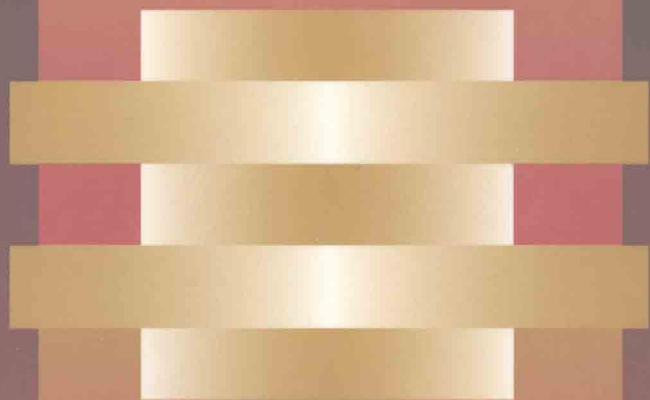


Equality of *O*ppportunity



John E. Roemer

EQUALITY
of
OPPORTUNITY

John E. Roemer

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Preface

I am indebted to Steven Durlauf, Ignacio Ortuno-Ortin, James Robinson, William Simon, and Peter Vallentyne, who each read parts of this manuscript and provided me with useful comments. My ideas have also been influenced by the contributors to a symposium, organized by Joshua Cohen and published in the *Boston Review* in 1995, in which Richard Epstein, Elizabeth Fox-Genovese, Susan Hurley, Eric Maskin, Arthur Ripstein, Nancy Rosenblum, Thomas Scanlon, Samuel Scheffler, and Robert Solow examined and critiqued an early version of my proposal. I have had useful discussions on parts of the manuscript with my colleague Joaquim Silvestre. Finally, as is so often the case, I am deeply indebted to G. A. Cohen, who read the manuscript and discussed its problems with me over an extended period. I am also grateful to participants at many seminars and conferences over the last several years who have commented on these ideas.

This essay oscillates, methodologically, between the philosophical and the economic. Within each method, I am confident that the technique is sufficiently elementary that the arguments can be understood by graduate students. Unfortunately, too few graduate students today who work in political philosophy or welfare economics have an understanding of both methods. I think that to do good political philosophy or welfare economics, it is essential to be cognizant of the main issues and ideas in both disciplines, if not to have both sets of technique in one's tool kit. Political philosophers with too little knowledge of welfare economics frequently try to reinvent the wheel, usually with bad results. Welfare economists who are poorly read in political philosophy often waste their time on technical questions that philosophy shows have no interest for the study of human welfare.

If this essay can at least illustrate the value of an interdisciplinary approach, it will have served one useful purpose.

July 1997

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Introduction

Two conceptions of equality of opportunity are prevalent today in Western democracies. The first says that society should do what it can to “level the playing field” among individuals who compete for positions, or, more generally, that it level the playing field among individuals during their periods of formation, so that all those with relevant potential will eventually be admissible to pools of candidates competing for positions. The second conception, which I call the nondiscrimination principle, states that, in the competition for positions in society, all individuals who possess the attributes relevant for the performance of the duties of the position in question be included in the pool of eligible candidates, and that an individual’s possible occupancy of the position be judged only with respect to those relevant attributes. An instance of the first principle is that compensatory education be provided for children from disadvantaged social backgrounds, so that a larger proportion of them will acquire skills required to compete, later on, for jobs against persons with more advantaged childhoods. An instance of the second principle is that race or sex, as such, should not count for or against a person’s eligibility for a position, when race or sex is an irrelevant attribute insofar as the performance of the duties of the position is concerned.

Indeed, one can view the nondiscrimination principle as deriving from a particular interpretation of the level-the-playing-field principle. That interpretation says that, in the presence of discrimination, some persons have an unfair advantage over others in the competition for positions, because their eligibility for the position in question is considered superior on account of social attitudes and practices which, indeed, should not count. The playing field is leveled by insisting that such attitudes and practice indeed *not* count.

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But the typical application of the level-the-playing-field principle goes farther than the nondiscrimination principle. It might, for example, say that equal opportunity requires that educational expenditures per pupil in public schools be equalized in a state or country. Were such equalization not to have been implemented, then nondiscrimination alone, in the competition for jobs, would not constitute the provision of equal opportunity, for earlier the playing field was not leveled, if children from rich school districts had access to better education than did children from poor school districts. Indeed, equalizing per pupil expenditures may not go far enough toward leveling the playing field in such cases. If an educated child is the output forthcoming from applying a certain technology to a bundle of inputs or resources, some of which are "internal" to the child—his genes, his family, his neighborhood—and some of which can be supplied "externally" by the school district—teachers, schools, books—then leveling the playing field might be thought to require compensating those with inferior bundles of internal resources with an extra dose of external resources.

