger equal worlds will be better. The egalitarian might argue that the objector has made some assumptions about how positive value is to be given to equality, assumptions that are by no means necessary. The objector has assumed that it is the relations of equality themselves that are given value. On the simplest version of this 'direct' value idea, each relation of equality would get a value of one unit of good; hence, the more relations of equality, the larger the total of good, and the better the outcome. But there may be other ways in which equality may be given positive value, though not direct value. One such attempt is to understand equality as a discounting principle, which I discuss later. Note, however, that even if one is not, in the final analysis,

¹⁶ This is not to say, of course, that there may not be a maximum possible *value* to be assigned to relations of equality in an outcome, as would likely be the case if equality's value scheme were asymptotic.

persuaded by the idea of equality as a discounting principle¹⁷, it still is the case that the strength of the original objection--that larger equal worlds are preferable to analogous smaller ones--rests on an assumption about giving direct value to equality. Until and unless it can be shown that this is the *only* or *best* way in which to assign positive value to equality, it is by no means a *necessary* consequence that larger equal worlds are better than smaller ones with respect to (in)equality. And even if it can be shown that direct value is the only feasible way to value equality positively, the egalitarian can--and I think should--fall back on her first response, arguing that though it is a consequence that larger equal worlds are better than smaller ones, this consequence is not worrying, and that those who find it worrying have not thought carefully enough about the individualistic nature of equality.

6.3 GIVING POSTIVE VALUE TO EQUALITY: FURTHER CONCERNS

I have argued that rejecting the pedantic assumption and giving positive value to equality is neither implausible in itself nor necessarily leads to implausible consequences. I shall sketch two different ways in which one might attempt to assign positive value to equality--the direct value and discounting approaches mentioned above--in the next, and final, chapter. But first, I shall consider some other worries, implications, and corollaries

¹⁷ Indeed, I don't think this discounting approach stands up under scrutiny. It seems to me not to respect the egalitarian ideal of valuing equality positively; it only takes away or discounts the badness of inequality. Using equality only as a weighting principle against inequality is not giving positive value to equality: a perfectly equal world scores a zero (as there is no inequality), and not a positive rating.

of the idea of giving equality positive value, which shall no doubt provide grounds for assessing the plausibility of this idea more fully.

6.31 Ad Hoc

It may be objected that giving positive value to relations of equality is an ad hoc solution to the adding BOPs example. However, I think the egalitarian can defend the idea of giving positive value to equality from this charge fairly easily. For one thing, she can point out, using her analysis of the pedantic assumption, that valuing equality is not the same thing as disvaluing inequality. Further, she may note that egalitarians have characterized their view as both accepting equality as an intrinsic moral value, and as being concerned with relations between individuals, and thus it would seem that these principles--since the pedantic assumption is to be rejected--require her to value equality positively. She might also point out that giving positive value to equality can play an explanatory role in examples other than ones with varying population size, and sometimes quite persuasively.

Consider, for example, the Sequence.¹⁸ The Sequence involves comparing 999 different worlds, all of which are of the same size--1000 people--and all of which have only two groups of people: the better-off and the worse-off. In the first world of the Sequence (W_1) there are 999 better-off individuals, and 1 worse-off individual; in the second world (W_2) there are 998 better-off individuals, and 2 worse-off individuals; in the third 997 and 3, and so on...to the mid-point world (W_{500}) with 500 better-off and 500

¹⁸ See chapter 2 of *Inequality*, p.27-52.

worse-off individuals...and so on down to the final world (**W₉₉₉**) with 1 better-off individual and 999 worse-off individuals¹⁹:

	a, a₂,...,a₉₉₉	b
W₁:	all 100	10
	a, a₂,...,a₉₉₈	b, b₂
W₂:	all 100	both 10
	a, a₂,...,a₉₉₇	b, b₂, b₃
W₃:	all 100	all 10
.		
.		
.	a, a₂,...,a₅₀₀	b, b₂,...,b₅₀₀
W₅₀₀:	all 100	all 10
.		
.		
.	a	b, b₂,...,b₉₉₉
W₉₉₉:	100	all 10

¹⁹ The numbers I have chosen to represent the individual's levels are arbitrary; all that is required is that all the better-off individuals be equally well off as one another, and similarly for the worse-off.

Temkin notes that some of the Individual Complaints aspects (MP&BOP, AP&BOP, WAP&BOP) judge the Sequence to be getting worse and worse, while others (MP&AVE, MP&ATBO) judge it to be getting better and better, while still others judge it to first be getting worse, and then better (AP&AVE, AP&ATBO, WAP&AVE, WAP&ATBO). Temkin later says, in chapter 10, that "all things considered, the Sequence first gets worse, then better, regarding inequality" (p. 297)²⁰; in other words, that the worlds at either end of the Sequence--closer to **W₁** or **W₉₉₉**-- are preferable. He does not give an explanation of the reasoning underlying this all-things-considered judgment about (in)equality, however. And his judgment here seems a little odd, in that only a minority of the Individual Complaints aspects (4 of 9) agree with this judgment. The idea of assigning positive value to equality, however, provides a possible explanation of why the Sequence first gets worse, then gets better.