Among the citizens of any advanced democracy, we find individuals who hold a spectrum of views with respect to what is required for equal opportunity, from the nondiscrimination view at one pole to pervasive social provision to correct for all manner of disadvantage at the other. Common to all these views, however, is the precept that the equal-opportunity principle, at some point, holds the individual accountable for the achievement of the advantage in question, whether that advantage be a level of educational achievement, health, employment status, income, or the economist's utility or welfare. Thus there is, in the notion of equality of opportunity, a "before" and an "after": before the competition starts, opportunities must be equalized, by social intervention if need be, but after it begins, individuals are on their own. The different views of equal opportunity can be categorized according to where they place the starting gate which separates "before" from "after."

I attempt in this essay to propose a precise way that we can organize our disparate views about equal opportunity. More specifically, different people have different conceptions about where the starting gate should be, or about the degrees to which individuals should be held accountable for the outcomes or advantage they eventually enjoy. My purpose is to propose an algorithm which will enable a society (or a social planner) to translate any such view about personal accountability into a social policy that will implement a kind or degree of equal opportunity consonant with that view. If my algorithm is generally accepted as a reasonable one, then the political

debate over what equality of opportunity requires can be reduced from one over social policy to a more fundamental debate about the proper realm of individual accountability. For once that realm has been agreed upon, or once a view of what that realm should be has been victorious through political competition, then a specific equal-opportunity policy will follow automatically, as it were, from the application of my proposed algorithm.

This should be contrasted to the way debate over equal opportunity takes place today, which is primarily over what the social policy should be. But that debate is often confused, as the participants do not share a common notion or definition of what equality of opportunity consists in. I propose, if you will, a definition of equal opportunity. It will not resolve the debate, but it can force it to take place over questions which are more fundamental than the choice of one particular social policy or another.

I have just said that my aim is pluralistic, in the sense that I shall provide a tool that can be used to calculate an equal-opportunity policy consonant with any of a spectrum of views of individual accountability. It is pluralistic in another sense as well. People with many different conceptions of what distributive justice consists in endorse equality of opportunity. I do not intend to advocate a particular conception of distributive justice, or even the view that distributive justice consists in some form of equal opportunity. (Perhaps I believe that to be the case, but it is a case I shall not prosecute here.) People who hold various theories of distributive justice advocate the provision of equal opportunity not only in different degrees (that is, with different conceptions of accountability) but also in different spheres of social life. I shall endeavor to respect this variety of views by showing how the algorithm of equal opportunity that I propose can be applied in specific spheres. Sections 8, 9, and 10 will apply the algorithm to the spheres of health, education, and employment, and section 11 presents a summary of an attempt to calculate the educational policy that would equalize opportunities for earning income in the United States. It is my hope, then, that persons from many points on the political spectrum will be able to use my proposal without committing themselves to a more pervasive egalitarianism than they are prepared to endorse.

I use two techniques in this essay, the philosophic and the economic. The former is used to locate the relevant concepts and to put forth a definition of equality of opportunity (principally in sections 2, 3, and to some extent in sections 12 and 14); the latter is used to move from the conceptual and somewhat imprecise level to a precise definition and consequent social policy. The preponderance of “economic” sections is due not to my

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thinking that the philosophical aspects of the problem are easier or fewer but, rather, to my being a trained economist and an untrained philosopher. Consequently, my economic imagination is considerably more developed than my philosophical one, a personal misfortune reflected in the sectional distribution of techniques. That having been said, I wish to emphasize that this essay's immediate intellectual forebears are the writings of three philosophers: Ronald Dworkin (1981a, 1981b), Richard Arneson (1989, 1990), and G. A. Cohen (1989). Although in the interest of brevity I do not attempt here to explain how my views descend from theirs, I have tried to do so in a recent book (Roemer 1996, chaps. 7, 8).

As the nondiscrimination principle is well known, this essay's task is to articulate carefully the "level-playing-field" view of equal opportunity. I will usually identify equality of opportunity with its "level-the-playing-field" interpretation. It is only in sections 12 and 14 that the nondiscrimination view is specifically discussed, and contrasted with the more inclusive level-the-playing-field view. It is in section 12 that I propose how we may decide what the scope of each of these two principles should be on the domain of social allocation issues.

Circumstances, Types, and Autonomous Choice

I shall assume, then, that the purpose of an equal-opportunity policy is to level the playing field. What features, in the backgrounds of the individuals in question, correspond to the mounds and troughs in the playing field that should be leveled off? I propose that these are the differential circumstances of individuals for which we believe they should not be held accountable, and which affect their ability to achieve or have access to the kind of advantage that is being sought. To be concrete, consider the access to a good life that is facilitated or made possible by education. Our society considers education a sufficiently important input into the good life that it views the social provision of a decent education to all individuals as necessary for equalizing opportunities for attaining the good life. Indeed, providing equal opportunities might seem to require providing equal amounts of educational resources for all individuals, and this goal has been achieved to varying extents in different countries and states. In the United States, education has historically been funded by municipalities, and this engenders unequal schools for municipalities with unequal tax bases or for municipalities which decide to fund education at different levels. A number of states have attempted to equalize educational resources by cutting the link between local taxes and school funding. In California, for instance, there is a law requiring the state to fund local public schools so that an equal amount is spent on each student in the state. The landmark *Brown* case (1954) provided that equal education for blacks and whites required that schools be integrated: the previous “separate but equal” policy was, it was ruled, oxymoronic. But in the United States, even were public educational financing to be equalized per capita, educational funding would not be equalized, because of the existence of private schools. In the Nordic countries, private schooling is for all practical purposes unavailable.

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Guaranteeing equal per capita financing of educational facilities is, however, not sufficient to provide equal educational achievement, since different children are able to use educational resources (teachers, books, school buildings) with different degrees of effectiveness or efficiency. To take an extreme case, mentally retarded children will require more resources than normal children to reach a similar level of functioning, or at least a level that we find to be acceptable. That we provide more educational resources for such children shows that we do not think that equal opportunity for the good life, insofar as the educational dimension is relevant, is achieved by providing equal educational resources per capita: we believe that more resources should be provided to some types of child if those children are unable to process the resources as effectively as others. The problem is to decide: when is it the case that different types of child are unable to process resources with equal effectiveness, and when is it the case that, though able to process them equally effectively, they do not by virtue of choice?

We must distinguish between the circumstances beyond a child's control which influence her ability to process educational resources and her acts of autonomous volition and effort. Equalizing opportunity for the good life, insofar as education is an input—or, more precisely, equalizing opportunity for educational achievement—requires distributing educational resources in such a way that the differential abilities of children to turn resources into educational achievement are compensated for, where those abilities are determined by circumstances beyond the control of the individual. Differential achievements due to the application of autonomous volition, however, should not be “leveled” or compensated for by an equal-opportunity policy.

Thus I am defining the “ability” of a child to transform resources into educational achievement as the propensity she has to effect that transformation, by virtue of the influence of circumstances beyond her control, which—let us say, for the moment—include her genes, her family background, her culture, and more generally, her social milieu, to the extent that that milieu is unchosen. But two children with the same relevant circumstances, and hence the same ability, may achieve different amounts of education by virtue of applying different amounts of effort. One extreme possibility is that circumstances determine everything, so that there is no room left for autonomous effort: if this were true, then we would say that what appears to be differential effort is in fact fully determined by circumstances beyond the control of the individuals. This case, which I call the deterministic case, is just one possibility. The general case is that educational achievement is determined jointly by circumstances and freely chosen effort, and equality

of opportunity requires compensating persons for the differences in their circumstances, insofar as those differences affect educational achievement, but not compensating them for the consequences of the differential application of effort.

Suppose—a tall order—that we knew exactly what circumstances jointly determined a child's ability to process resources into educational achievement. Suppose, further, the circumstances of a child could be precisely characterized as the value of a certain vector with, say, n components. Let us suppose, for simplicity, that this vector takes on a number of values in the population, considerably fewer than the number of individuals. Then we could partition the population of children in question into a set of *types*, where a type consists of all individuals whose value of this vector is the same. (In practice, we would define a type as the set of persons whose circumstantial vectors were almost the same.) By definition of ability and type, all individuals in a given type have the same ability to transform resources into educational achievement. By supposition, there are, on average, a fairly large number of individuals in the average type, since the number of types is small compared with the number of individuals. Let us further suppose that there is a large number of individuals in each type.