For notice: the worlds at either end of the Sequence contain the most relations of equality between individuals, and the middle worlds contain the fewest. And saying that there is *more equality* in the end worlds--since the pedantic assumption has been rejected--is different than saying that there is *less inequality* in the end worlds, though these two claims are obviously related. And it seems plausible, I think, to assign positive value to relations of equality as they are a good thing about these end worlds; they are not merely the lack of a bad thing--i.e., an inequality. Equality is more than just a lack of inequality.²¹ And if we do assign positive value to equality rather than just counting it as a 'zero' in

²⁰ Again, Temkin also means that the Sequence first gets worse, then better with respect to (in)equality.

²¹ There is an analogy to be made here to the way in which pleasure is assessed on negative utilitarianism. See Chapter Seven, Section 7.1, where I discuss the analogy to negative utilitarianism in more detail.

assessing the inequality of the worlds in the Sequence, the judgment that the Sequence first gets worse and then gets better is explained²².

This response to the charge that giving positive value to relations of equality is ad hoc has along the way raised another question, that of scope.

6.32 Scope

The question of scope is a question about the application of assigning positive value to equality: should equality be assigned positive value in all cases, or only some?

This question arises, in part, because the implausibility of the pedantic assumption--and hence the plausibility the idea of assigning equality positive value in addition to assigning inequality disvalue--is *obvious* only for certain sorts of examples. The pedantic assumption seems most implausible, and therefore the idea of assigning positive value to equality most plausible, in cases with varying population size. But the pedantic assumption seemed less implausible in cases in which population size remains constant. As was seen in the earlier discussion of transfers, when population size does not vary the number of relations remains constant, and hence any gain in the number of equalities will be countered by an exactly equal loss in the number of inequalities. The question remains then: since it is only in cases involving varying population size that the pedantic assumption is *obviously* called into question, should the idea that equality be assigned

²² In surveying possible explanations of our intuitive judgments about the Sequence that Temkin did not even *consider* the idea that there are more relations of equality between individuals in the end worlds, a 'fact' which is obvious about the Sequence even at a first glance. I think this shows the extent to which it is easy to fall under the influence of the pedantic assumption.

positive value (in addition to inequality being assigned disvalue), be restricted to these sorts of cases?

I do not think so, as the above discussion of the Sequence indicated. Equality is more than just the absence of inequality, even if in some cases--those with a fixed population size--adding a relation of equality (through transfers) means the losing a relation of inequality²³.

Note, though, the difference between this issue about scope and the earlier issue about the idea of valuing equality positively being ad hoc. The query about scope is not about the plausibility of valuing equality positively; it is about how, or more perspicuously, *when*, this idea is to be applied. The next query is also more about the specifics of assigning positive value to equality, rather than about whether or not the idea is plausible in the first place.

6.33 What About Little Inequalities?

There is another query to be raised about the idea of valuing equality positively: what about little inequalities? The concern here is about assigning positive value only to *strict* or *perfect* equality between individuals; little inequalities between individuals, despite being very close to the desired strict equality, are assigned disvalue only. But when we consider actual cases, this seems implausible.

²³ However, if it can be shown that assigning positive value to equality makes no practical difference to our judgments about cases that do not involve variation in population size, I would accept a somewhat restricted application. But it is far from obvious to me that valuing equality positively never does make a difference to such cases, as the discussion of the Sequence suggested.

Consider again the adding BOPs example, varied slightly: each added individual is added at a level just ever so slightly higher than the level of the previous better-off individual, as follows:

	a	b		a	b	b ₂	b ₃	b ₄ ...
A:	10	20	E _n :	10	20	20.01	20.02	20.03...

If it is only strict equality between individuals that is given positive value, E_n is not judged to be an improvement over A with respect to (in)equality. Instead, due to the increasing inequality, though this increase is minimal, E_n is judged to be getting worse and worse than A. But does this seem plausible, given the similarity between E_n and A_n, and given that A_n is judged to be an improvement over A?:

	a	b, b ₂ ,...,b _n
A _n :	10	all 20

In order to accommodate this difficulty, the egalitarian need not abandon the idea of giving equality positive value; she need only supplement it by also assigning positive value to little inequalities. But how then is she to avoid the intuitively undesirable consequence that inequality, at least some of the time, is a good thing?

One way in which this might be accomplished is by having two different value scales: one of positive value for equality and little inequalities, and the other of disvalue for inequality. There is nothing implausible about this idea in itself; there is no requirement, especially given the rejection of the pedantic assumption, that the positive value of equality and the negative value of inequality be assessed by one and the same

scale. By careful consideration of where the 'zero point' lies on each value scale, the query about little inequalities can be answered.

Consider first the negative value scale for inequality. Here, the intuitively acceptable place for the zero point is the origin: no inequality means a disvalue of zero, and some inequality--no matter how small--has some disvalue, this disvalue increasing as the inequality increases. This is the sort of scale Temkin and others accept: inequality has disvalue, and the best possible value for inequality is zero, achieved when there is no inequality whatsoever. But what is the intuitively acceptable place for the zero point for the positive value scale for equality?

Here, the idea that the zero point is the origin does not seem as intuitively persuasive. If equality is considered to be a good thing, it may be argued, then why can't little inequalities--which are very close to this good thing--also be considered to be good things? The zero point for value would then be somewhere above the origin: strict equality would be assigned the greatest positive value, with little inequalities being assigned lesser positive value.

By combining these two value scales, the implausible results of the A/E_n case are avoided. According to the negative value scale, the little inequalities between the better-off in E_n are assigned small amounts of disvalue (and the larger inequalities between the added better-off and the original worse-off are also assigned disvalue). According to the positive value scale, these little inequalities are assigned some degree of positive value, though not as much as would be assigned were they relations of strict equality. As long as

this positive value outweighs the small amounts of disvalue assigned to these little inequalities, E_n , like A_n , will eventually²⁴ be judged to be preferable to A .

But again, the main thing to note about this query about little inequalities is that it concerns how exactly to go about assigning positive value to equality, rather than whether or not doing so is plausible in the first place. Asking about where the zero-point should be for the positive value scale for equality already supposes that there is something to this idea²⁵.

6.24 Only an Academic Exercise?

There is one final query about the idea of valuing equality positively that I shall consider: is this issue a mere academic exercise, or does giving positive value to equality have real world application? Note again that this concern is not about whether or not assigning positive value to equality is plausible, nor is it about the precise way in which positive value is to be assigned. Rather, it is about whether or not doing so can or will have any real world significance.

It seems to me that this issue has real world significance in at least two ways. First,

²⁴ Though it will be later in the series that this judgment is made than was the case for A_n , as the little inequalities are not assigned as much positive value as relations of equality.

²⁵ I am unsure, however, how persuaded we should be by our intuitions about this case upon closer analysis. Though there is little doubt that the example strikes us as intuitively persuasive, this may be due primarily to the influence of deviation in our thinking about inequality: little inequalities are still somewhat good since they deviate so very little from equality. But deviation, as I argued in Chapter Two, has difficulties of its own.

the majority of the real-world comparisons that we wish to make are of the sort in which it is most obvious that the pedantic assumption should be rejected and equality assigned positive value--namely, comparisons involving varying population size. When we compare two societies, or two groups within a society--e.g., white to non-white, rich to poor, seniors to GenXers--we are dealing with varying population size. Second, considering equality to be a good thing, over and above its being a lack of a bad thing--i.e., inequality--may well have implications for the sort of policies we adopt to promote equality. For the concern to promote equality is not always the same as the concern to reduce inequality.

If our concern is to promote equality, rather than just reduce inequality, we will endorse different sorts of policies. We will not be solely concerned with *ameliorative* policies--i.e., policies which improve or lessen inequality; sometimes we may be more concerned with promoting equality. Consider, for example, a policy decision to be made regarding consumption of resources. By following one policy, our future society is predicted to be fairly small, with equal number of better- and worse-off individuals (thus resembling **A**), whereas by following another policy our future society is predicted to be quite a bit larger, with the vast majority of individuals being better-off, and only very few being worse-off (thus resembling **A_n**). Which policy should the egalitarian endorse insofar as her concern is only with (in)equality?

	a	b		a	b, b₂,...,b_n
A:	10	20	A_n:	10	all 20

I think the egalitarian should endorse the policy leading to a future society that resembles **A_n**, and should do so for egalitarian reasons. Although **A_n** is better than **A** in many other ways, e.g., in terms of both total and average utility, the egalitarian is not confusing a concern for utility with her real reason for endorsing the policy leading to **A_n**.

Insofar as her concern is restricted to (in)equality, and specifically with promoting equality between society's future members, she chooses to endorse the policy that leads to a future society resembling A_n .

This is a case, then, when giving value to equality does make a difference: if it were only the disvalue of inequality that were focused upon, she might well endorse the other policy. Promoting equality between individuals, as may well be the aim of some policies, is not the same thing as reducing inequality. Hence, it is not merely an academic exercise whether or not equality is assigned positive value; doing so can have real world significance.