I would construct the equal-opportunity policy as follows. Suppose we distribute the educational resources in a way so that, within each type, each individual receives the same amount of resources. (There may be, however, different per capita amounts of the resource for different types.) We will observe, in all likelihood, a *distribution* of effort levels in each type, leading to differential educational achievements within each type. (I am here assuming that effort is one-dimensional and measurable.) Note that this distribution is itself a characteristic of the type, not of any individual. *Where* on that distribution an individual sits is, however, by construction, due to his choice of effort.

I propose that the equal-opportunity policy must equalize, in some average sense yet to be defined, the educational achievements of all types, but not equalize the achievements within types, which differ according to effort. Thus equality of opportunity requires compensating individuals with different amounts of resources for their differential abilities, but not for their differential efforts, holding ability (the consequence of circumstances) constant.

How can the common view, that equality of opportunity (for educational achievement) requires providing an equal resource bundle to all children, be viewed as a special case of the (as yet imprecise) definition I have offered

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of equal opportunity? It is the case in which we consider all children to belong to the same type. Then equal opportunity simply consists in providing each child with the same educational resources, and not adjusting for the differential efforts which ensue. By definition, in the world as I have constructed it, any difference in achievement, once types have been defined, is viewed as being the result of differential application of effort or, as I also say, of different autonomous choices that individuals make. Thus I view the different choices that individuals within a type make as relevantly autonomous in the sense of not being determined by circumstances (since circumstances are the same within a type). It is not obviously possible, however, to compare the difference in efforts made by individuals of different types: for those effort differences are in part due to their being different *distributions* of effort across types.

Although I have just explained how the conventional view (that equality of opportunity consists in supplying all children with the same amount of the social resource) can be viewed as a special case of my conception, there are many who would affirm the policy that I just stated parenthetically, yet do not think that all children belong to the same type, have the same set of circumstances. They may believe, instead, that it is inappropriate for the state to counteract biological and social differences by positive discrimination. According to what I have said so far, such people must be viewed as not advocating a level-the-playing-field conception of equal opportunity. They advocate only a partial leveling of the playing field.

I do not have a theory which would enable me to discover exactly what aspects of a person's environment are beyond his control and affect his relevant behavior in a way that relieves him or her of personal accountability for that behavior. In actual practice, the society in question shall decide, through some political process, what it wishes to deem "circumstances." Two kinds of disagreement would surface in the political discussion that would take place to select the appropriate circumstances: first, concerning what aspects of a person's behavior really lie beyond his control, and hence should be attributed to the effect of circumstances, and second, whether to level the playing field partially or fully. I shall return to these important issues in section 3, but here I wish to define the way that opportunities would be equalized, in my proposal, once the set of circumstances, and hence types, has been determined.

Pursuing the education example, one might advocate a set of circumstances comprising IQ, income and education levels of the parents, family type (married and living together, single parent, and so on), and number of

siblings. Let us suppose that society chose this set of circumstances, which could be characterized as a vector with, say, five components. In practice, the first component, IQ, would be represented not by a continuous value, but perhaps by five intervals—thus the first component could take on five values. Similarly, each component could take on a (small) finite number of values. This would define a finite number of types; each type, in a nation the size of the United States, would contain a large number of individuals, large enough to be able to speak of continuous distributions of educational achievement within types, as a function of educational resources allocated to those types and of the efforts expended by children.

The process of arriving at the set of circumstances used to characterize type would be a contentious one, as I've said, in which different political, psychological, biological, and social views and theories would be debated. In democratic practice, different political parties would advocate different views, and the set of circumstances comprising type would ultimately be determined by, let us say, the Department of Education, whose chief officers would be appointed by the party in power. The choice of the set of circumstances, however, would be determined not only by different views in the above senses but by the practicalities of gathering information. For instance, many might agree that an important circumstantial variable in the child's ability to process educational resources is the love the parent has for the child, and her treatment of the child. It is, however, neither feasible nor, perhaps, appropriate (because invasive of privacy) to collect such information. Thus the circumstances should be easily observable and nonmanipulable characteristics of individuals.¹ A skeptic might argue against including IQ as a component of type, because a child could, theoretically, manipulate his performance on the IQ test. ("Now Johnny, play dumb on that test the teacher is giving you today.") I shall, however, offer another resolution to the problem of potential manipulability of type in section 5. (Another argument that I've alluded to, against the inclusion of IQ, is that IQ already reflects past effort of the child, and hence is not obviously something for which the child should not be held accountable.)

Clearly, the larger the set of circumstances, and the more finely we measure differences in components of circumstance, the more types there will be. Some compromise must be struck which will keep the number of types down to a manageable level.