CHAPTER SEVEN: ASSIGNING POSITIVE VALUE TO EQUALITY

In this final chapter I shall consider some implications of rejecting the pedantic assumption and assigning positive value to equality, focusing in particular on the implications for an acceptable egalitarian measure of (in)equality. One such implication is clear: none of the inequality measures I considered earlier, neither deviation measures nor the economic measures nor Individual Complaints, are acceptable measures of (in)equality for the egalitarian, as none of them acknowledge or assign positive value to relations of equality between individuals. Whether or not they are acceptable measures of inequality--a component of the concern for (in)equality--is a separate and important issue, and one that much of my discussion in Chapters Two through Five was aimed at.

I argued that many of them were unacceptable because, among, other things, they ignored certain relations of inequality between individuals. It is for analogous reasons that they are unacceptable as measures of (in)equality, as they ignore relations of equality between individuals¹.

An acceptable measure of (in)equality should assess and assign positive value to the relations of equality between individuals in an outcome, as well assess and assign negative value (disvalue) to those of inequality. I shall sketch two possible ways in which one might try to assess and assign value to relations of equality later in this chapter. But first I shall consider other options available to the egalitarian in light of the findings about the unacceptability of the pedantic assumption. Though assigning positive value to relations of equality between individuals is, I think, the most satisfactory way to adjust her

¹ Recall that for this reason I reject supplementing Individuals Complaints in some way, such as with a principle that relativizes to population size, in order to accommodate the problematic adding BOPs example.

view, there are other options available. She might (i) try to adjust her view so that the 'obvious and uncontroversial' pedantic assumption need not be rejected; or she might instead (ii) accept that it should be rejected, but nonetheless resist the idea of assigning positive value to relations of equality. These two adjustments can be effected by (i) rejecting the *individualistic* approach to (in)equality; or (ii) re-characterizing her view as *negative* egalitarianism.

7.1 OTHER OPTIONS: AVOIDING EQUALITY AS A POSITIVE VALUE

7.11 Maintain the pedantic assumption through a non-individualistic approach?

One option open to the egalitarian who does not wish to abandon the pedantic assumption is to reject taking an individualistic approach to (in)equality--that is, to deny that it is the relations of equality or inequality *between individuals* that matter. For it is only when equality and inequality are understood individualistically as relations between individuals that it is obvious that the pedantic assumption is mistaken. The egalitarian might instead argue that it is the (in)equality between groups that matters, or that her concern is for (in)equality in a 'holistic' sense, such as an overall 'pattern of distribution'. Providing she cashed out her view in certain ways, such as defining groups by their level², it would be possible for her to continue to endorse the pedantic assumption.

However, I do not think this route would likely be favoured by many egalitarians. Aside from inherent difficulties of cashing out a non-individualistic approach to

² Recall (Chapter Six) that this would thereby eliminate the possibility of relations of equality between groups; inequality would be the only possible relation.

(in)equality in a plausible way³, this sort of approach runs directly counter to that favoured by many writers. Temkin, for one, explicitly and repeatedly endorses the thesis that inequality is individualistic; and others, even those who disagree with much of the rest of his view of inequality, nonetheless agree with this thesis.⁴ McKerlie, in his review of *Inequality*, goes as far as to treat this individualistic thesis as by and large uncontroversial⁵.

Although rejecting an individualistic approach to inequality seems problematic, what about rejecting this sort of approach for equality only? That is, would it be possible to hold a view that considered inequality individualistically, assigning disvalue to relations of inequality between individuals, but considered equality non-individualistically, e.g., 'holistically'? Whether or not the egalitarian can, in fact, plausibly hold this rather strange view, it seems certain that this view would not allow her to maintain the pedantic assumption. For how could equality and inequality to be 'one and the same thing', if at the same time one was individualistic and the other holistic?

In sum, then, I do not think this option of questioning the individualistic thesis in order to maintain the pedantic assumption and avoid giving positive value to relations of equality is at all viable for the egalitarian. Trying to do so is both paradoxical and implausible: given that inequality is understood individualistically, if one wants to maintain the pedantic assumption, one needs to reject the individualistic approach for equality (for

³ For example, explaining what exactly is meant by a 'holistic' sense of (in)equality and justifying why it is this sense that matters; or explaining and justifying why it is the relations between groups--rather than the between the individuals in those groups--that matters.

⁴ e.g., Richard Sikora, in his review of Temkin's *Inequality*, in *Ethics*, vol. 105, April 1995.

⁵ *Canadian Journal of Philosophy*, 25 (1995): 623-36.

when both equality and inequality are understood individually, the pedantic assumption does not hold) and adopt instead a 'holistic' or 'group-centered' non-individualistic approach. But if equality is understood non-individualistically, one cannot in fact maintain the pedantic assumption as, *ex hypothesi*, equality and inequality are no longer the same sort of thing at all--one is individualistic and one holistic. As different sorts of thing, it is difficult to see how they could be 'one and the same issue' or 'two sides of the same coin'.

7.12 Negative egalitarianism

A second option open to the egalitarian who wants to avoid assigning value to relations of equality is to clarify the way in which 'egalitarianism' should be characterized; specifically, by no longer talking about the intrinsic value of equality as a relation between individuals as a fundamental concern and instead only talk about the disvalue of inequality. Such a view is perhaps better described as 'negative egalitarianism' than 'egalitarianism'. Negative egalitarianism would take as its fundamental tenet the Temkin-esque "it is a bad thing if some people are worse off than others through no fault of their own", but it would not confuse this principle, as Temkin does, with the egalitarian concerns for equality and/or the relations between individuals. Though proponents of negative egalitarianism would still consider relations between individuals or how individuals fare relative to one another in assessing and comparing outcomes, their concern would be restricted to the relations *of inequality* between individuals, or to some individuals being *worse off* than others.

There is an obvious analogy here to negative utilitarianism. In both moral systems the only sort of value attributed to outcomes is *disvalue*, and outcomes with lesser amounts of disvalue--pain/suffering or inequality--are preferable. Neither view says

anything about what is considered positively valuable; indeed, there are no positively-valued good things on such views. On negative views good things are good only insofar as they imply the absence of a negatively-valued bad thing. Pleasure is considered only as the absence of pain; equality only as the absence of inequality.

Though this negative egalitarianism option may seem, *prima facie*, somewhat viable, it begins to look dubious upon closer examination. Whether or not negative egalitarianism ultimately turns out to be a viable moral view will depend upon a couple of things, one a rather narrow concern and one rather broad. The narrow concern is just working out the details of this view; among other things, it will mean working out the details in a way that can account for our intuitions about the adding BOPs example. Perhaps this might be done by adopting a version of discounting (discussed below) that generated the discounting principle by considering what percentage of the total number of relations between individuals in an outcome are relations of inequality.

The viability of this view also rests upon the much broader issue of whether or not 'negative' moral systems are themselves viable, a question which is obviously beyond the scope of this thesis. But note that insofar as negative utilitarianism seems implausible in certain respects, by analogy negative egalitarianism may also seem implausible. Just as one might question the former's claim that pain/suffering are all that matter in assessing an individual's well-being, one might also question the latter's claim that it is only the relations of inequality that matter in assessing how individuals fare relative to one another. And just as one might question treating pleasure as only the absence of pain, one might question treating equality as only the absence of inequality.⁶

⁶ It is also difficult to see what is distinctively 'egalitarian' about negative egalitarianism. As we saw in Chapter One, accepting equality as an intrinsic moral value helps to distinguish egalitarianism from other moral systems, but this characteristic is absent from

Thus, as I said earlier, I think the best option for the egalitarian in light of the rejection of the pedantic assumption is to assign value to relations of equality between individuals, over and above assigning disvalue to relations of inequality. I mentioned earlier two different ways in which one might attempt to assign positive value to relations of equality in a measure of (in)equality: (i) a *direct value* approach; and (ii) a *discounting* approach. Though I think the former approach is the more promising, both of these approaches are problematic in one way or another⁷.

7.2 ASSIGNING POSITIVE VALUE TO EQUALITY

7.21 Direct value

One option is to assign value directly to the relations of equality between individuals in an outcome. On the simplest version of this view each relation of equality in an outcome is assigned the same amount of positive value, e.g., 1 unit. A more complicated version of this view might also assign value to small inequalities, though less and less value as the inequalities deviate further and further from perfect equality. Nonetheless, this more complicated version is still a straight or direct value view, as it is

negative egalitarianism. And it isn't, strictly speaking, correct to say that 'accepting inequality as an intrinsic disvalue' is a characteristic of this negative egalitarianism; it is only *undeserved* inequality that is disvalued. The question then arises: is the negative egalitarian's actual claim that undeserved inequality is disvaluable *because* it is undeserved? But if so, how does negative egalitarianism differ from desert theory?

⁷ This is not to be taken as anything like a complete survey of how one might assign positive value to relations of equality; there may well be other methods.

the relations of equality themselves that are assigned value. In assessing overall (in)equality, the positive equality index--that is, value of the relations of equality (and possibly little relations of inequality)--would be combined with the negative inequality index (the total amount of disvalue of the relations of inequality in the outcome) thus yielding a total (in)equality index.

Consider what this view would say about the adding BOPs example:

	a	b		a	b, b ₂ ,...,b _n
A:	10	20	A _n :	10	all 20

According to this direct value approach, the point at which the larger outcome is better than the smaller will depend upon the comparative amounts of value assigned to a relation of equality and disvalue assigned to relations of inequality. If the value of a relation of equality was comparatively quite small--say, 1 unit of positive value--A_n would need to be quite a bit larger than A (hence having many more relations of equality) before it would be judged to be better than A with respect to (in)equality. If the value of a relation of equality was comparatively much bigger--say, 10 units of positive value--A_n would be judged to be an improvement over A much earlier in the series of additions. In fact, if the value assigned to a relation of equality was comparatively large enough, A_n would be judged to be an improvement over A with the very first individual added.