1. I will relax this requirement later on.

I turn next to another unresolved issue: in what average sense should achievements of the advantage in question be equalized across types? I propose (for the moment) distributing the resource in question across types so that type i receives some amount R_i of the resource per capita, and that the resource be distributed equally among individuals of the type. The problem is to decide upon the values R_1, R_2, \dots, R_T , where there are T types. Let us assume that the society has determined what amount of the resource in question to set aside, so the only issue is how to allocate the resource among the types. There is a set of feasible resource distributions $\{\rho \mid \rho = (R_1, \dots, R_T)\}$, given the requirement that the total amount of the resource has been preset at some amount, R , per capita.

Corresponding to any distribution ρ of the resource among types, there will be a distribution of effort levels and outcomes or educational achievement levels within each type. I continue to suppose that we can measure educational achievement levels and effort levels. Perhaps achievement would be measured by the score on a test administered when the child leaves school, or perhaps we would adopt, as a measure of the outcome or advantage in question, which is furthered by education, the wage the adult the child becomes eventually earns. Let us suppose that effort is monotonically related to the outcome, within type.

I propose to select the equality-of-opportunity distribution of the resource as follows. For any feasible ρ , there will be a distribution of effort levels in each type: call the distribution of effort levels in type i at distribution ρ , F_ρ^i . (Formally, F_ρ^i is a probability measure on the set of effort levels, which are non-negative real numbers.) Consider persons in different types who have each expended effort levels at the same centile of their type distributions of effort—say, to be concrete, the fiftieth centile. Thus these individuals are each at the median of their type distributions of effort. Since achievement is, by hypothesis, monotonically related to effort within type, and all individuals in the same type receive the same amount of the resource, each of these individuals is also at the median of her type distribution of achievement. I propose that we select a distribution ρ of the resource (across types) so that the achievement levels of these individuals are all equal.

But choosing the fiftieth centile of effort levels was just an example. I propose that a distribution of the resource across types be chosen so that, for *each* centile π , the achievement levels of all those at the π^{th} centile of their respective effort distributions are equal. If such a distribution of the resource exists, I deem it to be the equal-opportunity policy.

Now in actuality, it will usually not be possible to find a single distribution, ρ , of the available resource, which will simultaneously equalize the achievement levels of all those at the same centiles of their type distributions of effort, for *every* centile. In general, for each centile, there will be a distribution of the resource that equalizes achievement levels for the T persons (say) at *that* centile across types. (When I say “equalize,” I really mean we seek the distribution that maximizes the minimum achievement level of the individuals, across all types, at the centile in question. Such a distribution always exists. It is the so-called maximin achievement distribution.) Thus we will have one hundred different distributions of the resource, one corresponding to each centile of effort. In section 4, I will propose a compromise solution, which will “average” these one hundred distributions in, I think, a plausible way. For the moment, however, I wish to ignore this problem, and so I suggest that we assume, for now, that these one hundred distributions all turn out to be identical: that is, there is one distribution of the resource, which we’ll call ρ^{EOP} , which simultaneously, for every centile π , maximins the achievement levels of all those at the π^{th} centiles of their type distributions of achievement. Since everyone in a given type receives the same amount of the resource, it follows that those at higher effort levels, within each type, end up with greater achievement.

What I must justify is the decision to “level” the achievements of individuals in different types, who are at the same centiles of their type distributions of effort, by an appropriate distribution of the resource. This is the task of the next section. Let me, at this point, simply point out why I do not propose to equalize the achievement levels of all those, across types, who expended the same *amount* of effort, supposing that we have an easy way of measuring that amount (for example, years of school attended might be a rough proxy for effort in the present example). That would be wrong, I contend, because the distribution of effort is a characteristic of the type, and hence is not something the person should be held accountable for. For example, suppose in type 1 the median level of effort is 5, and in type 2 it is 10. The median level of effort, in a type, is a characteristic of the distribution of effort, and since individuals in types should not be held accountable for those distributions, they should not be held accountable for the fact that those medians have different values. But by hypothesis, *where* in her own type distribution a person locates is due to her own autonomous choice—she could have placed herself, with suitable application of effort, at any centile. If persons in different types both fall at the median effort levels of their types, I

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declare them to have applied effort in equal *degrees*. I thus will distinguish between (absolute) levels and degrees of effort, and declare that leveling the playing field means guaranteeing that those who apply equal degrees of effort end up with equal achievement, regardless of their circumstances. The centile of the effort distribution of one's type provides a meaningful intertype comparison of the degree of effort expended in the sense that the level of effort does not.