These different possible judgments about when exactly A_n is better than A highlight a difficulty for the straight value approach to equality: it seems arbitrary exactly how much value is assigned to a relation of equality. One might get around this difficulty to some degree by, for example, first assessing the disvalue of the relations of inequality in a given example (such as the adding BOPs example) and checking one's intuitions about where in the series of additions things seem to be getting better, and then working

backwards to calculate how much positive value must be assigned to a relation of equality in order to accommodate these results. Such a practice will not necessarily yield an agreed-upon value scheme for equality, however. For one thing, different individuals may differ in their intuitions about when it is in the series that the added individuals are making things better and/or with respect to the precise measure of inequality they find most plausible. Further, there is no guarantee that even one and the same individual 'working backward' from his intuitions about different examples would arrive at the same amount of value to be assigned to equality in each case.

The real difficulty here is that we have different value scales--a positive one for relations of equality (and little inequalities), and a negative one for all inequalities--and it is not clear how to compare judgments made on different scales. This difficulty is perhaps highlighted, as the direct value approach to equality does not respect a significant difference between equality and inequality: relations of inequality comes in degrees, whereas those of equality do not. Though little inequalities approaching equality may be assigned varying degrees of positive value, equality is nonetheless a limiting case. The positive value assigned to a relation of equality is the upper limit, the maximum possible positive value attributable to a relation between individuals. In contrast, there is no limit to the disvalue that may be assigned to a relation of inequality: the larger the inequality, the larger the disvalue.

There is one further issue to be decided on this direct value approach. Assuming that the maximum positive value attributable to a relation between individuals--i.e., to a relation of equality--can be determined, should this value be linear or asymptotic? Recall: one argument in favour of an asymptotic value scheme for equality is that it avoids the implication that larger equal worlds are *vastly* superior with respect to (in)equality than analogous smaller worlds. By assigning diminishing marginal value to relations of equality, where the value gained by each additional relation of equality approaches, but never

reaches, zero, larger equal worlds will be assigned *somewhat* more value, though not necessarily *a lot* more value.

7.22 Discounting

The difficulty had by the direct approach about exactly how much comparative value to assign to a relation of equality is avoided by taking a discounting approach to equality⁸. The discounting approach does not assign value directly to relations of equality; instead it considers these relations only insofar as they minimize or discount the disvalue had by the relations of inequality. On this view, the disvalue of the relations of inequality is assessed first, and then the resulting inequality index is discounted according to a principle generated by the number of relations of equality in the outcome, thus yielding the (in)equality index for the outcome. One way to generate such a discounting principle is by considering the proportion of relations of equality to inequality.

Consider again the adding BOPs example, and how the 'proportion of relations' might generate a discounting principle:

	a	b		a	b, b ₂ ,...,b _n
A:	10	20	A _n :	10	all 20

⁸ However, the discounting approach is not without problems of its own. And, as we shall see, it is debatable if discounting is really avoids the problem with the direct value approach. For the problem is ultimately one of arbitrariness: what precise number should be assigned to a relation of equality? Discounting avoids the problem only by adopting an equally arbitrary discounting principle.

Assume, for sake of argument, that the issue of how to assess inequality has been decided, and that the disvalue of inequality is simply the sum of the gaps between individuals. In A, then, there are 10 units of disvalue of inequality. And the 'proportion of relations' is zero relations of equality to one relation of inequality--that is, equality counts for zero percent (and inequality for 100 percent) of the relations in outcome A. Hence, according to the discounting approach, these 10 units of inequality in A would count for their full amount in the (in)equality index, as there are no relations of equality, and hence no discounting principle generated from them, to discount it. But in the larger outcome, say, **A₉₉**:

	a	b, b₂,...,b₉₉
A₉₉:	10	all 20

there are 990 units of disvalue of inequality, and 4851 relations of equality to only 99 of inequality. In other words, the inequality index of **A₉₉** is 990 units, and equality accounts for approximately 95 percent of the relations in the outcome, and inequality for only around 5 percent. Hence, according to the discounting approach, the final (in)equality index would not be anything like 990 units of disvalue, as this inequality index--990 units of disvalue--would be drastically discounted due to the overwhelming proportion of relations of equality in the outcome. However, the precise discounting principle generated from the fact that 95 percent of the relations are equality and only 5 percent inequality is arbitrary; there is no requirement, for example, that we multiply the 990 units of disvalue by .05.⁹

⁹ This discounting value scheme for equality has some plausible consequences for certain cases. Consider again the 'problem' of the larger versus the smaller perfectly equal world. The consequence that the larger world is vastly superior than the smaller is avoided, but

Thus, on a discounting value scheme for equality one difficulty had by the direct value approach is avoided: a given amount of positive value is not 'arbitrarily' assigned to a relation of equality. One need not determine how much value to assign to a relation of equality, nor how this should compare with the amount of disvalue assigned to varying degrees of inequality: relations of equality are not themselves assigned positive value at all. It considers the *degree* of inequality in a relation of inequality separately, and weighs only the *number* of relations of equality against the *number* of relations of inequality in order to generate a discounting principle. However, it too is arbitrary, for there is no hard and fast rule as to how the discounting principle should be generated. Thus, in avoiding the *particular* arbitrariness problem encountered by the direct value approach, it creates another such problem.

Whatever one thinks of trading one arbitrariness for another, it is clear that the discounting approach is highly problematic for the egalitarian. This approach does not capture the egalitarian's belief that equality is *intrinsically* valuable: it does not actually assign positive value to equality at all. It considers equality to be a good thing only insofar as it discounts or minimizes the strength of the bad things--the relations of inequality--in assessing (in)equality. It does not count a relation of equality between individuals as a good thing in and of itself. Worlds of perfect equality all have an (in)equality index of zero, and this is the best index possible on a discounting approach. There are no positive values.

avoided in an entirely different way than on an asymptotic direct value schema. All worlds of perfect equality are judged to be equivalent on a discounting approach. There is nothing for a discounting principle to discount in the case of worlds of equality; the inequality index, and thus the (in)equality index, of all such worlds is zero.

7.3 COMPLEX COMPLEXITY

Having argued against the pedantic assumption and in favour of assigning positive value to equality, the question remains: what do these arguments imply for the egalitarian's project in general? One thing is certain: her project is much more complex than previously thought, in two different ways. First, the simplifying principle¹⁰ employed by many--i.e., considering groups as if they contained but one individual--no longer seems unobjectionable, and thus one's calculations will be more complicated. Second, in comparing outcomes, complexity arises not just in the 'final' stage of balancing the judgments yielded by the concern for (in)equality with those of other values accepted by the egalitarian, including utility; it is present in many of the steps along the way.

7.31 Complicated calculations

Consider again the following simplifying principle: "To rank outcomes...it is easiest if one assumes there is one person in each group and assigns an appropriate level to each person. Such an assumption greatly simplifies one's calculations, and does not affect one's ordinal rankings." (Temkin, p.57, n.6). Is this principle really uncontroversial when it comes to assessing (in)equality? I do not think so, as can be shown as follows:

Consider a four-person world with only two groups, the better-off and the worse-off:

¹⁰ Recall Chapter One, Section 1.5.

	(the worse-off)	(the better-off)
	a, a₂	b, b₂
K:	both 10	both 20

According to the simplifying principle, **K** is equivalent to **K***:

	(the worse-off)	(the better-off)
K*:	a	b
	10	20

But is this 'translation' of **K**--that is, thinking of **K*** instead of **K**--uncontroversial when it comes to (in)equality?

It seems to me that this method of translation is problematic for the egalitarian, as thinking of a group as if it were an individual greatly alters the number of relations of equality in the outcome. In effect, the relations of equality, originally existing only *within* a group, are thereby lost. In the **K/K*** case above, this is quite clear. In **K**, there are a total of 6 relations between individuals: 2 of equality (**a/a₂**, **b/b₂**), and 4 of inequality (**a/b**, **a/b₂**, **a₂/b**, **a₂/b₂**). But in **K*** there is only one relation between individuals, and that relation is one of inequality. There are no relations of equality *at all* in **K***, whereas there were two such relations in **K**. Thus, it seems to me that this simplifying principle should be rejected, which would in turn make the egalitarian's calculations much more complex.

7.32 Complex Balancing of Values

There is a second complexity stemming from rejecting the pedantic assumption and assigning positive value to equality--that of balancing different values. There is no doubt

that the egalitarian's all-thing-considered judgments are complex in this sense; she needs to balance her concern for (in)equality against her concern for any other values she may hold, such as utility. But it also seems that balancing is required within her concern for (in)equality itself, as she must balance the concern about and disvalue of relations of inequality with that of the concern about and value of relations of equality. Further, if an approach such as Individual Complaints is indeed the most satisfactory approach to assessing inequality--that is, if using a multi-faceted or complex measure is the best way to assess inequality--then the inequality component of the concern for (in)equality will also involve complexity.

But does my argument in favour of multi-level complexity--inequality as a component of (in)equality, and (in)equality as component of the egalitarian's all-things-considered judgments--show that egalitarianism is confused or should be rejected? I do not think so. All my argument shows is that egalitarianism is a far more complicated moral system than some may have thought. Accepting equality as an intrinsic moral value may have seemed like a simple idea, but doing so involves many complications.

APPENDIX A

Added individuals, when they alter an outcome's median or average, can never reduce the total amount of inequality/deviation. This is shown as follows:

(i) DEV AVE

Since the added individual (I_a) changes the average, he must be at a level either below the original average (AVE_0), in which case the new average (AVE_n) will be lower than AVE_0 , or at a level above AVE_0 , in which case AVE_n will be higher than AVE_0 . (If I_a were right at AVE_0 he wouldn't change the average at all). Suppose I_a is at a level below AVE_0 , thus AVE_n is lower than AVE_0 . Now the amount by which I_a 's level can lower AVE_0 to yields AVE_n is $x/(n+1)$, where x is the difference between I_a 's level and AVE_0 , and n is the number of individuals in the original outcome. (Note also that I_a 's level can be expressed by xn .)

Case I: Suppose that there are no individuals at any level between AVE_n and AVE_0 . Since I_a is added at a level below AVE_0 , the deviation of all those originally above or at AVE_0 will have increased by $x/(n+1)$, and the deviation of those originally below AVE_0 will have decreased by $x/(n+1)$. I_a must also deviate from AVE_n (as, ex hypothesi, his addition altered the average). Since for any average, deviation above equals deviation below, the total deviation of those originally above AVE_0 must equal the total deviation of those originally below AVE_0 . But since I_a also deviates from AVE_n , adding I_a will result in an increased inequality index.

Case II: Suppose there are individuals at various levels between AVE_n and AVE_0 . Individuals between AVE_0 and AVE_n , but closer to AVE_0 than AVE_n , will have their

original deviation amount altered by at most a figure approaching $x/(n+1)$. Individuals at a level *equidistant* between AVE_n and AVE_0 have the same deviation both before and after I_a is added. Thus the only possible decrease in deviation, and thus the only possible decrease in the inequality index) is with individuals between AVE_n and AVE_0 who are closer to AVE_n than AVE_0 . The maximum decrease in the inequality index from such individuals will be equal to however many of them there are, multiplied by a figure that approaches $x/(n+1)$. Since, *ex hypothesi*, not all individuals in the outcome are at a level between AVE_n and AVE_0 , the number of such individuals must be less than n . Recall that I_a 's level is equal to xn . I_a 's deviation from AVE_n -- $|xn \text{ minus } AVE_n|$ --which increases the original inequality index must be larger than the possible reduction in deviation from individuals between AVE_n and AVE_0 --which is at most [$\text{approaching-}x/(n+1)$ times less-than- $n| - AVE_n|$].

A parallel argument can be made about individuals added at a level above AVE_0 .

(ii) DEV MED

Recall that in calculating deviation from the median a world is compared to its 'closest' equal world, yielding the smallest inequality index possible. Recall also that the added individual (I_a) must be added at a level other than that of the original median (MED_0) as, *ex hypothesi*, he altered the median. But could adding I_a result in a smaller inequality index? The following *reductio* argument shows it could not:

Suppose that adding I_a does result in a lowered inequality index. Thus, by adding I_a there is a closer world from which to calculate deviation. Since, *ex hypothesi*, I_a himself contributes to the deviation, by removing him and his deviation from the outcome--though still keeping the same level from which to calculate deviation--a still smaller inequality

index is obtained. Since the only people who would remain would be those who were in the original outcome before I_a was added, this would mean that there is a closer world from which to calculate deviation than the world where everyone is at MED_0 . But this is absurd. Thus, by adding an individual at a level other than the median, the inequality index cannot decrease.

Broome, John. *Weighing Goods*. Basil Blackwell, 1991.

Dworkin, Ronald. "What is Equality? Part 1: Equality of Welfare". *Philosophy and Public Affairs* 10 (1981): 185-246.

"What is Equality? Part 2: Equality of Resources". *Philosophy and Public Affairs* 10 (1981): 283-345.

The Globe and Mail, Dec 17, 1994. "The Wage gap: The Rich Get Richer, The Poor Get Pummelled".

McKerlie, Dennis. "Equality and Priority". *Utilitas* 6 (1994): 25-42.

"Equality and Time". *Ethics* 99 (1989): 475-91.

"Critical Notice of Larry S. Temkin *Inequality*". *Canadian Journal of Philosophy* 25 (1995): 623-36.

Nagel, Thomas. *Mortal Questions*. Cambridge University Press, 1979.

Parfit, Derek. *Equality or Priority?* The Lindley Lecture, The University of Kansas 1991.

Copyright 1995 by the Department of Philosophy, University of Kansas.

"On Giving Priority to the Worse-off". Unpublished manuscript, 1989.

Rawls, John. *A Theory of Justice*. Harvard University Press, 1971.

Sen, Amartya. "Equality of What?". Reprinted in *Choice, Welfare and Measurement*.

Basil Blackwell and MIT Press, 1982.

Inequality Re-examined. Oxford University Press, 1992.

On Economic Inequality. Clarendon Press, 1973.

Sikora, Richard. Review of Temkin's *Inequality*. *Ethics* 105, (1995): 663-665.

Temkin, Larry. *Inequality*. Oxford University Press, 1993.